



Durham E-Theses

Danish connections 1000 – 1066: an archaeological perspective

Kruse, Susan Elizabeth

How to cite:

Kruse, Susan Elizabeth (1980) *Danish connections 1000 – 1066: an archaeological perspective*, Durham theses, Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/7802/>

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

Susan Elizabeth Kruse

Danish Connections 1000 - 1066: an archaeological perspective

ABSTRACT

This study concerns the connections of Denmark with the rest of Scandinavia and abroad in the period from 1000 to 1066. A brief review of the non-archaeological evidence is provided in Chapters 1-3, but the bulk of the thesis looks at the archaeological evidence (Chapters 4-9). Special attention is paid to England which for much of this period was politically united with Denmark. Throughout the work the limitations of the evidence both archaeological and non-archaeological are stressed, before any synthesis of general trends and their nature is attempted.

DANISH CONNECTIONS 1000 - 1066:
an archaeological perspective

Thesis presented for the degree of
Master of Philosophy

by

Susan Elizabeth Kruse

University of Durham
Department of Archaeology
July 1980

The copyright of this thesis rests with the author.
No quotation from it should be published without
his prior written consent and information derived
from it should be acknowledged.



14. MAY 1984

Acknowledgements

It is obviously impossible to acknowledge the large number of people who have helped in this study, and to those not listed below, I would like to say thank you. The following people deserve special mention:

Chris Morris for his understanding supervision and helpful comments.

Jim Lang for his kind help and many discussions.

John McKinnell for help with Old Norse, especially skaldic verse.

Zlatko Mikulić for help with Russian.

Trevor Woods for photographs and plates.

Keith McBarron for help and discussion concerning maps and figures.

John Steele and Craig Whitehead of the Computer Unit for supreme patience.

Helen Mounsey for assistance with the computer and other technical aid.

Bernadette Lucey, Mike Peverett, and Andrew Terry for help in the final preparation.

Finally, I would like to thank two bodies without which this study would not have been possible:

The inter-library loan staff of Palace Green Library for prompt, efficient, and kind service despite copious demands.

The Marshall Aid Commemoration Commission for their generous grant and interest.

TABLE OF CONTENTS

	page
List of Figures, Tables, and Maps	4
List of Plates	5
List of Abbreviations used in the text and bibliography	6
Preface	7
Introduction	10
Part I: Historical Background	
Chapter 1: Written sources	14
Chapter 2: Political background	37
Chapter 3: Religious, administrative, and economic background	63
Part II: The Archaeological Record	
Chapter 4: The dating of objects: typological and stylistic approaches	90
Chapter 5: Graves	134
Chapter 6: Settlements	160
Chapter 7: Objects in hoards	213
Chapter 8: Economic systems and routes	262
Chapter 9: Archaeological evidence of Scandinavians abroad	289
Conclusions: Danish connections 1000 to 1066	308
Appendix I: Scandinavian and English relations in the post-Conquest period	324
Appendix II: Hoards in Britain, Ireland, and the Northern Isles from the eleventh century with non-numismatic material	335
Appendix III. Scandinavian hoards with a <u>typ</u> of 991 to 1120 with more English coins than German coins	342
Bibliography	351
Source of illustrations	367
Plates	368 ff.

List of Figures, Tables, and Maps

	page
Figure 4.1 Swords	96
Figure 4.2 Spears	101
Figure 4.3 Axes	101
Figure 4.4 Shield bosses	106
Figure 4.5 Stirrups and spurs	106
Figure 7.1 Neckrings	221
Figure 7.2 Armrings	225
Figure 8.1 Percentages of minted to non-numismatic silver in southern Swedish and Gotlandic hoards	268
Table 1 "Ringerike" objects in hoards	116
Table 2 Approximate totals of Arabic, German, English, and Danish coins found in Scandinavia	271
Map 1 General map	9
Map 2 Germany around the year 1000	40
Map 3 Scandinavian finds in England	104
Map 4 Eleventh century Danish coin hoards	273
Map 5 Eleventh century coin hoards: Norway	274
Map 6 Eleventh century Swedish coin hoards	280

List of Plates
(p. 368 and following)

- Plate 1: Knútr's donation picture
- Plate 2: Vane from Heggen, Modrum, Buskerud, Norway
- Plate 3a: Armring from Undrom, Boteå, Ångermanland, Sweden
3b: Armring from Öster Torp, Skåne
3c: Crucifixes from Trondheim, Norway
- Plate 4: The St. Paul's stone
- Plate 5: Hoard from Äspinge, Skåne
- Plate 6: Hoard from Lilla Valla, Gotland
- Plate 7: Hoard from Lilla Valla, Gotland (cont.)
- Plate 8: Hoard from Gerete, Gotland
- Plate 9a: Pendants from Fülhagen, Gotland hoard
9b: Hoard from Stürko, Blekinge
- Plate 10: Hoard from Glemminge, Skåne
- Plate 11a: Hoard from Glemminge, Skåne (cont.)
11b: Hoard from Villie, Skåne
- Plate 12: Hoard from Tolstrup, Jylland
- Plate 13a: Hoard from Öster Herrestad, Skåne
13b: Hoard from Gårdsnäs, Skåne
- Plate 14: Hoard from Hemänge, Gotland
- Plate 15: Hoard from Torsta, Hälsingland, Sweden
- Plate 16: Part of Sigsarve, Gotland hoard

List of abbreviations used in the text and bibliography

<u>Ant. J.</u>	<u>Antiquaries Journal</u>
<u>ASC</u>	<u>Anglo-Saxon Chronicle</u>
<u>BAR</u>	<u>British Archaeological Reports</u>
<u>col.</u>	<u>column</u>
<u>Commentationes</u>	<u>Commentationes de nummis saeculorum IX-XI in Suecia</u> <u>Repertis.</u> Vol. 1: N. L. Rasmusson and L. O. Lagerqvist (eds.), Stockholm 1961. Vol. 2: N. L. Rasmusson and B. Malmer (eds.), Uppsala 1968.
<u>cm.</u>	<u>centimeter</u>
<u>Eng.</u>	<u>English</u>
<u>Ger.</u>	<u>German</u>
<u>GF</u>	<u>Gotlands Fornsal Museum, Visby</u>
<u>KHL</u>	<u>Kultur Historisk Lexikon för Nordisk Medeltid,</u> <u>Malmö</u>
<u>LUHM</u>	<u>Lunds Universitets Historiska Museum</u>
<u>Med Arch</u>	<u>Medieval Archaeology</u>
<u>Med Scand</u>	<u>Mediaeval Scandinavia</u>
<u>MLUHM</u>	<u>Meddelanden från Lunds Universitets Historiska</u> <u>Museum</u>
<u>mm.</u>	<u>millimeter</u>
<u>no.</u>	<u>number</u>
<u>PSAS</u>	<u>Proceeding of the Society of Antiquaries of Scotland</u>
<u>repr.</u>	<u>reprint</u>
<u>SCBI</u>	<u>Sylloge of Coins of the British Isles</u>
<u>SHM</u>	<u>Statens Historiska Museum, Stockholm</u>
<u>sn.</u>	<u>socken (parish)</u>
<u>tpq</u>	<u>terminus post quem</u>
<u>TRHS</u>	<u>Transactions of the Royal Historical Society</u>
<u>UffPKL</u>	<u>Uppgrävt förflutet för PKbanken i Lund, ed. Anders</u> <u>W. Mårtensson (Archaeologica Lundensia</u> <u>investigationes de Antiquitatibus Urbis Lundae</u> <u>VII), Lund</u>

Preface

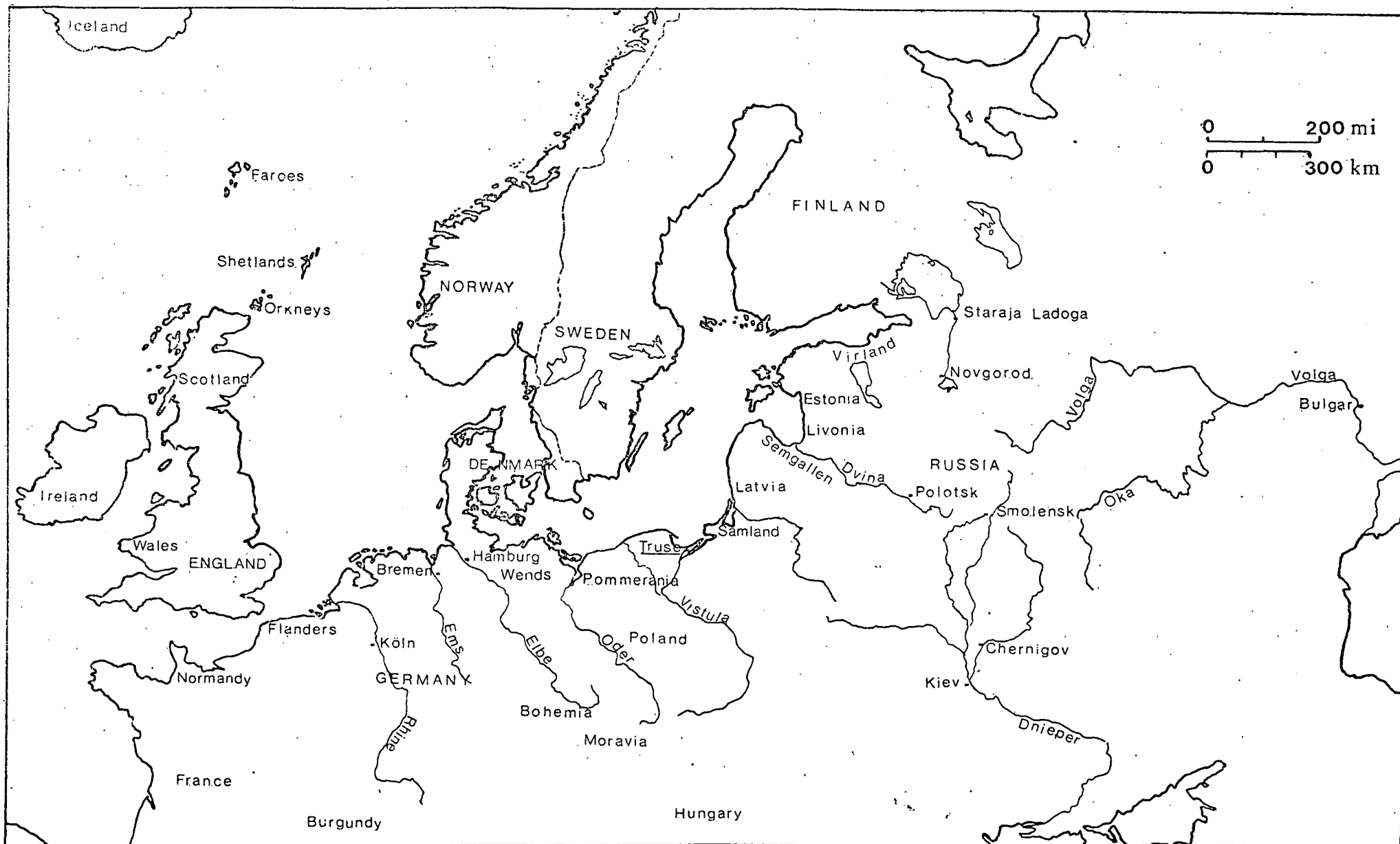
In a study as broad as this one there is no one accepted system to follow for personal and geographical names. Consequently the following conventions have been adopted: For personal names I have followed Campbell 1946-53b and 1949 where Scandinavian names are in normalized Old Norse, and Anglo-Saxon names in Old English. In both cases δ and β are normalized to "th", and possessives are indicated by the nominative form plus "'s". There are some exceptions; for example, "Emma" is used instead of "Imma" found in some documents or "Ælfifu", the Old English name she took in England. Similarly, some epithets are included for the sake of clarity; for examples, Eadmund Ironside, Eadward the Confessor, Haraldr Blátönn. For the Slavic and Russian names I have followed Vlasto 1970 who describes the basis for his transliterations on pp. x-xi.

Place-names present even greater problems. In this study, Scandinavia is used to include Denmark, Norway and Sweden; Finland, then and now, was somewhat separate with linguistic and cultural ties to the east. Unless stated otherwise, the geographical boundaries will refer to the old ones, where Denmark included the southern Swedish provinces of Skåne, Blekinge, and Halland, and much of the modern German province of northern Sleswig. For Scandinavian place-names, the modern spelling within each country is used; for example, Swedish "Skåne" instead of English "Scania" or German "Schonen". Outside of Scandinavia the English equivalents of foreign names are used. A few exceptions are made for common names in the literature; for example, Hedeby, Birka, Köln, and Wolin. Germany unless stated otherwise, will refer to the German empire in the eleventh century (see Map 2), while the Slavic area refers



to the Slavic lands south of the Baltic and east of the German empire.

Translations from foreign languages are by the author of the edition cited unless stated otherwise. A list of the abbreviations used both in the text and bibliography can be found on p. 6.



MAP 1

Introduction

The first half of the eleventh century was a time of much movement in Scandinavia with shifting political alliances, expanding economic networks, and the consolidation of religious missionary activity. It is the period which traditionally saw the transition of Scandinavia from an area outside the mainstream of European culture to a fully participating member, or, as it has sometimes been generalized, from a barbaric society to a Christian member of Europe. This view is far too simplistic since it revolves around the ties of Christianity, delegating to second place the important political and economic ties which had existed earlier; moreover, in the case of Sweden it is not accurate. Nonetheless, it is true that by the end of the period Scandinavia was characterized by somewhat different relations. The reasons for these shifts are complex, involving political ties and expansion, increased church organization and accessibility to the advantages it offered, and changing and expanding economic relations, all of which have their roots in the late tenth century.

Although no one country within Scandinavia can be viewed in isolation, this study will concentrate upon Denmark for a number of reasons. Historical sources indicate it was the major power during the first half of the eleventh century, although towards the end of the period the balance shifted to some degree to Norway. By the end of the tenth century Denmark itself had been consolidated, thus providing a stable enough situation to allow the conquest of England in the early eleventh century. Related to this political cohesion was the spread of Christianity and the beginnings of a comprehensive church organization in Denmark. At the same time, lively economic contacts resulted in foreign silver and objects

from much of Europe travelling to Denmark and in some cases being redistributed in a number of directions. The impression is obtained of much movement in a number of directions, with lively political, religious, and economic ties.

A number of sources provide the evidence for this picture. Written sources, comprising historical works, writs, charters, seals, runic inscriptions, and contemporary skaldic verse all shed light upon administrative and cultural changes. Clearly the church was related to the survival and themes of many of the written sources, providing the skilled men to record events and details. At times these sources touch upon economic matters, but more often, and especially concerning the east, this evidence is derived from the archaeological record. In addition, the archaeological evidence at times confirms the diplomatic or religious contacts. The problems inherent in all sources are important concerning the conclusions which can be drawn from the data.

At its simplest, the archaeological information can be divided into objects and settlement evidence. Objects by their portable nature provide the clearest indication of movements. The reasons behind their travel are diverse, and produce different limitations. Political and gift exchanges are often of a wealthy and atypical nature; few in fact remain in the archaeological record although written sources at times describe them and their movements. Foreign finds in graves are also hard to interpret; they may be the result of a foreigner who was buried abroad or a native who had acquired foreign goods by some means, whether by trade, plunder or gift. Few graves, however, from Denmark or Norway contain goods which can be ascribed to the eleventh century. On the other hand, hoards dating to this period contain objects or

fragments of objects in addition to coins; unfortunately their use as payment metal results in limited application for comparison. Significantly, objects in graves and settlements are often either of different metals or different forms.

Nevertheless, the dating potential of hoards makes these economic objects most useful in tracing contacts over a finite period. A sufficiently large number of hoards are known to determine the general trends and atypical or anachronistic objects. Finds from settlements display a wider range of forms and objects useful for comparison, but relatively few sites have contexts datable to the short span of the first half of the eleventh century. Stylistic and typological dating can also be used on objects from graves or single finds, but the fixed chronological points for these progressions depend on settlements and hoards whose objects are often quite different in nature.

The evidence from archaeological sites is far more complex by its very nature. In the first place, one is dependent upon those that have actually been excavated; hence distribution studies can be misleading or absolutely meaningless. Analysis of house types is almost always based upon the foundation traces in the ground, often incompletely preserved and yielding little information of superstructures. Moreover, regional variations are related to the availability of raw materials and topographical considerations. As more and more sites, both urban and rural, are excavated, the diversity of building techniques at any one time, as well as the lay out, is increasingly becoming evident. As a result, the study of influences on settlement type and architectural construction is very difficult indeed.

Both the objects and settlements do, however, point to connections within northern Europe and beyond in the period 1000 to

1066. In particular, the relationship between Denmark and England must be looked at closely due to the political union when four Danish kings controlled England for almost forty years. As a result of this political tie one would expect cultural relations to have increased and be reflected in the archaeological record. Yet the evidence is not unequivocal as shown by the number of different interpretations. It is hoped that a study of the archaeological material combined with other disciplines will enable a reassessment to be made of the result of this political union, and of the place of Denmark in Europe in this period.

Denmark in the year 1066 was quite different than it had been in 1000, due to many changes in the political, religious, and economic spheres. In England, Norway, and Sweden, the year 1066 marks a breaking point. Haraldr Harthráthi of Norway died at Stamford Bridge attempting to conquer England while Harold Godwineson was killed shortly thereafter defending England against another invader, William of Normandy; the Swedish ruler, Jarl Steinkell also died in this year. Consequently, although Svinn Ulfsson (or Ástriðsson) of Denmark remained in power until 1074, much of western Europe began anew. There is little argument that the character of the Scandinavian kingdoms was different after this point. The monarchy was on a more stable basis with fewer factions, smoother successions, and a firmer administrative network, while the religious setup was spread widely over Denmark. Economic ties continued to be widespread but in addition the foundations of a coined money economy had begun. Such a transition did not occur overnight, of course, and its process can be viewed throughout the first half of the eleventh century.

Chapter 1: Written sources

A number of written sources dealing with the period from 1000 to 1066 are known, but they vary widely in their accuracy, depending upon their biases and intentions. These sources can be divided into contemporary accounts and those composed long after the events described. Few contemporary accounts exist from Scandinavia, but fortunately accounts from western Europe, especially England, at times touched upon the Scandinavian affairs. While Scandinavian sources increase after this period, the interpretation of these sources has long been a complicated task for modern historians. In this chapter a brief review will be given of those written sources relevant to the period from 1000 to 1066 and their relative uses in constructing a chronological and cultural framework.

The contemporary Scandinavian sources comprise only two types of evidence: skaldic poems and runic inscriptions. Although the skaldic poems are generally found embedded into sagas and therefore preserved in manuscripts dating much later, the verses themselves are often contemporary with the events described. The nature of the skaldic verse with its rigid meter and structure made them quite difficult to corrupt as they were orally passed from generation to generation. However, at the same time old verses were passed on, new skaldic verses were often composed about old events, sometimes in fact by a saga author. As a result, it is a difficult study in itself to determine whether the verses are genuinely old and the saga based around them, or whether they were composed to lend authenticity to a saga account. Fortunately, in some cases the saga author misunderstood the

verse, thereby showing that the verse is at the very least older than the saga, and perhaps contemporary with the events it describes. At times linguistic studies can also show the poems to be older than the sagas.¹

Even if the poem is genuinely old, its accuracy is another matter. It is clear that many Scandinavians viewed them as truthful. In an oft-quoted passage from Snorri's prologue to Heimskringla, he declared the verses to be true, since it would have been mockery to praise a king falsely in front of himself and other listeners.² On the other hand, there was considerable leeway for bending the truth and futuristic promises. For example, the last stanza of Óttarr Svarti's Knútsdrápa emphasizes Knútr's prowess at the battle of Helge-ǫ, implying his victory there,³ when in actual fact the Anglo-Saxon Chronicle shows it did not end in victory for Knútr.⁴

In general, however, the amount of historical information contained in these verses is quite small. The nature of the poetry with its rigid meter, complicated word order, and use of kennings left little room for detailed historical accounts. Nor was this the prime motive of the poets who saw their works not so much as informative pieces but rather as artistic creations⁵ and usually the means by which they made a living. Consequently the emphasis was on praise to the employer; the more skillfully done, the better the reward and chance of permanent employment.⁶

The lack of contemporary historical works in Scandinavia prevents any check on the accuracy of most of the historical information in the poems set there. In verses dealing with exploits in England, and occasionally those in Scandinavia, such as the above mentioned verse concerning the battle of Helge-ǫ,

many of the details can be compared with the Anglo-Saxon Chronicle. A fairly large body of verses deals with Óláfr Helgi's campaigns in England, including his alliance with Æthelred against Sveinn. Another group of verses concerns itself with Knútr's invasion of England and his help from Jarl Eiríkr of Norway.⁷ In addition some verses concerning the battle of Stamford Bridge have been preserved.⁸

The amount of new information in these poems is quite small, and enough inconsistencies exist in details also mentioned in the Anglo-Saxon Chronicle to view the new information with some caution. For example, as Campbell has shown, the poems of Sigvatr and Óttarr are rather vague in their treatment of Óláfr Helgi's campaigns in England. It is unlikely that either of them actually were present during Óláfr's campaign, and as a result probably derived their information from Óláfr or others who had fought with him, all of whom could have had hazy memories of the battles or their own reasons to twist events.⁹ Óttarr's Knútsdrápa, dealing with Knútr's conquest of England, is even vaguer as indeed are other poems concerning Knútr. In some cases older poems were used to provide background details. For example, as Campbell showed, Thórtthr Kolbeinsson seems to have known little about the actual battles, and in his Eiríksdrápa used place-names from Óttarr's and Sigvatr's poems dealing with Óláfr Helgi.¹⁰ These discrepancies in the material set in England provide a cautionary note when using the skaldic verses to reconstruct events in Scandinavia.

Runic inscriptions provide the only other contemporary source. Most, however, are terse statements providing little connection with the information in skaldic poems. Although most are preserved on stones, it is possible a wider use of runic writing on wood

occurred than can be ascertained from the archaeological record.¹¹ Various hints suggest merchants may have used runes, especially the short-twigg type, for some business correspondence in the Viking Age as well as the early Middle Ages. Examples have been found in Scandinavia and the Baltic, some dating back to the ninth century. In Hedeby, for example, wooden runic sticks have been found showing their use there in letter writing, while mid-tenth century Arabic accounts indicate the Norse carried the custom even to Russia.¹² On the other hand, in Lund where conditions of preservation were quite good, no examples were found as they have been in the equally good conditions in the medieval layers in Bergen.¹³ As a result, it is impossible to determine how widespread, if at all, the use of wooden runic documents was in the early eleventh century.

The inscriptions on runestones are found throughout much of Scandinavia but contain little information useful for constructing a chronological framework. Instead they usually record only a brief memorial statement, often of a formulaic nature. Nor can they be dated very finely. Even those stones which mention a known figure or event must be used with care. Too often a circular argument develops whereby the type of runes and ornamentation on a stone recording historical events are used to date those inscriptions without such background; yet there is no way to determine how long after the event the stone was raised.

The type of runes gives some indication of date, although not as finely as one would like. The runes alone cannot indicate the date but must use fixed points provided by other criteria, usually references in the inscriptions to known people or events.¹⁴ These in turn, as mentioned above, are not always contemporary with the raising of the stone, necessitating some leeway in dating.

Moreover, the number of stones mentioning historical people or events is relatively small, resulting in little overlap with which to test epigraphic features. Stylistic considerations and Christian iconography are also used to create a chronological framework,¹⁵ although each does not provide exact parameters either.¹⁶

In Denmark, the problems of dating are clearly illustrated by runestones dealing with tenth century figures. Two stones are known from Jelling, one raised by King Gormr to his wife Thyri while the second was raised by their son Haraldr after Gormr had died.¹⁷ Nevertheless, the rune types of the later Jelling stone are closer to a type found on the Hedeby stone which from internal evidence must date after 934. One explanation of this discrepancy is that Gormr's stone was carved in "everyday speech" while Haraldr's used an official style.¹⁸

The Danish runic inscriptions have been divided typologically into three main periods based on linguistic features, and tied into a chronological framework using the three above mentioned stones and a few others. The first consists of runic inscriptions of the pre-Jelling type which generally are dated to the ninth century. Here the sixteen character futhark is used, usually with frame lines, no ornamentation, and often omitting divisional marks between words. The second category, inscriptions of the Jelling type, includes, as the name suggests, the Jelling runestones. Ornamentation begins to appear on these stones and linguistic features suggest a midway position between the pre-Jelling type and the after-Jelling type.¹⁹ The after-Jelling inscriptions are generally dated to the first half of the eleventh century by political probability and stylistic factors. Certain linguistic innovations such as dotted runes appear, and the old compositional scheme of parallel bands in vertical rows was replaced on most

stones by runes following the edge of the stone. Moreover, more diverse ornamental features appear, and Christian iconography or expressions begin to be common. The upper dating for this type is not firmly established but is usually placed around the mid-eleventh century.²⁰

Although these inscriptions do not usually refer to political events, a few are recorded upon runestones. For example, a stone from Simris, Skåne with runes of the after-Jelling type records a man who served with Knútr.²¹ Other Scandinavian runestones also record this event, primarily from Sweden, however.²² One in particular from Yttegårde in Uppland tells of a man called Úlfr who had taken three gelda in England, the first from Tósti, the second from Thorkætill, and the third from Knútr.²³ The first man, Tósti, may well be the rich landowner mentioned in Heimskringla and Óláfs Saga Helga.²⁴ Thorkætill is almost certainly Thorkell Strut-Haraldsson inn hávi (Thorkell the Tall), a prominent mercenary in the English battles from 1009 to 1012, fighting for Æthelred, then later entering Knútr's service. The Anglo-Saxon Chronicle mentions a large danegeld paid in 1012 and the inscription probably refers to this event.²⁵ The Chronicle also mentions geld paid to Knútr in 1016 and again in 1018.²⁶ Significantly these inscriptions show Knútr's army did not consist of Danes alone but included Swedes and Norwegians as well.

Most runestones cannot be linked with historical events but nonetheless reveal the range of travel in the late Viking Age whether as traders, soldiers, raiders, pilgrims, or merely travellers. Without known historical references they are difficult to date with precision, but stones with Christian iconography and Urnes style provide a terminus ante quem suggesting the men commemorated lived in the eleventh century. The travel is by no means concentrated westwards. For example, the Kolind stone in Jylland was

erected by a craftsman to his brother who had died in the east.²⁷ In Sweden, where the largest number of runestones survive, this travel to the east was often recorded. There are about a hundred inscriptions telling of travels to the east, compared to around fifty dealing with movements to the west.²⁸ Some stones mention trips to the Baltic regions of Estonia, Virland, Livonia, or Semgallen. The Russian cities in general are recorded on a number of stones, some telling of men who were employed as mercenaries there while others deal with men who appear to have settled for one reason or another.²⁹ Novgorod is the only Russian city mentioned by name; one of the three inscriptions records that Spjallbuthi died in St. Óláfr's church there.³⁰ Greece is the most frequently mentioned place on the Swedish stones and probably refers to the northeastern Mediterranean area of the Byzantine Empire.³¹ The scope of travel in this period is best illustrated by the inscription carved on a whetstone found at Timans, Ronensn. in Gotland. It contains only six words, the first two personal names, the third a group of people, and the last three place-names: "Ormika, Ulfair, Greichen, Jerusalem, Island, Särkland."³²

The runestones also provide evidence of the socio-political structure in Scandinavia. A large number of inscriptions clearly indicate the relationship of the deceased to the people raising the memorial, suggesting they were perhaps used as proof and claim to inheritance. As time goes on, however, these relationships are not stressed as much as titles, perhaps indicating land grant and tenure were becoming more closely allied with royal service.³³ Both thegns and drengs often appear in Danish inscriptions, especially in ones which seem to date from the eleventh century.³⁴ The thegn probably had a similar position to that of the Anglo-Saxon thegn.³⁵ The dreng, however, seems to have

been a sort of lesser thegn who served the king in his band of warriors; in time the word came to have a more vague and general use, referring to moral qualities rather than the position itself.³⁶ Inscriptions show the office of the dreng already existed in Knútr's time.³⁷ Other positions mentioned on runestones include stallari,³⁸ farmers (probably referring to important landowners), smiths, ship captains, agents and land stewards;³⁹ one interesting stone from Jylland was erected to a man who was land steward to a Norwegian.⁴⁰ Clearly if these titles do represent land claims based on royal grants, it has important implications on royal control and administration in this period.

There are extremely few Norse runic inscriptions in England. Page has argued that a brief flowering of Norse runes perhaps occurred when the Scandinavians first settled, but as the Scandinavian languages became assimilated few Norse runes were used.⁴¹ A new surge of runic use may have followed Knútr's conquest. The St. Paul's stone in London, which from its inscription and ornamentation dates from this time,⁴² has a runic inscription saying "Ginna and Toki had this stone laid."⁴³ A fragmentary stone recently found in Winchester, probably from an eleventh century context, has Danish runes in a layout known from Danish stones of this period.⁴⁴ However, the scarcity of such stones suggests the Scandinavian motives for raising runic memorial stones were different in Denmark than England.

England, unlike Scandinavia, had a tradition of historical writing, enabling a much clearer reconstruction of events. By far the most important contemporary source is the Anglo-Saxon Chronicle. Its value has already been mentioned as a check to the reliability of skaldic verses. For the period 1000 to 1066 only three versions of the Chronicle provide much information. The B text had ended in 977 while the A text is extremely sparse

in this period.⁴⁵ The C text, however, provides a full account until 1056, then a gap until 1065 and 1066; this version most probably was written at Abingdon.⁴⁶ The D and E versions are clearly related, probably derived from a common manuscript in the north. Whitelock felt York was the most likely place although Ripon has also been suggested. Both texts agree closely until 1031 after which they diverge. Whitelock felt D stayed at York where it obtained extra material which was interpolated before the surviving manuscript was begun in the mid eleventh century. It also incorporated information concerning Worcester which Whitelock argued was not to be explained by the manuscript in Worcester, but instead that information about Worcester travelled to York, probably the result of the joining of the two sees from 972 to 1016 and from 1060 to 1062.⁴⁷ The prototype of the E text sometime after 1031 appears to have gone south, and by 1045 had reached Canterbury. There it was used by the F scribe for his bilingual text, although he also drew upon A. At some point the E prototype reached Peterborough where the surviving E text was copied in the early twelfth century.⁴⁸ The actual interrelationships between the C, D, and E texts have been studied in detail by Whitelock⁴⁹ and Körner.⁵⁰

Although the nature of the Chronicle resulted in a factual recording of events, the texts were not without bias or inaccuracy. For example, the attitudes towards Godwine are quite different in all three texts. The C text is somewhat hostile towards Godwine, despite the fact he generally had good relations with Abingdon. The D text is relatively neutral while the E text is rather pro Godwine, perhaps because he was earl of Kent.⁵¹ Delays in the recording of some events could introduce mistakes or bias as well. For example, studies of the accounts of Ethelred's reign

suggest these entries were written at one time during the period 1016 to 1023, perhaps by a Londoner.⁵² With such hindsight it is no wonder Æthelred's actions were so soundly condemned. Relatively few entries occur in Knútr's reign, leading many authors to believe the reign was quite peaceful, a conclusion supported by other evidence as well. It must be remembered, however, that Knútr courted the church and as a result received a good press from the monks who recorded the events.⁵³

Surviving Anglo-Saxon wills, charters and writs do not provide much political information but do fill out the picture concerning the impact of Danish rule in England. Although Sveinn and Knútr must have been viewed as usurpers, this attitude was probably more complex for much of Knútr's reign and that of his sons. As Freeman pointed out, on Knútr's frequent absences from England, the English do not seem to have taken advantage of the situation, as they did in William the Conqueror's reign; moreover it is doubtful if the housecarles could have stopped a national rebellion.⁵⁴ Even Stenton noted that as a result of the prosperity and peaceful times of Knútr's reign "memories of the West Saxon dynasty soon lost their political force."⁵⁵

The charters and writs also suggest a degree of continuity. For example, a charter of 1018 confirming lands to the bishop of Cornwall uses the phrases "when I, King Cnut, succeeded to the Kingdom after King Edmund".⁵⁶ Similarly the succession of Eadward the Confessor does not appear in documents as a sharp break and re-establishment of the old West Saxon dynasty. In a writ to Bury St. Edmunds dating from 1042-3, Eadward the Confessor said: "And my will is that ^{the}freedom shall abide with the monastery [Bury St. Edmunds] unaltered which King Cnut granted to it, and afterwards King Harthacnut, my brother."⁵⁷ Nevertheless writs do show a racial identity remained. In another writ Eadward also referred

to Hörthaknútr as his brother, and in addition expressed the wish that neither Englishmen nor Danes alter the donation.⁵⁸

Two other contemporary sources from the continent are also worth mentioning. The first, the Chronicle of Thietmar of Merseburg, was begun around 1012 and continued until his death in 1018. Thietmar claimed his source of information for the English affairs was an Englishman named Sewold. Unfortunately the work is of limited historical value. Although contemporary, it is full of errors and already contains a number of legendary features,⁵⁹ a graphic example of how quickly such traditions could arise.

The second work, the Encomium Emmae provides more information. It was written by a monk at St. Bertin's or St. Omer's in Flanders during the reign of Hörthaknútr. The author had met Knútr previously but his main tie was with Queen Emma to whom he dedicated his work.⁶⁰ Campbell maintained the Encomium Emmae was commissioned purely to glorify Emma and her relations without any propaganda intentions to defend the Scandinavian claims to England.⁶¹ However, it has also been plausibly argued that at the time the work was written, Eadward the Confessor had travelled to England and may well have been considered as a threat to Hörthaknútr's claims; hence the work would have had considerable value as propaganda.⁶²

The Encomiast clearly was an extremely clever author. In his prologue he stressed the need for historical accuracy, for if "one inserts a fictitious element, either in error, or, as is often the case, for the sake of ornament, the hearer assuredly regards facts as fictions, when he has ascertained the introduction of so much as one lie."⁶³ Throughout his work the Encomiast generally seems to have held to his tenet, although he was guilty of a number of errors and misunderstandings.

Moreover, he often distorted much by omission. For example, Emma's first marriage to Ethelred is never made clear since a woman who marries her husband's enemy and then to all intents and purposes disinherits her children by the first marriage would not be a worthy heroine.⁶⁴ In addition, if the work was written for propaganda purposes in support of Hörthaknutr's right to the throne, Eadward the Confessor's claims would necessarily be played down.

This bias clearly limits the value of the Encomium Emmae as a historical work. The historical content begins with Sveinn in Denmark yet right from the beginning the Encomiast was twisting facts, as Campbell has pointed out:⁶⁵

In a work devoted to the praise of Sveinn and his family, it would, of course, be natural to suppress any undertakings in which they did not meet with success, ... The omission of them is, therefore, to be attributed to dramatic motives: the Encomiast thought it better to depict Sveinn as attacking England with immediate and complete success, than as going there repeatedly with ultimate success.

Moreover, some of his accounts of both Sveinn's and Knútr's conquests of England differ from the Anglo-Saxon Chronicle and would seem incorrect.⁶⁶ As a result, it is impossible to know the accuracy of the details in the Encomium Emmae which are unsupported elsewhere.

In general, Campbell felt the Encomiast had a fairly good grasp of Scandinavian affairs. Most of his facts are known from other sources but often the Encomium Emmae is the earliest surviving authority. Hence, he argued, one can generally accept his information on Scandinavia unless there was a motive for suppressing it or changing it. The Encomiast is of far less value for the Danish invasions of England but does provide some useful characterizations. Because he was almost contemporary with the events, his characters are more believable; without the number of traditions

which later accrued to the figures. He has few details of Knútr's reign; after all, a full account would not help his case at all whether he was simply glorifying Emma or advancing the cause of Hörthaknútr. After Knútr's death, however, he is well informed and has much value as a corroborative source.⁶⁷

While these contemporary sources allow a historical framework for Scandinavian activities in the west and occasionally even at home, the political situation and Scandinavian involvement to the east in this period is more obscure in documentary accounts. For the western Slavic region, occasionally continental or Arabic accounts mentioned events of the tenth century, but in the first half of the eleventh century there are few contemporary accounts at all, confined mainly to references in Thietmar.⁶⁸ Further east in Russia, a bit more information is available. Although the Russian Primary Chronicle was probably written in the second half of the eleventh century, some sections seem to have been based on earlier written fragments.⁶⁹ As a result, it is probable that some of the information dealing with the first half of the eleventh century is contemporary, although the difficulty clearly lies in determining which sections. Some Byzantine sources also shed light upon the Russian situation at this time and the Scandinavian presence both in Russia and Byzantium. These clearly show the employment of Scandinavians as mercenaries in both places.⁷⁰

The major contemporary sources have been dealt with at length since ultimately they provide the framework on which the historical chronology is based and to which the archaeological material must be joined. The non-contemporary sources are of course important as well but present a number of problems. By the time these accounts were written, a number of traditions had grown in both England and Scandinavia making it a difficult if not impossible task for an

author to construct a historically accurate account. Inaccuracies crept in for a number of reasons: bias and deliberate tampering with sources, misunderstandings of earlier accounts, reliance on oral tradition which had deviated from historical accuracy over the years, or attempts by authors to fill in gaps where no information was known or to rationalize conflicting accounts. These inaccuracies in turn were compounded and built upon by later authors. As a result, the disentanglement of historically accurate information is extremely difficult indeed when no contemporary source can corroborate.

One of the most important non-contemporary sources for Scandinavian history in the first half of the eleventh century is Adam of Bremen's History of the Archbishops of Hamburg-Bremen (Gesta Hammaburgensis Ecclesiae Pontificum).⁷¹ Adam wrote it during the 1070's, and as a result had access to people who were contemporary with events of the first half of the eleventh century. His most important informant was Sveinn Úlfsson (also known as Sveinn Ástríðsson), the nephew of Knútr, and king of Denmark from at least 1047 to 1074.⁷² As the title indicates, Adam was writing a church history, and therefore usually touched on political points only when they had some bearing to the Christian mission. This is especially unfortunate concerning Sweden where he remains one of the sole authorities in this period. Moreover, Adam's work is highly biased towards the German church in Scandinavia; as a result he consistently downplayed the English missionary contribution and rights.⁷³ On the other hand, although understandably intolerant of paganism, he nevertheless recorded the customs of the Uppsala temple, providing insight into eleventh century pagan practices in Sweden.⁷⁴

In addition Adam had a great interest in geography, and he

attempted to describe the world as he knew it, based upon ancient authors, contemporary accounts told to him, and superstition.⁷⁵ As a result, he provided information on trading routes, Scandinavian topography and details concerning the Baltic countries for which there are no other contemporary sources.⁷⁶ Unfortunately, where Adam's accounts can be checked there are often mistakes, misunderstandings, and doomed-to-failure attempts to combine conflicting traditions.⁷⁷ Nevertheless, the scope of the work together with its near contemporaneity makes it invaluable for the reconstruction of Danish history and tradition in the eleventh century.

Adam's work was also extremely influential to later authors, especially in Denmark. The Roskilde annals, written about 1140, were almost entirely based upon Adam and provide little new information.⁷⁸ The first Danish histories appear even later. Sven Aggesøn's Compendiosa Historia Regum Daniae was written sometime after 1185 while Saxo Grammaticus' much longer work, Gesta Danorum, followed in the early thirteenth century.⁷⁹ Both used Adam of Bremen extensively, and while Saxo may have derived some of his information from Sven, enough differences exist to suggest that both drew upon Danish traditions, at times different from those used by Adam.⁸⁰ Like Adam, when many of these statements can be checked, they are not very accurate.⁸¹ Nor is this surprising; without contemporary accounts to base their histories upon, Sven and Saxo were both forced to use oral tradition which had been circulating for well over a century past the events set in the eleventh century.

The body of tradition that the Danish authors had to draw upon was often different from that available to Norwegian and Icelandic authors.⁸² The Icelandic histories appear at a slightly

earlier date than ^{those} in Denmark. The earliest known works, probably dating to the early twelfth century, have unfortunately not survived but influenced later histories and sagas. The first, a latin history by Sæmundr Sigfússon dealt with the kings of Norway while the second, a vernacular study by Ari Thorgilsson appears to have dealt with the kings of Norway, Denmark, and England.⁸³

The earliest extant works appear in the late twelfth and early thirteenth centuries. A Norwegian history, the Historia de antiquitate regum Norwagiensium, was written by the monk Theodoricus probably around 1180. Theodoricus said he had based much of his history upon oral sources since few written works were known in Norway;⁸⁴ he does mention a few written sources, however, including the Catalogus regum Norwagiensium, which Ellehøj has argued was more important to Theodoricus than previously thought, providing a Norwegian body of tradition slightly different from the Icelandic.⁸⁵

A late twelfth century vernacular history of the Norwegian kings called the Agrip used Theodoricus as well as other works, although the exact sources are debated. Turville-Petre felt it had drawn upon a lost latin history, combined with some versions of sagas which have not survived and different oral sources.⁸⁶ Ellehøj, however, concluded the main sources must have been Sæmundr's and Ari's lost studies, and probably the Catalogus regum Norwagiensium.⁸⁷ The sources for the early thirteenth century Historia Norwegiae are also much debated. Turville-Petre felt the lost latin history influenced both the Agrip and the Historia Norwegiae, but that the latter also drew upon Adam of Bremen and chronicles known from Roger of Hoveden.⁸⁸ Ellehøj agreed on the importance of the Danish material, especially Adam of Bremen, but felt that the English material could be explained by Norse traditions, probably found in Ari.⁸⁹

Although the actual interrelationships between texts is not completely clear, there is no doubt that a comprehensive body of west Norse tradition was already established by the end of the twelfth century, and was heavily used by these authors.⁹⁰ The earliest sagas first appear around this period also, but most date from the thirteenth century. The saga authors had access to the above mentioned histories, with the possible exception of the Historia Norwegiae,⁹¹ as well as oral traditions, including the skaldic poems. While many kinds of sagas were written, some concerned themselves with events and people of the Viking Age; and while most of these in turn deal with Norwegians, in some cases the events and people overlapped into Denmark. On the other hand, more sagas dealing with Danish affairs may have been written and not survived. For example, references in some works show a saga dealing with Knutr had been written.⁹² For the first half of the eleventh century, Snorri's work on the Norwegian kings, Heimskringla, is the most important source, but other sagas also contain portions concerning this period.⁹³

The problems of using the sagas as sources of history are clearly illustrated by Snorri's works. He probably wrote the Heimskringla sometime in the first half of the thirteenth century, thus over 200 years after many of the events he described. His sources were diverse, including various histories, skaldic verse, oral sources, and other saga biographies which in turn had been based on similar earlier sources.⁹⁴ However, Snorri's account was not meant as a search for an account as close to historical truth as possible. Instead, the emphasis was on the major characters who as rulers possessed certain qualities, living according to fate and destiny in a coherent pattern. With such a historical framework to start with, Snorri felt it proper, and

in fact necessary, to weave these themes through the work, rationalizing accounts when necessary and adding details and motivations when lacking. The result makes interesting reading, and a commentary on medieval Icelandic thinking, but it provides little hard and fast information on eleventh century Scandinavian events or culture. Nor was Snorri alone in this approach; he was merely more adept and prolific than many other authors.⁹⁵

The problems facing the interpretation of non-contemporary Scandinavian sources apply to non-contemporary English accounts, although the existence of a larger body of contemporary material allows a firmer grasp of the historical foundation. Nevertheless, it is clear that a certain amount of source material which has not survived was incorporated into post-Conquest works. This is best seen in Florence of Worcester's Chronicon ex Chronicis where for the eleventh century he had access to new material which in places is corroborated by skaldic verse. The Chronicon ex Chronicis in turn influenced a number of later latin histories.⁹⁶ A comparison of the often contradictory details in these later works suggests tradition and stories were also prevalent in England, so much so, that they may well have circulated as vernacular sagas.⁹⁷

The integration of all these sources both contemporary and later to provide a coherent reconstruction of the historical events and milieu is an extremely difficult task, necessitating an analysis of the materials used and the bias of each source. The contemporary accounts are of most value in constructing a historical background, but uneven, with far less material available for Scandinavia. This scarcity of contemporary source material faced authors writing only several generations after events, forcing

them to draw upon oral traditions and accounts, more often than not contradictory and with regional variations; moreover, the bias of authors led to reworking of the material available. Nevertheless, although it is often impossible to determine just what details can be accepted, when the sources are used together they allow a general idea of the political, religious, and economic situation to be formed, against which the archaeological material must be placed.

Chapter 1: Footnotes

1. Turville-Petre 1976 pp. lxvi-lxxiv.
2. Heimskringla (Prologus) vol. 1 p. 5.
3. Heimskringla (Ólafs Saga Helga ch. 150) vol. 2 pp. 280-1; translation in Ashdown 1930 p. 139 or Whitelock 1979 p. 336.
4. ASC 1025 E (F). For problems concerning the dating of the battle, see below Chapter 2 fn. 76.
5. Campbell 1949 p. 366.
6. Turville-Petre 1966 (1968) p. 4.
7. Campbell 1970 (1971) p. 4. See also Whitelock 1979 pp. 133-4.
8. See Turville-Petre 1966 (1968).
9. Campbell 1970 (1971) pp. 10-1.
10. ibid. pp. 3-4, 13-4.
11. Jansson, S. 1962 p. 10.
12. Liestøl 1970 pp. 123-5.
13. For Lund and Bergen see below Chapter 6 pp. 167-70, 184-5.
14. Jacobsen and Moltke 1947 col. 7.
15. Olsen, M. 1960 pp. 241-2.
16. For a discussion of problems with stylistic dating, see below Chapter 4 p. 111ff. Christian iconography most probably dates after 1000 (see below Chapter 3 p. 63ff.) but exactly when is more difficult to determine.
17. Jacobsen and Moltke 1942 cols. 78-9.
18. Jacobsen and Moltke 1947 col. 8.
19. ibid. cols. 16-20; Jacobsen and Moltke 1942 cols. 1022-4.
20. Jacobsen and Moltke 1942 cols. 1024-6; Jacobsen and Moltke 1947 cols. 21-3.
21. Jacobsen and Moltke 1942 cols. 389-90.
22. ibid. col. 837
23. Jansson, S. 1965 (1966) p. 12.
24. ibid. pp. 12-3. Ólafs Saga Helga (included in Aðalbjarnarson's edition of Heimskringla vol. 2 p. 433) records: Tósti hét maðr í Svíþjóð, er einn var ríkastaðr ok gofgastaðr í landinu, þeirra er eigi bæri tignarnafn. Hann var inn mesti hermaðr ok var löngum í hernaði. Hann var kallaðr Skoðglar-Tósti.

25. Jansson, S. 1965 (1966) p. 13. ASC 1012.C (D,E).
26. ASC 1016, 1018.C (D,E).
27. Jacobsen and Moltke 1942 cols. 145-6.
28. Liestøl 1970 p. 121.
29. ibid. pp. 127-9; Jansson, S. 1962 pp. 28-35.
30. Liestøl 1970 p. 127; Jansson, S. 1962 pp. 26-8.
31. Jansson, S. 1962 p. 19.
32. Stenberger 1958 p. 366. "Greichen" refers to the Greeks while "Island" to Iceland. "Särkland" refers to an eastern area which is difficult to define precisely but was probably an Arab territory in which Jerusalem lay (see Jansson, S. 1962 p. 40, Liestøl 1970 p. 128).
33. Randsborg 1980 pp. 29, 34ff.
34. ibid. pp. 34-5.
35. ibid. pp. 31, 43.
36. ibid. p. 44; Aakjær 1927 pp. 18, 25, 28-9.
37. E.g. the Simris stone (see Jacobsen and Moltke 1942 col. 389-90).
38. For a discussion of the position of the staller see below Chapter 3 pp. 72-3.
39. Randsborg 1980 p. 40.
40. The Egå stone (see Jacobsen and Moltke 1942 cols. 144-5).
41. Page 1973 p. 194. On pp. 194-8 he listed the few examples of Norse runic inscriptions in England which vary widely in date.
42. Jacobsen and Moltke 1942 cols. 478-9. For a discussion of the ornamentation on the St. Paul's stone see below Chapter 4 pp. 118-9.
43. Jacobsen and Moltke 1942 col. 479; Page 1973 p. 195.
44. Kjølbbye-Biddle and Page 1975 pp. 389, 392.
45. Whitelock 1965 p. xii.
46. ibid. p. xiii.
47. ibid. pp. xiv-xv.
48. ibid. p. xvi.
49. ibid. pp. xvii-xviii.

50. Körner 1964 p. 3ff.
51. Whitelock 1965 p. xviii.
52. Keynes 1978 pp. 229-32.
53. See Dolley 1966 pp. 52-3 for his list of coin hoards deposited in this period; the fewer number when compared to both before and after suggest non-turbulent times. See also Barlow 1963 pp. 273-4 for arguments that laws were respected and enforced in Knutr's reign. See also Freeman 1870 p. 439 and Stenton 1947 p. 403.
54. Freeman 1870 p. 440.
55. Stenton 1947 p. 403.
56. Whitelock 1979 no. 131 pp. 597-8.
57. Harmer 1952 no. 8 p. 154.
58. ibid. no. 58 pp. 257-8.
59. Whitelock 1979 pp. 138, 347.
60. Campbell 1949 pp. xix, xxi.
61. ibid. p. xxi.
62. Körner 1964 pp. 64-8, but see also Campbell 1949 p. lxviii.
63. Encomium Emmae, Prologue.
64. Campbell 1949 p. xlvi.
65. ibid. p. lii.
66. ibid. p. liii.
67. ibid. pp. xxii-xxiii, lxviii-lxix.
68. Vlasto 1970 p. 363 fn. 213; Herrmann 1980 pp. 194, 198, 202.
69. Lichačev 1970 pp. 171, 184; Birnbaum 1978 pp. 21-2.
70. Obolensky 1970 pp. 161-2.
71. Two different notational systems are used in editions of Adam of Bremen, both of which are given in Tschan's edition (see his p. xxxiv). In this study, both will also be cited, the first referring to that of Schmeidler, and the second, when different, placed in parentheses, to that of Weiland-Waitz.
72. Adam of Bremen i 48 (50), i 61 (63), iii 54 (53). See also below Chapter 2 pp. 51-2.
73. See below Chapter 3 pp. 66-7, 70.

74. Adam of Bremen iv 27-8, Schol. 141 (137).
75. Tschan 1959 pp. xix-xx.
76. See especially Book iv in Adam of Bremen.
77. Tschan 1959 pp. xvi-xvii.
78. Körner 1964 p. 141; Christensen 1969 pp. 223-4.
79. Whitelock 1979 p. 135.
80. Campbell 1946-53b pp. 21-2; Skovgaard-Petersen 1969 p. 72.
81. Skovgaard-Petersen 1969 p. 57.
82. Campbell 1946-53b pp. 12, 21.
83. Turville-Petre 1953 pp. 83, 93-4; Ellehøj 1965 pp. 17-8, 43 ff., (287-9).
84. Turville-Petre 1953 p. 169.
85. Ellehøj 1965 p. 182ff., (297).
86. Turville-Petre 1953 p. 172.
87. Ellehøj 1965 p. 266, (301-2).
88. Turville-Petre 1953 pp. 174-5.
89. Ellehøj 1965 pp. 146-7, 174, (295-6).
90. Campbell 1946-53b p. 2.
91. Turville-Petre 1953 p. 175.
92. See Campbell 1946-53a.
93. E.g. see Campbell 1949 pp. 1-lxix, 66ff. which include analysis of Norse accounts concerning historical matters and the problems in using such sources.
94. Turville-Petre 1953 pp. 220, 224-7.
95. For a good discussion of the historical content and concept in Snorri see Turville-Petre 1953 p. 224, Campbell 1949 p. 84, Gurevich 1971, and Andersson, T. 1977.
96. See Whitelock 1979 pp. 130-1 for a discussion of the post-Conquest sources and their relative value. See also Whitelock 1965 pp. xviii-xxi.
97. Wright 1939 pp. 69-70. He identified a number of stories concerning the first half of the eleventh century which may have been current in Anglo-Saxon times as sagas. These include: (1) the death of Sveinn due to the intervention of St. Eadmund (pp. 172-4); (2) Knútr and the waves (pp. 175-7); (3) tales concerning Eadric Streona (pp. 186-90, 205-10); (4) the single combat of Knútr and Eadmund Ironside (pp. 191-5); and (6) stories concerning Godwine (p. 218ff.).

CHAPTER 2: Political background

Although a relatively large number of sources deal with the people and events of the first half of the eleventh century, the historical background in this period is difficult to reconstruct. This is especially true for Scandinavia where, as noted previously, few contemporary accounts exist. Similarly, the history of the Baltic countries and Russia for this time is quite vague. Nevertheless, Scandinavia had contacts both east and west, and the background in both areas must be dealt with despite the overbalance towards the west where more evidence survives. This lack of documentation for Scandinavia and the Slavic areas is all the more unfortunate since the first half of the eleventh century saw the process of political consolidation in many of these areas, a development which understandably had important repercussions on political, religious, and economic relations.

All indications suggest Denmark had advanced well on the way to becoming a unified realm under Haraldr Blátönn in the late tenth century. He boasted on a runestone raised to his parents at Jelling that he had consolidated all Denmark, a claim that has increasingly been supported by archaeological evidence.¹ The actual details of Haraldr's reign are difficult to reconstruct, especially for the early years. The runestone evidence suggests a concentration of power in Jelling and mid-Jylland with gradual extension of power outwards from these regions.² The refortification of the Danevirke combined with hints in other sources indicates political struggles with Germany also occurred.³ Haraldr's marriage alliance with a Slavic tribe was also probably related to these southern problems since the Slavs at this time were also in conflict with the Germans.⁴

A runestone from Sønder Vissing in Jylland records that Haraldr's wife was Tovi, daughter of Mistiwi who was probably a Wendish ruler.⁵ Adam of Bremen, however, named Haraldr's wife as Gunnhildr⁶ but he may have confused her with Sveinn's Slavic-born wife who was also named Gunnhildr. It is also possible that Haraldr married more than once, or that Gunnhildr was simply Tovi's baptismal name.⁷

There are further indications of political connections with the Slavic lands late in Haraldr's reign and in that of his son Sveinn. Probably in the late 980's a power struggle developed between father and son resulting in Haraldr's flight to a Slavic land (?to his father-in-law) where he soon died, leaving Sveinn in control of Denmark.⁸ Sveinn's own marriage to Gunnhildr, either the sister or daughter of Boleslaw of Poland, further strengthened these ties and in addition linked him with the Swedish dynasty. Adam of Bremen clearly indicated that she had previously been married to Eiríkr Sigrsæli of Sweden.⁹ Later sources mention a second marriage of Sveinn to Sigrithr Stórrátha, also said to have been Eiríkr's widow.¹⁰ Modern opinion, however, is that Sigrithr was not a historical figure but rather a later expansion and tradition.¹¹ As a result of these ties, Gunnhildr's son by Eiríkr, Óláfr Skötkonung, was half-brother to Knútr.

A number of traditions exist concerning the early years of Sveinn's reign. Thietmar, Adam of Bremen, Sven Aggesøn, Saxo, and the Icelandic sagas all mention that Sveinn was captured at least once by enemies and held for ransom early in his reign but the accounts vary considerably, and it is impossible to determine what the traditions are based upon.¹² Further stories deal with the conflicts between Sveinn and Óláfr Tryggvason but these are mainly late and often contradictory.¹³ In the late tenth century Óláfr had gained

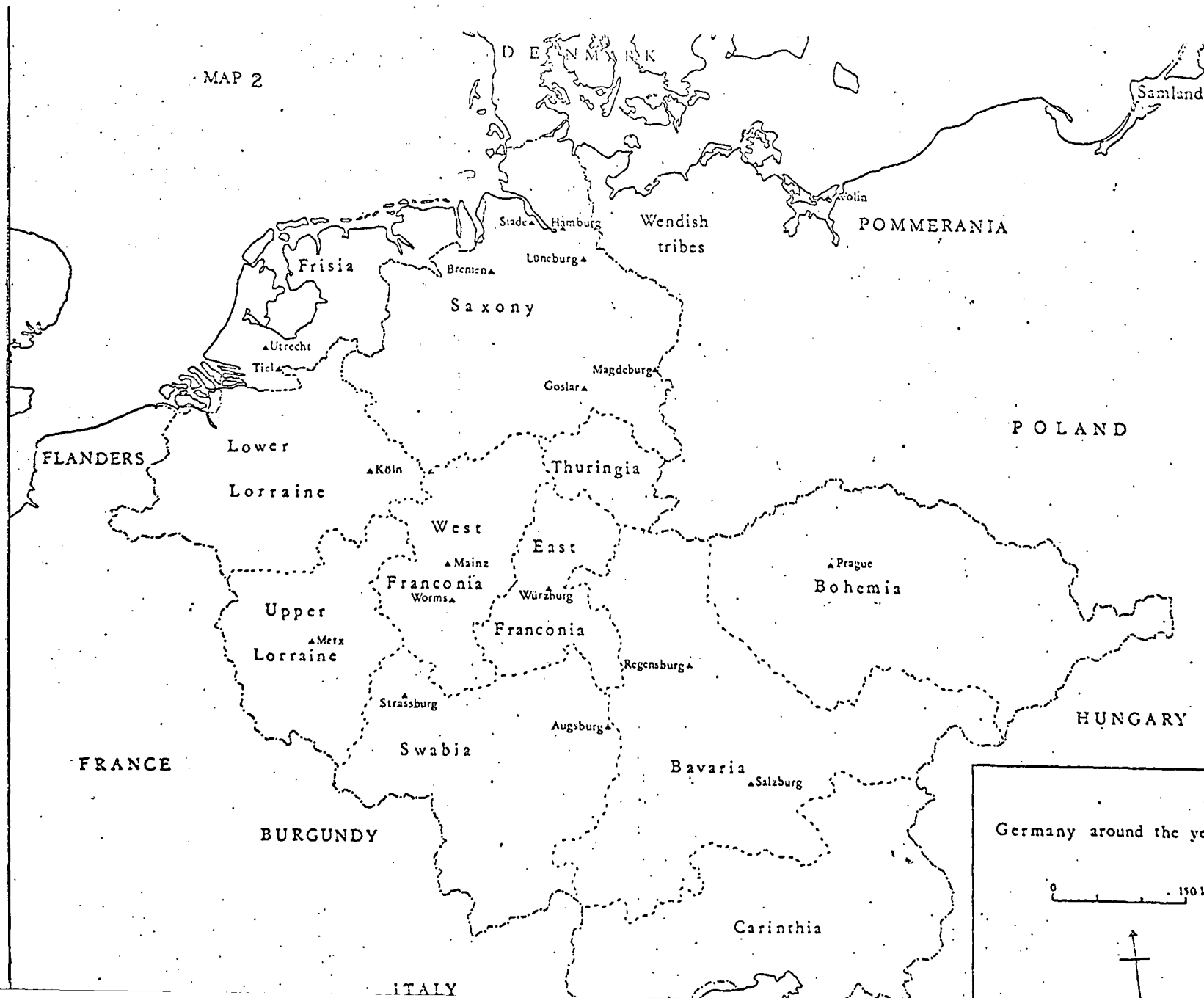
control of Norway from Jarl Hákon.¹⁴ According to Adam of Bremen, around the year 1000 Óláfr, angered at an alliance between Sveinn and Óláfr Skötkonung of Sweden, sailed against Denmark;¹⁵ skaldic verse on the other hand suggests Óláfr Tryggvason was returning to Norway from somewhere in the south.¹⁶ At any rate a battle seems to have occurred in the Øresund in which Óláfr was defeated by Sveinn and perhaps Swedish forces as well. Most accounts maintain Óláfr leapt into the sea and drowned, an end Adam felt most fitting.¹⁷

As a result of this battle, Jarl Hákon's sons Eiríkr and Sveinn were restored to power in Norway, and seem to have recognized Sveinn's overlordship, as well as perhaps that of Óláfr Skötkonung to some degree.¹⁸ Several later Norse sources record that Eiríkr was married to Gytha, daughter of Sveinn (and Knútr's sister) while Heimskringla alone mentions his brother Sveinn's marriage to the daughter of the king of Sweden.¹⁹ That close ties did exist between the Norwegian jarls and Denmark is shown by the fact Eiríkr left Norway upon Knútr's request to help in the conquest of England.²⁰

The situation in Sweden at this time is far more difficult to reconstruct. Sweden had no later historical accounts comparable to those in Denmark or Norway. As a result, most details must be derived from Danish and Norse traditions which in general recorded Swedish events only when they were relevant to the Danish or Norse material. Adam of Bremen remains the earliest source for most of the Swedish information but in general he provided extremely brief accounts, many of which, such as the tradition of Sveinn's expulsion from Denmark by Eiríkr of Sweden, appear to be wrong.²¹

Events in Germany in the late tenth century had repercussions in Scandinavia, especially southern Jylland, as has been mentioned above. In the tenth century the German empire had expanded its

MAP 2



Germany around the year 1000

0 150 km

holdings considerably, extending its power into the Slavic areas and Italy, while at the same time consolidating its position internally. Such expansionism necessitated the reliance of emperors upon either church or nobility, both of which often had ideas of their own. As a result, the emperors tended to see-saw between both groups. Otto I (d. 973) at first relied upon his relations but after their rebellions was forced to turn to clergy, a policy his son Otto II (d. 983) continued.²² In the reign of Otto II diplomatic contacts were extended by his marriage to the Byzantine princess Theophano who brought eastern clergy and objects with her.²³ In the years that followed, the nobility gradually began to assert themselves; while Henry II (1002-24) relied primarily upon clergy, his successor, Conrad II (1024-39) turned to feudal lords, but Henry III (1039-56) was forced to turn back towards the clergy.²⁴ The large number of coins minted by both the church and nobility in this period shows the diffusion of power. Nevertheless, succession managed by and large to remain stable, and clearly in the first half of the eleventh century the German empire was the most powerful force in western Europe.²⁵

The relations between the Germans and the Slavs were quite turbulent throughout the tenth and eleventh centuries. Political expansionism and missionary activity advanced hand in hand to these areas with varying results. In Bohemia the first impulses of Christianity began to arrive in the mid-ninth century from the west. With the increased missionary activity in the following years, it came under political pressures from various factions in Germany. In the early tenth century Bavarian influence was dominant but soon the Saxons as well pushed their claims, mainly for political reasons.²⁶ The Saxon influence grew in the following years and

was strengthened by Henry the Fowler's invasion in 929. From this point Bohemia had to recognize German overlordship although to some degree it managed to remain relatively independent.²⁷ Nevertheless, the Bohemian church organization remained under the German church. Politically, the position of Bohemia as part of the German empire was formalized in 1002.²⁸

As a result of the German influence in Bohemia, Poland came under German pressure from both areas. Christianity made few inroads in Poland until the second half of the tenth century when Mieszko I consolidated much of the area and saw the advantages of Christianity. He attempted to receive Christianity from Bohemia, perhaps in an attempt to defuse the German pressure with the minimum loss.²⁹ In fact, the arrival of Christianity in Poland resulted in a tug of war between the Pope and German empire, both of which wanted control of the newly formed sees. In the following years Mieszko attempted to maintain Poland's independence but with varying success. With the Wendish revolts in 983 Mieszko was forced to rely more heavily upon German support in order to prevent the threat of similar revolt in Poland.³⁰ Although he seems to have acknowledged German suzerainty to some degree, nevertheless he was able by and large to maintain Poland's independent policies, even in the church.³¹

Mieszko's son, Boleslaw (992-1025) continued these policies but gradually managed to pull away from Germany. He won the right to appoint bishops himself, thus officially placing Poland on an equal status with the other Christian states.³² Relations with Germany were made even worse when he invaded Bohemia and Moravia in 1003-4. Even though Boleslaw's conquests were gradually retaken by the Germans and peace was made in 1018, he remained strong enough to retain the independence of Poland.³³ His successors, however,

were unable to maintain internal control. The few remaining captured areas were lost, and a resurgence of paganism occurred. When Kazimierz finally restored order in the 1040's he was accompanied by German military support, and new ties were forged with Germany.³⁴

In the Wendish lands between the Elbe and the Oder no one tribe dominated as in Bohemia or Poland. In general they resisted Christianity; as a result it arrived via a long series of political conquests. Nor was the religious motivation the only incentive. The Slavic ports were wealthy and the lands fertile, and no doubt both were coveted by the Germans. A gradual expansion occurred which was much resisted, and resulted in the revolt of the Wendish tribes in 983, thus ending German domination between the Elbe and the Oder.³⁵ In the following years Germany attempted to recapture the lost territories but was unable to do so for many years. Nevertheless, since bishoprics had previously been set up in the area, in the eyes of the Germans and clergy the Wends were considered renegades, and religious justifications allowed any expedient to bring them back into the fold of Christianity. Hence the years following 983 were characterized by brutal campaigns;³⁶ even Adam of Bremen with his bias towards German conversion denounced the cruelty and avarice of the Germans.³⁷ Mistivoi, who may well be the Mistiwi on the Sönder Vissing stone, was a ruler of one of the Wendish tribes; given the political situation where both areas were at some conflict with Germany, such an alliance is understandable.³⁸

The late tenth and early eleventh centuries also saw the emergence of Kiev in Russia under Vladimir (d. 1015). There were relations with Scandinavia, both in dynastic marriages and mutual havens for exiles. In a struggle with his half-brother, Vladimir fled to Scandinavia, although by 978 he was back in Russia and sole ruler of

Kiev. His four marriages show a wide network of contacts. One was to a Scandinavian woman and ^{another} to Rogneda, the daughter of the prince of Pólotsk.³⁹ Later, as his political power increased and the supply of Arabic silver diminished, his last two marriages and contacts show an attempt to open up a route to the Mediterranean; this is in contrast with Novgorod which continued to concentrate on western European and Scandinavian ties. Vladimir's third marriage shows his importance by 989 when he was able to convince the Byzantine emperor to send his sister to him in return for military aid. As a result of this marriage clergy of the eastern religion arrived in Russia.⁴⁰ Vladimir's fourth marriage to a Bulgarian woman shows further ties with the east; it also seems to have resulted in Bulgarian influences in the Russian church.⁴¹ Although in the later years of Vladimir's reign the eastern relations appear more important, he did not turn his back upon Scandinavia. Óláfr Tryggvason was said to have been his friend, and a number of Scandinavian legends grew up concerning Vladimir, suggesting contact of some form.⁴²

The conquest of England by Sveinn and the reconquest by Knútr shortly thereafter resulted in some shifts in the political situation in Europe. The exact motives and logistics of Sveinn's campaign are rather obscure, however. Stenton felt Sveinn's invasion was of a different nature than those previously, where Sveinn aimed for political control from the start rather than simply tribute.⁴³ While this is probably true for the last few years, there is little indication Sveinn thought that far ahead on his first appearance in England in 994. Then Sveinn with Óláfr Tryggvason attacked London and southern England, but both were content to be bought off with a danegeld. Óláfr alone met with Æthelred and promised not to attack England again, but Sveinn's whereabouts at this point were not mentioned.⁴⁴

Although raids continued over the next twenty years, the next mention of specifically Sveinn leading a party is in 1003 and 1004 when he attacked the south and East Anglia, leaving in 1005.⁴⁵ His motives are obscure, but William of Malmsbury later recorded that Sveinn's sister had been killed in the St. Brice massacre the year before, and some authors have seen the new invasions as spurred by revenge.⁴⁶ Sveinn's retreat in 1005 was not the result of a payment of tribute, but perhaps because of the heavy losses obtained in the fight against Ulfcytel.⁴⁷

The next years saw raids almost annually. Although Sveinn is not mentioned by name until the final conquest in 1013, the Chronicle entry for 1005 noted that a little time occurred before the fleet came back, thus implying it was Sveinn who returned in 1006 with a great fleet.⁴⁸ After a year of fighting, this fleet was bought off in 1007.⁴⁹ It presumably departed since the next year the Chronicle recorded no fighting, and instead noted that Æthelred had ordered his own fleet to be built.⁵⁰ In 1009 the next attack on England occurred, this time by Thorkell's army.⁵¹

The relationship of Thorkell to Sveinn is quite important in determining Sveinn's motives for his final conquest on England. Stenton felt that Thorkell acted as Sveinn's man, and therefore was part of Sveinn's overall plan. As a result, when the army took tribute in 1012 and forty-five ships entered Æthelred's service, this led to Sveinn's invasion in 1013 out of a desire to punish Thorkell and Æthelred.⁵² On the other hand, there is good reason to believe Thorkell acted independently. The Chronicle entry for 1009 stated that the fleet was built to protect England "from every invading army"⁵³ thus suggesting the presence of separate fleets. Nor does the Chronicle ever suggest any connection between Sveinn and Thorkell, and the gap between their actions indicates two different raids.

Campbell felt that Thorkell's campaigns in England were watched with great unease by Sveinn, who he felt had long had plans for England himself.⁵⁴

Whether Sveinn did in fact have previous plans to conquer England is impossible to determine, since before 1013 he had settled for tribute. In 1013, however, his campaign was clearly different. Perhaps he was worried at Thorkell's presence now within the English power structure. At any rate, there was no mention of tribute as he worked his way through much of England, demanding hostages and capitulation.⁵⁵ In this campaign at least he showed himself to be, as Stenton remarked, one of the most efficient and able Viking leaders of his time.⁵⁶

Few sources allow a fuller picture of Sveinn to be reconstructed. His political policies in Denmark are obscure although the resources he had available to call upon suggest a stable situation. Similarly, since he died the year after conquering England, it is impossible to know what plans he might have had concerning his rule there. The successful conquest of England set an important precedent, however, for it showed the vulnerability of England and made possible the later conquests of Knútr and William as well as less successful Scandinavian attempts.⁵⁷

After the death of Sveinn, Æthelred was called back and Knútr retreated to Denmark.⁵⁸ It is difficult to determine what occurred in Denmark at this time. Knútr's elder brother Haraldr⁵⁹ had succeeded their father in Denmark. While it is reasonable to assume Haraldr helped Knútr in his reconquest, as some of the sources suggest, this cannot be proven one way or the other. The Encomium Emmae cannot be used without reservations since the Encomiast maintained that Haraldr was younger, probably to exalt the position of Knútr.⁶⁰ The Encomium Emmae does, however, add the fact that Knútr

and Haraldr went to the Slavic lands to fetch their mother, a detail there is no reason to distrust.⁶¹ Knútr returned to England in 1015; as Æthelred was ill, the English resistance was led by his son Eadmund Ironside. Æthelred died in 1016, and later that year after a series of battles, Eadmund and Knútr met at Alney near Deerhurst. There they agreed that Eadmund should hold Wessex and Knútr the north. At the end of the year Eadmund also died, leaving Knútr in full possession of England.⁶²

The character of Knútr is easier to understand than that of his father. He clearly was a young man when he conquered England but already prudent and cautious; although by his retreat to Denmark the people of Lindsey suffered much, it was a wise move in the long run since he did not then have the support he needed.⁶³ Throughout his life Knútr in fact showed himself to be more of a statesman than a warrior.⁶⁴ Although much decried, his overthrow of Óláfr Helgi by bribery instead of a long series of military campaigns was prudent and effective, resulting in minimal loss of Danish (or English) lives.⁶⁵ Knútr's policies in England also show a political expertise, changing little but strengthening the country by the peace he was able to enforce both internally and externally.⁶⁶

In addition, Knútr was clearly adept at foreign policy. His marriage to Æthelred's widow, Emma, was a brilliant move. In all probability it was not designed to reconcile the English and Danes as the Encomiast suggested.⁶⁷ Instead the alliance defused a potentially dangerous situation. Æthelred's sons by Emma were in Normandy with Emma's brother, providing a claim should Richard of Normandy look towards England. By marrying Emma and fixing an agreement whereby the children of Emma and Knútr would be first in succession, Knútr took care of the threat from Normandy while Emma was able to regain her status.⁶⁸

Although the sources are patchy, it seems Knútr was in diplomatic contact with almost every ruler in northern and western Europe.⁶⁹ Perhaps most important were his close ties to the papacy and to Conrad, emperor of the Germans. Knútr was present at Conrad's coronation in Rome in 1027. At the same time he obtained concessions for travelers to Rome passing through the German empire, Burgundy, and other territories through which the route lay; throughout the first half of the eleventh century a number of people, from the king himself to ordinary folk made this journey.⁷⁰ The close ties with Germany continued during Knútr's reign. Around 1035 he betrothed his daughter Gunnhildr to Conrad's son Henry. In the settlement Conrad promised to return to Denmark the province of Sleswig which from the time of Haraldr Blátúnn had been used as a border zone by Germany.⁷¹

During his reign Knútr left England several times to take care of foreign matters. In 1019 he travelled to Denmark, presumably to secure the Danish throne after the death of his brother Haraldr.⁷² The Anglo-Saxon Chronicle recorded another expedition in 1022 to Wihltlande, interpreted by some scholars as the Isle of Wight⁷³ but as the Slavic area of Witland by others.⁷⁴ Knútr may have been in the Baltic area at any rate since the Chronicle recorded his return in 1023.⁷⁵ Sometime in the mid 1020's Knútr again left England, this time to combat a threat from Óláfr Helgi and Önundr of Sweden.⁷⁶ A battle occurred at Helge-å on the coast of Skåne where conflicting accounts declared both sides victorious.⁷⁷ Nevertheless, the outcome clearly signalled the fall of Óláfr Helgi. His alliance with Önundr was broken and he returned to Norway where an uneasy peace existed for a short time. Knútr did not follow up his campaign but instead went on his pilgrimage to Rome while at the same time bribing men in Norway against Óláfr Helgi.⁷⁸

As a result of the battle of Helge-å Knútr may well have briefly

gained control of part of Sweden. In a letter written to the English people from Rome before returning to Denmark, his preamble begins:

"Canutus, rex totius Angliae et Denemarciae et Norreganorum et partis Suanorum ..." ⁷⁹ His claims to part of Suanorum caused scholars some difficulty, and in fact was sometimes amended to Sclauorum. ⁸⁰ However, the phrase rex Sveorum is found on some coins minted by Knútr, suggesting he did control a part of Sweden at some time. Historical accounts suggest the most likely time was after the battle of Helge-å. It does not seem to have lasted very long, however, probably only until the early 1030's. ⁸¹

When Knútr returned to Norway in 1028 he met no opposition there. Óláfr Helgi fled to Jaroslav in Russia and Knútr put his son Sveinn by his mistress Ælfgifu to rule Norway; Ælfgifu went as well to act as regent. Later legends are harsh to both Sveinn and Ælfgifu, but much of this may be due to the fact that when they were written, Óláfr had been canonized. Óláfr in fact returned to Norway in 1030 but the Norwegians rose against him and he was killed in battle. He was declared a saint, however, within a short time; twenty-five years later his cult had already become widespread. ⁸²

After returning from Norway, the sources suggest Knútr spent the remaining years of his reign in England. ⁸³ His rule there appears to have been both peaceful and prosperous. Few novel changes seem to have been introduced. Knútr issued his own law codes which drew heavily upon those of his predecessors, and indications suggest these laws were enforced. ⁸⁴ At the same time Knútr expanded contacts, both diplomatic and economic with the continent. Byzantium, for example, was more accessible to England with the addition of the Baltic routes. ⁸⁵ His patronage of the church appears to have been genuine, and as a result the church spoke highly of him. ⁸⁶ Moreover, it facilitated artistic contact where continental and Scandinavian art

styles became more available.⁸⁷ As Stenton has remarked, the reign of Knútr "for all its weakness in constructive achievement can fairly be regarded as a brilliant age."⁸⁸

In a relatively short period Knútr had put together a northern empire; most authorities believe he did not conceive of it from the beginning of the reign but rather seized the opportunities skillfully as they came along.⁸⁹ It was never very stable, either, already fragmenting just before his death. In 1034 Magnus, the son of Óláfr Helgi, returned from exile in Russia. Sveinn and presumably Ælfifu fled to Denmark where Hörthaknútr, Knútr's son by Emma was ruling. When Knútr died in the following year a complicated situation arose. Hörthaknútr was the legitimate heir in England based upon the marriage agreement of Emma and Knútr, but he was unable to leave Denmark, presumably because of the return of Magnus.⁹⁰ Faced with a difficult situation in England, the witan proclaimed Haraldr, Knútr's other son by Ælfifu, as regent of England.⁹¹ Ælfifu appears to have returned to England, and probably held an influential place as Haraldr's mother.⁹²

Emma's position on the other hand clearly declined; she was exiled in 1037 and fled to Flanders. It is interesting that Emma did not go to her kinsmen in Normandy, but this is probably due to the fact her nephew had died in 1035 and Normandy at that time was in an unstable minority rule.⁹³ Flanders, in fact, up until the time of the Norman Conquest, was on uneasy terms with England. It provided a base for Scandinavian claimants to the English throne as well as for exiles such as Emma and Godwine.⁹⁴ When Hörthaknútr finally settled matters in Denmark he sailed in 1039 to join his mother in Flanders, accompanied by a large fleet; he thus seems to have envisioned a struggle with his half-brother for England.⁹⁵ While in Flanders, however, news arrived of Haraldr's death.

Hörthaknútr and Emma returned to England in 1040, but Hörthaknútr's reign only lasted two years.⁹⁶ His death marked the end of Scandinavian rule in England although there were later attempts to regain control.⁹⁷

In 1041 Eadward, the son of Emma and Æthelred had arrived in England. His reasons for coming are unknown but presumably of a royal nature, either as a claimant to the throne⁹⁸ or on Hörthaknútr's wish to secure the succession upon his death; Campbell suggested Hörthaknútr may have known himself to be terminally ill.⁹⁹ At any rate, Eadward smoothly succeeded Hörthaknútr in 1042. England's foreign relations under Eadward the Confessor remained much the same as under Knútr although the ties with Normandy where Eadward had spent most of his life were understandably much closer.¹⁰⁰

Scandinavia, however, upon the death of Hörthaknútr was in a much greater state of flux. Magnus took Denmark, either as a result of an agreement the kings had made if either should die without an heir, or by military invasion.¹⁰¹ Sveinn Úlfsson, Knútr's nephew, also had a good claim to the Danish throne but no means by which to implement it. A number of later stories describe the struggles between Sveinn and Magnus but few contemporary sources help to sort out the conflicting details. Nor can Adam be trusted here since his informant for Danish affairs was Sveinn Úlfsson who obviously would present only his case.¹⁰² What is clear is that a power struggle ensued, further complicated by the return of Haraldr Harthrathi to Norway in 1045. Haraldr, the half-brother of Óláfr Helgi had gone eastwards after the death of Óláfr, spending time in Russia and in Byzantium as a member of the varangian guard.¹⁰³ He clearly wanted a share of Norway, and later sources say Magnus divided Norway between the two of them. On Magnus' death in 1047 Sveinn claimed Denmark and Haraldr ruled Norway although the late

sources mention much conflict between the two rulers.¹⁰⁴ These events are difficult to untangle as well, but the political situation appears to have remained the same. Haraldr ruled Norway alone until his death in 1066 in a bid for the English throne.¹⁰⁵

For all the instability of the first years, Sveinn's reign was quite secure in its latter years and a time of much advancement. He had a personal reputation for wisdom, not only acknowledged by Adam of Bremen who had derived much of his information from Sveinn, but also shown in papal documents and epithets in skaldic verse in which he was the enemy but nonetheless noted for his wisdom.¹⁰⁶ Before his death in 1074 he extended the church organization, creating new sees, building many churches, and strengthening ties with the papacy.¹⁰⁷ In his reign the beginnings of a national coinage can also be seen.¹⁰⁸ At the same time he did not forget his claims to England, although his attempts did not meet with any success.¹⁰⁹

The history of Sweden during this time is still obscure. Önundr, like his father Óláfr Skötkonung, was a Christian king but neither made much headway towards establishing Christianity in Sweden.¹¹⁰ Önundr ruled from c. 1022 to c. 1052, and with the possible exception of the battle of Helge-å and its aftermath, he seems to have kept Sweden intact, merely lending aid and refuge in the power struggles between Denmark and Norway. After his death, Adam of Bremen recorded that Önundr's half-brother Eymundr succeeded. Adam's report is scathing, primarily because Eymundr turned away from the church of Hamburg-Bremen and appointed his own bishop who had rejected the German church and had been consecrated in Poland.¹¹¹ Upon his death, his nephew Steinkell ruled Sweden; his portrayal in Adam of Bremen is far more flattering, partly because Steinkell turned back towards the German church.¹¹² Steinkell died in 1066 and thereafter a state of political confusion existed.¹¹³

Unfortunately Adam dealt almost exclusively with ecclesiastical matters and there are few hints of the political connections during these reigns.

Some of the marriages of Russian princes show continued links with Sweden, however. Upon Vladimir's death in 1015 a power struggle arose between his eight sons by four different wives. Two were quickly killed off and in the ensuing conflict two of the sons, Mstislav and Jaroslav emerged as the strongest contenders. In 1024 they agreed to divide Russia along the Dnieper. Kiev and Novgorod were held by Jaroslav while Mstislav made Chernigov his capital. When Mstislav died in 1036 Kiev became the capital of a united Russia, ruled by Jaroslav until his death in 1054.¹¹⁴

Jaroslav continued the close ties with Byzantium that his father had forged although relations gradually deteriorated, resulting in a short Russian-Byzantine war in 1043; this was followed again by smoother relations when he betrothed his son Vsevolod to the Byzantine princess Maria.¹¹⁵ Jaroslav also looked to the west and allied himself in a number of dynastic marriages. He himself married Ingigerthr, daughter of Óláfr Skötkonung, in c. 1019 and his daughter married Haraldr Harthráthi, probably around 1044. Relations with Poland were established by the marriage of his sister to Kazimierz, son of Mieszko II in 1039, followed in 1043 by the marriage of his son Izjaslár to Kazimierz' sister Gertrude. One of Jaroslav's daughters married Andrew of Hungary, who in fact had been in exile in Kiev from 1034 to 1046. Another daughter married Philip, the son of Henry I of France in 1049 while two sons were married to German women.¹¹⁶ Altogether it is an impressive list, linking most of the important western European countries, and emphasizing the importance of Russia at this time. After Jaroslav's death in 1054 internal difficulties of succession among his three

eldest sons splintered the country again; in the following struggles the political contacts of some of the foreign spouses were appealed to for aid.¹¹⁷

Relations with the Slavic countries continued throughout this period as well, although they are difficult to document. Shortly after coming to power, Knútr exiled Eadmund Ironside's sons, Eadmund and Eadward from England. Accounts differ on the circumstances, but it seems clear they eventually found refuge in Hungary.¹¹⁸ There Eadmund died, but Eadward appears to have remained, and eventually married Agatha, a kinswoman of the German emperor Henry;¹¹⁹ he eventually returned to England in 1057 but died soon thereafter.¹²⁰ There are a few indications of contact between Scandinavia and Hungary, limited to a small number of objects which seem to reflect a small amount of trade or diplomatic contact;¹²¹ if Knútr did send the princes directly to Hungary, he must have considered it remote enough that they would constitute little threat. On the other hand, there is a bit more evidence of contacts between England and Hungary where some of the church rites show Anglo-Saxon influence; moreover, Hungary lay on one of the routes Englishmen took to Jerusalem.¹²² In general, however, Hungary's ties seem far closer to Germany in this period.¹²³

More significant to Scandinavia appear the relations with the Baltic Slavs, at times diplomatic while at other times military in nature. Knútr, it must be remembered, was half-Slavic; one of his sisters, recorded only in the Liber Vitae of Winchester, had the Slavic name of Santslave.¹²⁴ In addition, Florence of Worcester mentioned that another sister had married a Slavic king named Wyrtegeorn.¹²⁵ Further ties are indicated in Adam of Bremen's account of the Winuli prince Gottschalk. According to Adam, Gottschalk had been educated at Lüneburg, although after the Saxons

killed his father, he renounced Christianity and returned to fight on the side of the Winuli. He was captured by Duke Bernhard and, after coming to terms with him, travelled to Denmark where he met Knútr. He returned to England with Knútr and appears to have remained there until after the death of Hórtþaknútr.¹²⁶ Gottschalk then made a number of raids against the Slavs, probably from Denmark¹²⁷ where he was considered important enough to marry into the Danish royal house.¹²⁸ Adam gave so many details concerning Gottschalk partly because he supported the church of Hamburg-Bremen but also because he spent the last years of his life attempting to convert the Slavs, for which he was martyred along with the Scottish bishop John in 1066.¹²⁹

Other relations between Scandinavia and the Wendish Slavs do not appear to have been peaceful, but accounts for the first half of the eleventh century are generally late and difficult to untangle. The Wends in this period, and in fact into the twelfth century, were still only loosely organized into tribes. As a result, they had no unified force with which to resist Scandinavian or German attacks. Throughout the eleventh century a number of raids occurred between various Wendish tribes and Scandinavia, some of which Gottschalk appears to have participated in. Adam of Bremen described attacks upon Denmark after the death of Knútr, but according to Adam, Magnus dealt with them one and all.¹³⁰ Another major series of raids occurred around 1066 resulting in the destruction of Hamburg and Sleswig (or more probably Hedeby).¹³¹ The raiding back and forth continued into the twelfth century, often with the combined forces of Germany, Poland, and Denmark against the Wends. In this later period, however, economic motivations were also tied to political expansionism, and in fact Denmark controlled some regions for a brief period, placing the Slavic church organization under Roskilde.¹³²

Even from this brief survey it is clear that the period from 1000 to 1066 was a time of far reaching political ties; even the trails of political exiles alone show contacts over a large area. This expansive network emphasizes the impossibility of viewing any one country in isolation. The historical background, however, gives only one side of a complicated picture in which religious and economic relations were also important. At times the impetus and channels were identical but, as shall be seen, they could operate independently from one another as well.

Chapter 2: Footnotes

1. See Jacobsen and Moltke 1942 col. 79. See also Christensen 1969 p. 233 concerning problems in the translation of the inscription. For archaeological evidence of large scale projects in Haraldr's reign see Chapter 6 p. 178.
2. Randsborg 1980 pp. 33-4.
3. See Christensen 1969 pp. 231-3; Andersen, Madsen and Voss 1976 vol.1 pp. 79-80.
4. Randsborg 1980 pp. 14, 22.
5. ibid. p. 22; Jacobsen and Moltke 1942 col. 93-5.
6. Adam of Bremen ii 3.
7. Larson 1912 pp. 14-5; Jones 1968 p. 127 believed Tovi was Haraldr's second wife.
8. Campbell 1949 p. 1. The two oldest accounts, the Encomium Emmae (i 1) and Adam of Bremen (ii 27-8 (25-6)) both agree upon this outcome and it therefore seems basically correct.
9. Adam of Bremen Schol. 24 (25); ii 39 (37); Encomium Emmae ii 2. Thietmar also mentioned this marriage (see Cross 1930 p. 125). See also Campbell 1949 p. lvii.
10. See Cross 1930 p. 125.
11. ibid. pp. 125-6; Campbell 1946-53b pp. 12-3.
12. See Campbell 1946-53b p. 10.
13. ibid. pp. 11-2; Jones 1968 pp. 137-8.
14. See Campbell 1949 p. 68.
15. Adam of Bremen ii 40 (38).
16. See Jones 1968 p. 138.
17. Adam of Bremen ii 40 (38); Campbell 1946-53b pp. 11-2.
18. Campbell 1949 p. 68.
19. See ibid.
20. See ibid. p. 69.
21. Adam of Bremen ii 39 (37); Campbell 1949-53b p. 11.
22. Suhle 1964 pp. 51-2, 54; Bäuml 1969 pp. 47-9.
23. Dalton 1911 (repr. 1961) pp. 93-4.
24. Bäuml 1969 p. 49.

25. ibid. pp. 49-50; Barlow 1963 p. 16.
26. Vlasto 1970 pp. 86, 88-9.
27. ibid. pp. 94, 97.
28. ibid. pp. 99-100.
29. ibid. pp. 114-5.
30. ibid. pp. 118, 121.
31. Bosl 1970 pp. 51-2.
32. Vlasto 1970 p. 127.
33. ibid. pp. 128-9.
34. ibid. pp. 130-2.
35. ibid. pp. 144-5, 148.
36. Bosl 1970 p. 56.
37. Adam of Bremen iii 23 (22).
38. Randsborg 1980 p. 22. Adam of Bremen ii 42 (40) mentioned a leader of the Winuli named Mistivoi.
39. Vlasto 1970 pp. 253-4.
40. ibid. pp. 255, 258-60.
41. ibid. pp. 262, 266.
42. ibid. pp. 257-8.
43. Stenton 1947 p. 379.
44. ASC 994(04) See also Campbell 1949 p. li for arguments that Sveinn may also have attacked the Isle of Man in this year.
45. ASC 1003, 1004, 1005 C (D,E).
46. See Stenton 1947 p. 375.
47. ASC 1004 C (D,E).
48. ASC 1005, 1006.C (D,E).
49. ASC 1007 C (D,E).
50. ASC 1008 C (D,E).
51. ASC 1009 C (D,E).
52. ASC 1012 C (D,E); Stenton 1947 p. 379.
53. ASC 1009 C (D,E).
54. Campbell 1949 p. liii.

55. ASC 1013 C (D,E).
56. Stenton 1947 p. 379.
57. Freeman 1870 p. 361.
58. ASC 1014 C (D,E).
59. See Campbell 1949 pp. lvi-lvii. The Encomium Emmae implied that Knútr was the elder, but other sources suggest the opposite to be the case.
60. Encomium Emmae ii 2; see also Campbell 1949 pp. lv-lvi.
61. Encomium Emmae ii 2.
62. ASC 1015, 1016 (00) See Wright 1939 for a discussion of various traditions which arose concerning events of this time, including the death of Sveinn (pp. 172-4), stories about Eadric Streona (pp. 186-90, 205-10), and the meeting of Knútr and Eadmund Ironside (pp. 191-5).
63. ASC 1015 (00) Garmonsway 1963 (1964) p. 10.
64. See Campbell 1949 p. lx who noted the absence of any mention of Knútr's courage or heroic deeds in the Encomium Emmae. Certainly if such a reputation had existed it would have been in the Encomiast's interests to include it.
65. Larson 1912 pp. 234-5. Skaldic poetry and the sagas dealing with Óláfr Helgi deplored the use of bribery, not surprisingly since they were biased towards Óláfr; moreover, in the case of the sagas, it did not fit the heroic milieu the authors envisioned.
66. Stenton 1947 p. 403; Larson 1912 pp. 135-6. Thietmar (viii 7) recorded that Knútr killed the crews of thirty pirate ships in 1018 (see Whitelock 1979 p. 350) and further attacks are not mentioned in the ASC.
67. Encomium Emmae ii 16, 17.
68. Campbell 1949 p. xlv.
69. Larson 1912 p. 264.
70. Barlow 1963 p. 291.
71. Stenton 1947 p. 402.
72. ASC 1019 (00) Campbell 1949 p. lvii.
73. E.g. Stenton 1947 p. 395.
74. E.g. Larson 1912 pp. 157-8. A much later tradition in Henry of Huntingdon mentioned Godwine fighting against the Slavs, and Larson 1909-10 p. 736 suggested this may perhaps be related to the ASC entry of 1022.

75. ASC 1023 C. Campbell 1949 p. 75 felt Knútr may have concentrated his fleet on the Isle of Wight in preparation for his journey to Denmark.
76. The dating of this expedition is problematical. The ASC E places it in 1025. Campbell 1949 p. 82 argued from the various sources that 1027 seems more probable, Jones 1968 p. 380 felt 1027 to be too late since Knútr undertook his pilgrimage to Rome in that year. Instead, he felt 1026 was probably the year of the battle.
77. See Jones 1968 p. 381. The ASC 1025 E recorded the Swedes as victors.
78. Garmonsway 1963 (1964) pp. 23-4.
79. Robertson 1925 p. 146.
80. E.g. Larson 1912 pp. 152, 344.
81. Lagerqvist 1968 pp. 403, 409; Robertson 1925 p. 345.
82. By the time the ASC 1030 C had been written down, Óláfr Helgi had already been canonized. The ASC entry for 1055 D noted that Siward was buried in a church he had dedicated to God and St. Óláfr; hence the cult had already spread to England by that time. For further discussion of the cult of St. Óláfr, see Chapter 3 pp. 68-70 and Appendix I p. 328.
83. There has been much discussion that Knútr may have made a second pilgrimage to Rome just before his death. See Campbell 1949 p. lxii and Barlow 1958 pp. 650-1.
84. Lund 1976 pp. 188, 195; Barlow 1963 pp. 273-4.
85. Barlow 1963 pp. 14-5.
86. Stenton 1947 p. 405.
87. Rice 1952 p. 25.
88. Stenton 1947 p. 413.
89. ibid. p. 400; Larson 1912 p. 108.
90. Campbell 1949 p. lxviii; Jones 1968 p. 400.
91. The ASC 1035 C (D) also recorded a story current at the time that Haraldr was not Knútr's son. The Encomium Emmae iii 1 not surprisingly also reported this story.
92. Stenton 1947 pp. 414-5.
93. ASC 1037C See also Campbell 1949 p. xlvihi.
94. Grierson 1941 pp. 95-100.
95. Campbell 1949 p. lxviii.
96. ASC 1040, 1042; Encomium Emmae iii 9, 10.

97. See Appendix I pp. 324-6.
98. Körner 1964 pp. 66, 68.
99. Campbell 1949 p. lxviii.
100. Stenton 1947 p. 402.
101. See Jones 1968 p. 400 for a discussion of the various late stories concerning this agreement. Adam of Bremen ii 77 (74) said Magnus attacked Denmark during Hórfhagnútr's absence in England; there are a number of problems with his chronology, however, and it is difficult to ascertain precisely what happened.
102. See Campbell 1946-53b pp. 17-9.
103. ibid. p. 19; see Obolensky 1970 pp. 162-3 for a discussion of the contemporary Byzantine account concerning Haraldr.
104. See Jones 1968 pp. 406-7.
105. ASC 1066 C (D,E).
106. Christensen 1968 pp. 39-40.
107. ibid. pp. 38-9; Adam of Bremen iv 2-8.
108. Christensen 1968 p. 41; Haastrup 1969 p. 131.
109. See Appendix I. pp. 324-5.
110. Adam of Bremen ii 58-9 (56-7).
111. ibid. iii 15 (14).
112. ibid. iii 16 (15).
113. ibid. iii 53 (52).
114. Vlasto 1970 pp. 266-7.
115. ibid. p. 285.
116. ibid. pp. 286-7.
117. ibid. pp. 287-9.
118. There are various stories concerning the banishment of the two princes. The ASC 1057 D maintained that Knútr had exiled Eadward (and thus presumably Eadmund as well) to Hungary. Florence of Worcester, however, said Knútr sent them to Sweden to be killed, but the Swedish king took pity upon them and sent them to Hungary (see Whitelock 1979 p. 312). Adam of Bremen (ii 53 (51)) thought they had been exiled to Russia. Although the route may have been indirect, it does appear that the princes ended up in Hungary.
119. Fest 1938 using post Conquest accounts argued that Agatha was the daughter of the King of Hungary, but see Stenton 1947 p. 563.

120. ASC 1057 D (E).
121. Paulsen 1933 pp. 30-1, 35-6, 57; but see also Bakay 1967 p. 171.
122. Barlow 1963 p. 16.
123. Bosl 1970 p. 58.
124. Larson 1912 p. 262.
125. See Whitelock 1979 p. 314.
126. Adam of Bremen ii 66 (64), 79 (75).
127. ibid. ii 79 (75).
128. ibid. iii 19 (18).
129. ibid. iii 50-1 (49-50).
130. ibid. ii 79 (75).
131. ibid. iii 51 (50), Schol. 81 (82); Vlasto 1970 p. 151.
132. Vlasto 1970 pp. 151-2, 154.

Chapter 3: Religious, administrative, and economic background

The written sources are not only the mainstay behind the construction of a political framework, but they also provide the major basis for the religious, administrative, and to some degree the economic background. In the religious and administrative spheres the sources provide an indication of the ideas themselves and the routes they travelled both to and from Scandinavia, while in the economic sphere they reveal a range of articles not present in the archaeological record, some of the routes they travelled, the movements of merchants, and some of the major towns. Together all are important in determining the significant areas of contact, to which the archaeological information must be added.

In the first half of the eleventh century the church had an extensive network throughout Europe which was gradually, but firmly being pushed into the Slavic areas and Scandinavia. The advantages of this network were many. In the first place, it provided the channels for diffusion of ideas and cultural influences such as artistic styles or ecclesiastical objects. Its organization and skilled men were also indispensable to the political administration. The division of the nations into ecclesiastical sees often served as political districts, necessary as the countries became unified. Educated clergy brought skills useful for correspondence and administration such as writs and laws, as well as providing the moral sanctions with which to implement them. In addition, the clergy were useful as ambassadors to other countries.¹ Altogether, the church provided a multitude of advantages to the Christian king which were not available to the pagan ruler.

In Scandinavia, rulers in the late tenth and early eleventh centuries were well aware of these advantages, whether or not their own religious convictions were fully tied to the new religion. In some cases the conversion may have been primarily for political motives but it could work the other way as well. Hákon Haraldsson (the Good), who was fostered in England by Ethelstan, was a Christian yet when he returned to Norway there was so much opposition to the new religion that he reverted to paganism.² The church, however, did provide a moral sanction for attempts to consolidate a domain or even extend it, as long as the activity was tied in with religious conversion. The brief reign of Óláfr Tryggvason is a case in point. Although his motives may have been partly religious, he also appears to have been well aware of the political advantages, and used the church as a weapon to consolidate a hold in Norway. As one author has put it, Óláfr "stands before posterity as one^{who} in his day and place was Christ's best hatchet-man ..."³

It is a different matter entirely how far the conversion of a king influenced the people in the country. While trading towns certainly had their Christian enclaves,⁴ they may have been composed of foreign Christian traders or men who felt it good business to be at least nominally Christian, since many of their dealings were with Christian foreigners. Christianity in the towns was probably a very different situation from what occurred in the rural areas. Runestones with Christian iconography do, however, suggest the new religion was filtering down to at least some extent. While many probably represent the upper classes, some may also belong to other strata in society. For example, a stone from Hørning in Jylland ornamented with a cross, was raised by a craftsman to the man who had freed him from slavery.⁵ Furthermore, the scarcity of graves with goods in Denmark and Norway may to some degree be

attributed to the influence of Christianity.⁶ In Sweden and Gotland, however, the process was clearly slower. Not only do historical sources indicate a more enduring hold of paganism, but graves with objects are found well into the eleventh century.⁷

The history of the conversion of Scandinavia shows a long complicated process. The first Christian missions began in Denmark but they were all short-lived. The first large scale attempts occurred in the early ninth century with Frankish and papal backing. In 823 Archbishop Ebo of Reims was sent by Louis the Pious to convert Denmark but seems to have had little impact.⁸ In 826, however, a pretender to the Danish throne, Haraldr, was converted, perhaps to get the emperor's support, and the monk Anskar returned to Denmark with him. Anskar, however, does not seem to have stayed long in Denmark, probably because Haraldr was soon thrown out of Denmark. Anskar then moved on to work in Sweden, especially at Birka.⁹ In 849 Anskar, now archbishop of Hamburg-Bremen, attempted to convert Denmark again, this time with a bit more success, and he managed to build a church at Hedeby. Although not smoothly, the mission continued through the lifetime of Anskar's successor, Rimbert, but after he died, little missionary work is heard of.¹⁰

According to Adam, in the first half of the tenth century Archbishop Unni attempted to convert Gormr inn gamli but succeeded only in convincing his son Haraldr Blatönn, although he did not baptise him. As a result, Unni was able to ordain priests for churches in Denmark; then like Anskar, he moved on to work in Sweden.¹¹ This sequence seems rather doubtful from the other bits of information known about Haraldr. In fact, Adam included another version which is also somewhat suspect, where the renewed German mission into Denmark was linked with the political conflicts between Haraldr and Otto I. According to Adam, after Haraldr

had been defeated at one point by Otto, he promised to allow Christian missions in Denmark. Although Adam seems to have confused this raid with later ones in the 970's by Otto II, some new missionary attempts seem to date to the mid-tenth century. In 948 Pope Agapetus confirmed Adaldag, archbishop of Hamburg-Bremen, as head of the church in Denmark with the authority to appoint bishops, and as a result, the sees of Hedeby, Ribe, and Århus, all in Jylland, were established.¹² The German influence does not seem, however, to have been pervasive since in 965 and again in 988 the German emperors exempted the three churches from imperial taxes, probably simply because it was beyond their power to collect them.¹³ Haraldr himself appears to have taken longer to convert, and from hints in several sources does not seem to have embraced Christianity until the 960's.¹⁴ Nevertheless, his boast on the Jelling stone of making all the Danes Christian¹⁵ indicates his conversion had some meaning to himself, if not others. Haraldr's son Sveinn was also a Christian, although tolerant of paganism. In his reign English clergy arrived in Denmark; for example, Sveinn sent an English bishop named Gotebald to work in Skåne.¹⁶

With the reign of Knútr, not surprisingly, the number of English clergy in Denmark increased. Adam of Bremen, with his bias towards the German mission, described a few, but Sven Aggesøn later reported the presence of many English bishops and clergy.¹⁷ These English appointments of Knútr were clearly resented by the German church which felt, probably with reason, that Knútr was attempting to circumvent German ecclesiastical rights to the Danish sees. Matters came to a head when one of Knútr's appointments, Gerbrand, was captured by Unwan, archbishop of Hamburg-Bremen, as he was returning from England. Gerbrand had been consecrated by Æthelnoth, archbishop of Canterbury, in 1022 and had been assigned to the see of Sjælland by Knútr. Unwan, however, forced Gerbrand to swear fealty to the see of Hamburg-Bremen,

and therefore Knútr had to recognize the claims of the German church. Knútr thereafter appears to have abandoned any attempts to assert Canterbury's claims and instead worked towards a better relationship with Hamburg-Bremen.¹⁸

Knútr's devotion to Christianity seems to have been genuine; his relations reflect an attitude above and beyond the use of Christianity for mere political gain. He probably had received Christianity via the German church; Adam of Bremen recorded that his baptismal name was Lambert.¹⁹ In England he did not tamper with the existing church set up, and his appointments show respectable, if unadventurous, choices.²⁰ He did much to further the church, however, founding new churches and monasteries, repairing others, and donating gifts to many more, both in England and abroad.²¹ Emma also was noted for her generosity to the church, as well as for being an avid collector of saint's relics.²² The good will Knútr fostered with the church allowed him to use its network and link Scandinavia more closely with the European countries.

In Norway, unlike Denmark, the initial conversion came from England. It, too, was not a smooth progression; Hákon's abortive attempt has already been mentioned. The first real inroads came with Óláfr Tryggvason. Nevertheless, the credit for the conversion of Norway has generally been given to Óláfr Helgi. Adam of Bremen mentioned a number of English clerics in Norway in both their reigns,²³ and in fact the English influence upon the Norwegian church was never superseded despite some missionary work from Germany. Many parallels in terminology, organization and liturgy between the Anglo-Saxon and Norwegian church can be observed, some of which may date before the Norman conquest.²⁴

Sweden also had devout Christian kings in Óláfr Skötkonung and Önundr but Christianity did not take hold as it had in Denmark

and Norway. Although the first half of the eleventh century was characterized by travelling clerics who worked in several Scandinavian countries, nowhere is this as true as in Sweden where no firm church organization had been established. As a result, the country attracted a number of missionaries attempting to create a secure Christian situation. Óláfr Skötkonung attempted to Christianize Sweden with the help of both English and German clergy, but there was so much opposition that he was forced to compromise and build only one church. The German church was looked to for its establishment, and Unwan consecrated a priest named Thorgaut for Sweden's first see which was at Skara.²⁵ Further missionary activity by both Germans and English continued in Önundr's reign but made little impact. Although throughout the entire eleventh century a number of rulers were Christian, any attempts to destroy the temple at Uppsala usually resulted in popular revolt. In fact, it was not until the early twelfth century that the temple at Uppsala was finally destroyed.²⁶

The strength of paganism is difficult to determine since all the sources are Christian and late. In Sweden it clearly maintained a strong hold, so much so that people could dictate to a ruler concerning his Christianizing policies. The opposite extreme is visible in Denmark where all indications suggest a high degree of Christianization in the first half of the eleventh century. While the earlier conversion of the kings and the missionary activity associated with it may partly account for this change, the ties with the Christian Danelaw may also have played a role in the permeation of Christianity throughout the population.²⁷

While paganism in Norway does not appear to have had as great a hold as in Sweden, it does seem to have resisted Christianity somewhat longer than in Denmark. In many respects the character

of Óláfr Helgi allowed a bridge between the two religions. Although he is credited with a great deal of Norway's conversion, most of the sources are late, after his canonization. His reputation as a warrior-king saint may have been even more powerful for conversion than his policies when he was alive. It has been argued that Óláfr's cult may have taken over that of Thor.²⁸ Óláfr is frequently depicted with an axe, a symbol which has been equated with Thor's hammer.²⁹ On the other hand, the axe, although a long-standing heathen symbol, does not necessarily seem to represent the hammer; in Gotland many miniature axes have been found in pagan graves, but the Thor cult does not appear to have been very strong there.³⁰ Moreover, the axe clearly functioned as a symbol of royal power at this time in various places throughout Europe;³¹ it is possible, of course, this attribution evolved from earlier pagan associations.

Even if Óláfr did not merge with the Thor cult, it is possible that he was able to draw upon the pagan associations with the axe. Perhaps more importantly, it is understandable how a warrior king would have had great relevance to the Christian movement in Scandinavia. His cult certainly spread rapidly and widely. Even in the pre-Conquest period, his cult had spread throughout England and was not confined to the Danelaw or Scandinavian influenced areas. The Anglo-Saxon Chronicle noted a church dedicated to God and St. Óláfr by Siward in Northumbria³² while a charter from 1063 mentioned another at the other end of the country in Exeter.³³ Moreover, in the Red Book of Darley written in the 1060's in Dorset, the feast and votive mass of St. Óláfr were included in the calendar.³⁴ Similarly, in the Red Book of Derby, a manuscript also from the 1060's, St. Óláfr is the latest and only non-English saint commemorated.³⁵ Óláfr's cult spread even

further as time went on. A Swedish runestone from the eleventh century mentions the presence of a church dedicated to St. Óláfr in Novgorod,³⁶ while post-Conquest sources note further dedications in Britain, Germany, the Baltic lands and even as far as Jerusalem.³⁷

The contacts evidenced by the Óláfr cult together with the other ecclesiastical ties show the importance of the church in the formation of foreign contacts. In Scandinavia the closest relations were certainly with Germany and England where each vied with one another for jurisdiction and influence. The evidence suggests the supremacy of Hamburg-Bremen in Denmark despite the fact England was linked much closer politically. The bishoprics were created by the German church although they were sometimes filled by Englishmen. Yet in the second half of the eleventh century close contacts with the English church clearly occurred, especially in regard to the foundation of monasteries.³⁸ Thus it is difficult to determine whether the English influence in the Danish church³⁹ reflects these later ties or ones dating to the first half of the eleventh century. The answer, in all probability, lies between the two. Although the German church clearly strove to defend its organizational rights, the fact that English clergy were confirmed as bishops and other Englishmen helped in the conversions suggests some English influence must have been felt even in the pre-Conquest period.

In Norway, however, the situation was different. The German church did not press any claims, perhaps in part because the English influence was too firmly entrenched, perhaps in part because of geographical distance. As a result, the English influence upon the Norwegian church is quite marked. Nonetheless, as in Denmark, the situation is not clear cut. German missionaries are known to have worked in Norway and some German influence can be seen in the early Christian laws of some parts of Norway.⁴⁰ The Swedish

church is clearly a very different case from either Denmark or Norway. Influences came from both England and Germany, yet the formation of a comprehensive church organization dates past the period under discussion and involved different impulses.⁴¹

In both England and Germany church and state were highly interdependent,⁴² and as a result the church was also responsible for some administrative officials, skills, and institutions. It would be useful if the Danish institutions could be correlated with those from either England or Germany, but this is rarely possible. The documentary source material in Scandinavia is all late,⁴³ preventing the firm dating of the institutions they describe. The use of royal documents and letters must have derived from abroad, probably associated with Christianity, but the lateness of the sources prevents any idea of where the original impulses came from or when they occurred.

Similarly, the Danish conquest of England may have affected English administrative practices but it is also possible those features first mentioned in Knútr's reign were simply traditional English custom recorded for the first time rather than new practices derived from Scandinavia. The lack of contemporary source material in Scandinavia makes it especially difficult to decide one way or the other. Nevertheless, most authors have argued that the Danish kings took over the existing framework with few changes.⁴⁴ Certainly the evidence of legal and religious matters supports such a view, but as Stenton noted, the Danish element has probably been underestimated.⁴⁵ Knútr was fairly young at the time he gained the English throne, and presumably trusted to advisors; not surprisingly, few important positions at this time were given to Englishmen. His placement of Scandinavians in positions of local power resulted in a change of emphasis of the

positions themselves, twisting them to conform more to a personal relationship with the king. The office of ealdorman was maintained but gradually replaced by that of the earl, a title which in fact is an Old Norse loanword.⁴⁶ The difference between the functions of the ealdorman and earl appears to be slight, but presents a more fundamental change in the emphasis of the relation of the king and his official. Before Knútr, the ealdorman generally had some ties with the district, but with Knútr the office came to represent a governing district given to a follower, regardless of local connections.⁴⁷

Two institutions which first appear in Knútr's reign have been much debated as to their origin. The first is the office of the staller (Old Norse stallr), a position whose exact function at this time is somewhat vague. Stenton felt that in the first half of the eleventh century it could be applied to any officer in the king's household.⁴⁸ Unfortunately, only in post-Conquest references is more specific information to be found concerning the duties of the staller. In thirteenth century Norway he held a high position as the king's spokesman, in charge of the king's men, and a provider of horses and transport; the sagas suggest he led the army as well.⁴⁹ Contemporary sources indicate the eleventh century staller, whatever his duties, also held a high position. In England the use of the term in charters and documents is associated with prominent men from the reigns of Knútr through Eadward the Confessor.⁵⁰ A Swedish runestone commemorates Jarl Hákon's staller; it seems quite possible this refers to Jarl Hákon, the son of Jarl Eiríkr and therefore Knútr's nephew.⁵¹ Similarly, in a skaldic verse Sigvatr refers to himself as Óláfr Helgi's staller, whether figuratively or literally.⁵² As time went on, more and more stallers are mentioned in England; in the

reign of Eadward the Confessor three stallers signed one charter.⁵³ Nevertheless, the first three recorded stallers have Old Norse names which led Larson to argue that the office was originally introduced into England from Scandinavia.⁵⁴

More information is available concerning the second institution, that of the thingmannalith or housecarles. Its nature was clearly military although very different from the Anglo-Saxon army, with much greater discipline, a complicated set of rules and a more intimate relationship with the king.⁵⁵ It is first mentioned in 1033⁵⁶ but like the staller, the references which afford details of its nature are much later. Sven Aggesøn and Saxo both felt Knútr had selected and organized the men who served in it; Sven added the details that only men possessing a two edged sword inlaid with gold were permitted to join and were subject to a series of guild laws.⁵⁷ These laws have understandably been compared to those mentioned in the late Jómsvíkinga Saga.⁵⁸ But the problems in comparing the two are great, not the least of which is the fact many scholars believe the Jomsborg Vikings are fictitious.⁵⁹

A hint in the Anglo-Saxon Chronicle suggests Sven's story of a separate law for the housecarles in England may have some foundation. The entry for 1049 relates how Swegen, the son of Godwine, killed Björn, Knútr's nephew and brother of Sveinn Úlfsson, with the result that the king and here declared Swegen to be nothing.⁶⁰ Larson felt the action was by the housecarles; in fact, one of the laws Sven mentioned proscribed just such a trial and punishment if a man killed a fellow member of the band. It would appear Björn belonged to the housecarles; otherwise one would have expected the witan and not the here to judge the case. Later Scandinavian traditions in fact do place both Swegen and Björn in the housecarles.⁶¹

Altogether the evidence does suggest the organization was Scandinavian in origin, but it is more difficult to determine when it came to England and how it fit into the existing military structure. Most scholars would agree it arrived in the early eleventh century with Sveinn and Knútr,⁶² but the original inspiration is disputed. Larson argued from saga evidence that it was derived from an institution existing in the Norwegian royal court.⁶³ Others have felt it was a Jomsburg-type organization transferred to England,⁶⁴ but since the Jomsvikings as recorded in documents are so covered in traditions, it is impossible to determine what facts can be taken as historically accurate.⁶⁵ Powicke felt it was an institution based to a large degree upon Anglo-Saxon precedents, but the creation of Knútr.⁶⁶ None of these theories is capable of proof due to the lack of contemporary Scandinavian sources, but it would seem most probable that since it appeared with Sveinn and/or Knútr, it would be Scandinavian in origin, especially since the series of raids showed the presence of closely knit bands of raiders.⁶⁷

The relationship of the housecarles to other forces in England is even more difficult to determine. A number of different terms are used for military groups in the eleventh century but there are not enough documents to determine their precise meanings.⁶⁸ On Swedish runestones one hears of men serving in the thingalith or lith in the west. Jansson felt in some cases the two words were synonymous⁶⁹ but they may in fact be separate, the first belonging to an elite group and the second to a more general army which also seems to have been present, mentioned under several terms.⁷⁰

In both Scandinavia and England such a group allowed a trained military force which could be quickly mobilized for either internal or external conflicts. In England, however, the institution does

not appear to have been particularly long-lived, although there is disagreement as to when it was abolished. Some scholars felt the housecarles were dismissed in 1051 when Eadward abolished the army tax, but others have suggested Harold revived the force; still others have argued it existed until 1066 when it took part in the battle of Stamford Bridge.⁷¹ The major problem in all these interpretations lies in the loose use of the word itself in the eleventh century. As Hollister has pointed out, it could refer to a select corp bound by separate rules, as indicated in the Chronicle entry of 1049, but at the same time the term seems sometimes to have been used for any household warrior or retainer both of the king and other important lords. The term even appears in post-Conquest sources, after the institution had been replaced by Norman ones.⁷² In Scandinavia the select troop lasted longer; for example, Sven Aggesøn's paternal grandfather had been a member of such an organization, although by Sven's time it had lapsed.⁷³

While the amount of administrative influence that can be documented in England is slight, the reverse situation of English influence in Scandinavian institutions is even more difficult to analyze. The lack of contemporary source material, as mentioned previously, makes it impossible to date new institutions. Despite the political situation, few Danish institutions show similarities to the English, even in the post-Conquest period. Whether Knútr used charters or writs in Denmark as he did in England is a difficult problem. His Proclamation of 1020 appears to have been written in Denmark,⁷⁴ but this merely shows a literate scribe accompanied Knútr. However, the first extant written documents in Denmark, and Sweden as well, have formulae far closer to German royal documents; thus if Anglo-Saxon influences did arrive with

Knútr they were soon afterwards replaced by a German or papal-influenced chancery.⁷⁵

German influence may be evident in the use of seals, although this study is made very difficult by the uneven sources in Germany, Denmark and England. The use of the writ had appeared by the eleventh century in England, and alongside it, probably the use of the seal which would attest to the writ's authenticity.⁷⁶ Although there are hints that Knútr possessed a seal, the first extant English seal belongs to Eadward the Confessor while the first Danish seal belongs to St. Knútr, dating from c. 1085. In both cases the kings are portrayed enthroned in majesty, a depiction similar to the earliest extant German seal, that of Otto III, dating to 997. The Scandinavian and English seals, however, are double-faced, a type which was only later adopted in Germany and France.⁷⁷ It has therefore been suggested that Knútr derived his portraiture from German seals, perhaps from his contacts with Conrad II, but the form of the two-faced hanging seal was either from an existing Anglo-Saxon technique or perhaps Knútr's own invention.⁷⁸

The earliest extant documents in Norway are also very late, but unlike Denmark and Sweden these show strong English influence, with similarities in terms and formulae; even Norwegian handwriting seems based upon Anglo-Saxon script.⁷⁹ Other administrative features also display English similarities. The terminology for some of the posts within the king's household seems derived from Old English suggesting an importation of the institutions themselves.⁸⁰ Moreover, the post-Conquest Frostathing and Gulathing law codes have some Anglo-Saxon characteristics.⁸¹ While none of these similarities can be dated to the first half of the eleventh century, most authors have done so, based upon the political probability and a view that the contacts were not as close after the Norman

conquest.⁸² However, sources show strong administrative contacts in the post-Conquest period which could account for the similarities.⁸³

It therefore appears that many administrative features owed more to the religious connections than political ties, further emphasizing the union between church organization and political administration. On the other hand, the establishment of mints and the models for the coins themselves in all three Scandinavian countries derive from Anglo-Saxon and not German influence. Sveinn Haraldsson, Óláfr Tryggvason, and Óláfr Skötkonung all began to mint coins around the year 1000, before, it must be stressed, the political union of Denmark and England. In each case the moneyer Godwine seems responsible, and all imitate Æthelred's crux issue.⁸⁴ Yet all three issues display regional differences. The Norwegian coins are closest in design, followed by Denmark, with Sweden a distant third. On the other hand, the Danish examples are closest in weight and size with Sweden again quite deviant. It seems likely that Godwine minted in all three countries although the differences in design and weight suggest he was not concerned with die production;⁸⁵ his employment in Denmark, Norway, and Sweden indicates internal networks operating at an administrative level in Scandinavia.

These issues were short-lived, but later coinages also show Anglo-Saxon influence, both in coinage types and moneyers's names.⁸⁶ Beginning in the reign of Knútr, widespread minting occurred throughout Denmark with coin types based initially upon Anglo-Saxon prototypes but with increasingly native traits as time went on.⁸⁷ It took longer in Norway and Sweden for minting to begin again. No coins are known in Norway from the reigns of Jarl Sveinn and Jarl Eiríkr.⁸⁸ Very few coins exist from Óláfr Helgi's

but the few known display Anglo-Saxon influence, either direct or via Denmark. Some have Anglo-Saxon moneyers or are die-linked to other Anglo-Saxon imitations; unfortunately too few coins are known to determine whether they represent travelling moneyers, dies, or simply Norwegian imitation.⁸⁹ Although Magnus minted coins in Denmark, there are no certain Norwegian examples, and only in the reign of Haraldr Harthrathi does Norwegian coinage appear on any scale. Despite his stay in Byzantium, Haraldr looked towards Anglo-Saxon prototypes for much of his coinage.⁹⁰

In Sweden there appears to have been a gap between the first Swedish coins of Óláfr Skötkonung and those of his son Önundr. He too looked towards Anglo-Saxon coins as models, but brought the design and weight in closer conformity to Anglo-Saxon issues.⁹¹ Moneyers with Anglo-Saxon names continue to appear but similar problems exist as in Norway concerning the implications of the design and names.⁹² It is also possible that some of the Anglo-Saxon influence on Swedish coins arrived via Denmark; similarities in coin type as well as identical names of moneyers exist.⁹³ The output of coins from Swedish mints was relatively small in the eleventh century, however, and did not evolve into a national coinage until much later than ⁱⁿDenmark and Norway.⁹⁴

The importance of Anglo-Saxon prototypes and perhaps even personnel in Scandinavia in the first half of the eleventh century suggests further administrative features may have also arrived from England, but had been replaced before they were recorded; as it is, the coins represent the only contemporary indications of administrative influences in Scandinavia. However, it is impossible to argue from negative evidence and one can only postulate the possibility. Nevertheless, the economic sphere of the administration may have been separate from such institutions as the chancery (if it existed) or political offices; these latter positions may

well have been derived more from the church organization and its influences, and therefore with the exception of Norway, from Germany rather than England.

Operating alongside the political and religious ties was a widespread economic network, linking Scandinavia directly and indirectly with most of Europe and as far east as Russia and Byzantium. This economic network had operated throughout the Viking Age but after the introduction of Christianity, the Scandinavian kings were quick to assimilate the new church ties with the old economic ones. The interrelationship of political, religious, and economic links is vividly illustrated by Knútr's pilgrimage to Rome. Outwardly it was for religious reasons, but he was quick to take advantage of the political opportunities, visiting rulers along the way and forging ties with Conrad of Germany. At the same time he negotiated for safer roads and fewer tolls on the route for all travelers, merchants or pilgrims.⁹⁵

While finds of coins and excavations in towns indicate trading contacts, written sources also provide information concerning routes and commodities. Numerous sources mention foreign merchants in trading towns throughout Europe, suggesting both transient and settled traders in various places.⁹⁶ In Denmark, Hedeby was the most important town throughout the Viking Age with an international reputation as an important trading town. The Vita Anskarii mentioned merchants there by the mid-ninth century⁹⁷ while an Old English translation of Orosius contains a separate account, often attributed to King Alfred, of two merchants, both of whom called in at Hedeby. The first, Óttarr, lived in the far north of Norway, and travelled south with his wares, stopping at Sciringesheal, Hedeby, and then continuing to England. The second man, Wulfstan, who was perhaps English, began his journey at Hedeby and travelled directly to Truso at the mouth of the Vistula.⁹⁸ Hedeby was also

visited in the tenth century by Arabic merchants, some of whom were little impressed by the place or inhabitants.⁹⁹ By the mid-tenth century trading guilds are also known to have existed.¹⁰⁰

Birka was described in the Vita Anskarii and also appears to have been of international trading importance. Although Anskar travelled with western merchants, the eastern connections, as archaeology has shown, were especially important to Birka. In fact, its decline in the second half of the tenth century was probably caused by the severely diminished silver imports from the Arabic countries which in turn were due to declining resources and a break in the route from the Bulgar.¹⁰¹ The third major town known in Scandinavia, Kaupang, is most probably to be equated with Sciringesheal visited by Óttarr. Unlike Birka and Hedeby, however, its main importance was on a local level although Óttarr's account and finds show some connections to Hedeby and England. Like Birka, it also had declined by the end of the tenth century, and probably even before Birka.¹⁰²

Elsewhere documentary sources show Scandinavian merchants in foreign countries. Few contemporary accounts describe their movements in the Baltic with the exception of Wulfstan's travels, the runic inscriptions, and Adam of Bremen whose account will be discussed below. Some tenth century Arabic and Byzantine accounts describe Scandinavian merchants in Russia where their customs and appearance caused much comment.¹⁰³ Scandinavian merchants to the west are not as often recorded as the raiding parties, but the few hints in documentary sources combined with archaeology show the two coexisting. Óttarr's journey has already been mentioned; the peaceful dealings of Óttarr and King Alfred at a time of hostility between Scandinavia and England is a case in point.¹⁰⁴

The importance of London as an international trading town is reflected in a document dating to around 1000. It lists a number of foreign merchants, some of the wares they carried, and the tolls and restrictions to which they were subject. French and German merchants from a number of cities are listed, but the German merchants appear to have been the more honored of the two. Although no Scandinavian merchants are mentioned, it is quite likely they were also important to the trading community there. A twelfth century document which included earlier material noted that both Danes and Norwegians were permitted to live in London for a year. The fact that the Danes were especially privileged and allowed to travel over all of England to fairs and markets led Stenton to feel that the document dates to the reigns of either Knutr or Eadward the Confessor.¹⁰⁵

Adam of Bremen provided further information of Scandinavian trading ties in the 1070's. He noted the trading connections of Hedeby or Sleswig¹⁰⁶ to the Slavic lands, Sweden, Samland, and even Greece while ships from Ribe concentrated on the western trade to Frisia, England, and Saxony.¹⁰⁷ Århus he saw as primarily dealing within Scandinavia, to Fyn, Sjælland, Skåne, and Norway¹⁰⁸ but some foreign objects found in excavations there suggest either a small degree of international trade or internal redistribution from other international Scandinavian towns.¹⁰⁹ Both Skåne and Sweden were described as full of merchandise but Adam did not specify their outside contacts in greater detail.¹¹⁰ Birka, however, was described as a wilderness at this time, with little indication that it had ever been a major town.¹¹¹ Adam's comments concerning Norway provide a cautionary note in attributing all foreign objects as trade items. He noted that the Norwegians possessed a large number of foreign riches, but these, he stated, were secured by

piracy.¹¹² While the excavations at Kaupang and Ottarr's account clearly show trade occurred, raids must be kept in mind as a parallel source of foreign riches.

Although trade must be considered a major motive for the movement of goods, it was not the only one. As Grierson has emphasized, military payments, gifts, ransoms, fines, dowries, or the travels of exiles all resulted in the distribution of goods. And, whatever the original means the goods began, piracy was always a major threat.¹¹³ Nevertheless, despite the dangers of robbers, sea travel was often thought safer than many overland journeys.¹¹⁴ The coastal route along the Frankish and Frisian coasts leading to Hedeby and from there to various places in Scandinavia was used from an early time. As Wulfstan's journey showed, Hedeby was also linked to the southern Baltic east-west sea route.¹¹⁵ Finds of coins and objects from Skåne and parts of Norway from the period up to c. 970 suggest that many of the eastern connections were first made in Denmark and from Hedeby redistributed northwards.¹¹⁶ Norway by its geographical position had other sea routes to the British Isles while Sweden by its position had direct access across the sea to the Russian rivers.

While the international links can be traced to a great extent from documentary sources and archaeological finds, the internal trading connections within Scandinavia are less easy to ascertain. Nevertheless, the increasing evidence of diverse specialized exploitation of resources as shown by seasonal fishing huts in Norway, or evidence of steatite and iron quarrying, suggests an efficient network throughout Scandinavia to distribute these products.¹¹⁷ This internal network is difficult to document but is probably bound up with local markets, some of which can be identified from written sources and/or archaeology. The results

of such an internal trading system can best be seen in the distribution of steatite. Since steatite occurs naturally in Scandinavia only in Norway and to a lesser degree Sweden, the numerous examples of vessels found in towns and rural sites throughout all Scandinavia indicate a well developed internal distribution.¹¹⁹

The range of commodities used in economic exchanges is also quite difficult to determine. Some can be discerned from the archaeological record but many of those mentioned in documentary sources are never found, or at best only in traces. Óttarr journeyed to the far north to get walrus ivory but his main wealth lay in reindeer. In addition he received skins, feathers, and ships' cables made from walrus or seal hides as tribute from the Lapps. Presumably most of these were trade items he exchanged in Kaupang, Hedeby, and England,¹²⁰ yet of the range of wares, few indeed would be found in the archaeological record.

Even more intangible is the trade in slaves. The Vita Anskarii mentioned its occurrence in the ninth century¹²¹ and it still flourished when Adam of Bremen wrote in the 1070's.¹²² Other references suggest it also occurred in England despite the opposition of church and state. In his law code Knútr forbade "the all too prevalent practice" of selling Christian men from England.¹²³ This problem was not new to England because of increased Scandinavian presence, but had been several times legislated against in Æthelred's time with, it seems, little effect.¹²⁴ Nevertheless, England and Scandinavia appear to have been on the fringe of this widespread slave trade which seems to have been most concentrated in the Slavic regions.¹²⁵

These commodities as well as others archaeology can identify would be part of the international trade in luxuries. Foodstuffs and raw materials which are not mentioned in documentary sources are impossible to trace in themselves, but may be indicated by

concentrations of coins in non-agricultural areas.¹²⁶ It is not clear, however, what form payments took at this time. That a number of different types of exchange could exist at the same time is shown by a passage in Haralds Saga Grafeldar. The poet Eyvindr composed a drápa concerning all Icelanders for which men contributed silver coins. These were melted down and the metal refined, then made into a brooch which was given to Eyvindr. Eyvindr, however, had other ideas, cut up the brooch and bought a farm with the silver. Later when he wished to buy some herring he had no cash at hand, and therefore used his bowshot as payment.¹²⁷ This passage illustrates the use in the late Viking Age/early Middle Ages of three types of payment, each operating side by side.¹²⁸

As a result, the written sources can shed light on contacts in religious, administrative, and economic spheres which will not appear in the archaeological record. Together all three show an interrelated network linking most of Europe, through which ideas and objects passed. Religious and administrative contacts are difficult to date to the period of the first half of the eleventh century but enough hints survive to show the importance of Germany and England, with ideas flowing in several directions. These two countries also appear important in economic ties, but a wider area of contact is indicated in the written sources. While to a great degree archaeology by its nature can add almost no information to administrative details, and only limited evidence of the important religious ties, its contribution as a source of economic information is significant and will be discussed in a later chapter.¹²⁹

Chapter 3: Footnotes

1. Barlow 1963 pp. 4, 118.
2. Heimskringla (Hákonar Saga Goða ch. 17, 32) vol. 1 pp. 171-2, 196.
3. Jones 1968 pp. 134-5. But see also Andersson, T. 1977 pp. 83-6, 90-1.
4. Jones 1968 p. 126.
5. Jacobsen and Moltke 1942 cols. 96-7. Illustration in Jacobsen and Moltke 1941 Fig. 161-2.
6. See below Chapter 5 pp. 137-45.
7. See Adam of Bremen iii 53 (52); Oppermann 1937 pp. 105-11. See also below Chapter 5 pp. 145-51.
8. Brøndsted 1965 p. 307; Jones 1968 p. 106.
9. Adam of Bremen i 15 (17); Brøndsted 1965 p. 307.
10. Adam of Bremen i 41 (43); Brøndsted 1965 p. 307.
11. Adam of Bremen i 59 (61).
12. ibid. ii 3, ii 26 (23). See also Christensen 1969 p. 226, Campbell 1949 p. liii, Tschan 1959 p. 56 fn. 11.
13. Randsborg 1980 p. 13.
14. See Christensen 1969 pp. 226-7.
15. Jacobsen and Moltke 1942 col. 79.
16. Adam of Bremen ii 41 (39); Campbell 1949 pp. liii-liv.
17. Adam of Bremen ii 55 (53); Storm 1911-2 p. 223.
18. Adam of Bremen ii 55 (53), 64 (62), Schol. 37 (38), Stenton 1947 p. 457; Barlow 1963 p. 233.
19. Adam of Bremen Schol. 37 (38).
20. Barlow 1963 p. 75.
21. Larson 1912 pp. 168-70.
22. Campbell 1949 pp. xlvii-xlvi.
23. Adam of Bremen ii 37 (35), 57 (55).
24. Leach 1921 p. 85; Larson 1912 pp. 193-4.
25. Adam of Bremen ii 58 (56), iv 23, Schol. 135 (130-1).
26. Oppermann 1937 pp. 86-8, 106-7, 122, 160-1.
27. Olsen, O. 1969 pp. 53-4.

28. Paulsen 1936 p. 71.
29. ibid. p. 71 Paulsen 1956 p. 249.
30. Trotzig 1969 pp. 29-30.
31. Schiørring 1978 pp. 28-9. See also below Chapter 4 pp. 103, 105.
32. ASC 1055 D.
33. Sawyer 1968 no. 1037. This charter, however, is considered "dubious"
34. Dickens 1937-45 pp. 56-7.
35. Bull 1913-4 p. 141.
36. Liestøl 1970 p. 127.
37. Paulsen 1956 pp. 250-2; Kjær 1928-36 pp. 73, 78. See also Appendix I p. 328.
38. See Appendix I pp. 326-7.
39. See Olsen, O. p. 53 for a discussion of the similarities.
40. Moe 1955 p. 30.
41. See Appendix I pp. 328, 331.
42. Barlow 1963 pp. 3-4.
43. Harmer 1946-53 pp. 122, 127, 144.
44. E.g. Stenton 1947 pp. 389-90; Brøndsted 1965 p. 97; Jones 1968 pp. 373-4.
45. Stenton 1947 p. 408.
46. ibid.; Larson 1909-10 pp. 729-30.
47. Stenton 1947 p. 408.
48. ibid. p. 420.
49. Larson 1904 pp. 149-50.
50. ibid. p. 147; Bascombe 1976 p. 77.
51. One of the stones from Sövsjö, Småland. See Jansson, S. 1965 (1966) p. 17.
52. In the Vestrfararvísur. See Heimskringla (Óláfs saga Helga ch. 160) vol. 2 p. 292; and Whitelock 1979 p. 339.
53. Bascombe 1976 p. 77.
54. Larson 1904 pp. 147, 152.
55. Stenton 1947 p. 406; Hollister 1962 p. 12

56. Hollister 1962 p. 14; Sawyer 1968 no. 969.
57. See Larson 1904 pp. 158-9.
58. ibid. p. 155; Jónsvíkinga Saga ch. 16.
59. Campbell 1946-53b p. 8.
60. ASC 1049 C.
61. Larson 1904 pp. 165-6.
62. See Hollister 1962 p. 13.
63. Larson 1904 pp. 157-8.
64. See ibid. pp. 156-7.
65. Campbell 1946-53b pp. 7-10. See also below Chapter 9 pp. 297-30.
66. Powicke 1962 pp. 4-5.
67. See Hollister 1962 p. 18.
68. ibid. pp. 16-8.
69. Jansson, S. 1965 (1966) p. 16.
70. Hollister 1962 p. 12, 16-8.
71. See Larson 1904 pp. 168-9.
72. Hollister 1962 pp. 12, 19.
73. Larson 1904 p. 160.
74. Robertson 1925 pp. 140-1.
75. Harmer 1946-53 pp. 144-5.
76. Harmer 1952 pp. 35, 37. See also Barraclough 1954 pp. 205, 207-9.
77. Harmer 1946-53 pp. 119, 128-9; Barraclough 1954 pp. 208-9.
78. Harmer 1946-53 pp. 139-41; Barlow 1963 p. 128.
79. Harmer 1946-53 pp. 122-3, 151.
80. Larson 1904 p. 197.
81. Moe 1955 p. 30.
82. E.g. Harmer 1946-53 p. 151. Larson 1904 p. 199.
83. See Appendix I pp. 329-30.

84. Malmer 1961 p. 233. The largest number of examples is known from Sweden where seven different moneyers are recorded, although Godwine is by far the most common.
85. ibid. pp. 238-40.
86. Skaare 1976 pp. 60, 112; Rasmusson 1968 pp. 378-9; Malmer 1972 (1974) pp. 9-10.
87. Malmer 1972 (1974) p. 20. In Knútr's reign Danish coins were minted at Lund, Roskilde, Ringsted, Slagelse, Odense, Viborg, Ørbaek, Ribe, and perhaps Hedeby (see Hauberg 1900 pp. 69, 198). See also Hauberg 1900 pp. 190-8 for a list of moneyers' names in Knútr's reign.
88. Skaare 1976 p. 60.
89. ibid. pp. 60-3.
90. ibid. pp. 64, 68.
91. Rasmusson 1968 p. 381.
92. Lagerqvist 1968 pp. 397-8.
93. ibid.; Rasmusson 1968 pp. 378-9.
94. Rasmusson 1961 p. 5.
95. Knútr's Proclamation of 1027. See Robertson 1925 pp. 146-9.
96. See Hatz 1974 pp. 169-70; Stenton 1947 pp. 533-4; Jones 1968 pp. 164-5.
97. Sawyer 1971 p. 177.
98. ibid. p. 35.
99. See Jones 1968 pp. 175-7.
100. Hatz 1974 p. 171.
101. Sawyer 1971 pp. 177, 181, 197-8.
102. Blindheim, C. 1975 pp. 53, 56-7.
103. See e.g. Jones 1968 pp. 255-6; Smyser 1965 p. 95ff.
104. Sawyer 1971 pp. 35-6.
105. Stenton 1947 p. 533.
106. Exactly which place Adam refers to is unclear. See below Chapter 6 p. 163.
107. Adam of Bremen iv 1.
108. ibid.
109. See below Chapter 6 pp. 164-5.

110. Adam of Bremen iv 7, 21.
111. ibid. Schol. 142 (138).
112. ibid. iv 31 (30).
113. Grierson 1959 p. 131ff.
114. See, e.g. Adam of Bremen iv 15.
115. Sawyer 1971 p. 35.
116. Hårdh 1976b p. 156.
117. Keller 1972-4 pp. 103-4.
118. ibid. p. 108. See also below Chapter 6 p. 186.
119. Skjølsvold 1961 pp. 5, 129-35.
120. See translation in Jones 1968 pp. 158-9, 162.
121. See Hatz 1974 p. 175.
122. Adam of Bremen iv 6.
123. II Canute 3 (Robertson 1925 pp. 176-7).
124. V Æthelred 2, VI Æthelred 9, VII Æthelred 5 (Robertson 1925 pp. 78-9, 94-5, 112-3).
125. Hatz 1974 pp. 175-6; See also Smyth 1977 p. 155ff.
126. Hatz 1974 pp. 178-9.
127. Heimskringla (Haraldrs saga Gráfeldar ch. 16) vol. 1 pp. 221-3.
128. Keller 1972-4 p. 101.
129. See below Chapter 8.

Chapter 4: The dating of objects: typological and stylistic approaches

Whereas non-archaeological sources can suggest some routes of influence and the interchange of ideas, the objects and information derived from archaeology can enlarge on these ties and demonstrate new paths. Most of the information available consists of objects, whether as single finds, grave finds, objects in hoards, or objects from settlements, all in varying degrees of datable context. Clearly the first difficulty lies in determining the provenance of artefacts. Most are small and portable; trade, migrations of people, migrations of craftsmen or military expeditions can all account for their distribution. At its simplest, objects found concentrated in one region can generally be thought of as local production while those found sporadically in Scandinavia but concentrated elsewhere are probably imports. Obviously it is rarely this simple since objects, styles, or motifs were changed and copied; possible explanations for differences include foreign craftsmen who could misunderstand or alter pieces, or Scandinavian artists in a foreign place could merge with local styles, or an inept craftsman could bungle the work in his native land. Even a study of techniques presents problems since many were common throughout Europe. As a result, the importance of evaluating the finds against the native and foreign cultures in which they occur cannot be underestimated.¹

A second problem arises in the dating of objects, especially when the time period under question is so finite. Various methods are available, each applicable to different types of finds and with different limitations. Wilson has listed the ways in which objects can be dated, ordered according to their reliability. The first two methods, dating by inscription or association with a known personage cannot be applied to any of the late Viking period

material. The third method, by association with political events, is not feasible on its own, but is often used in combination with other methods. Wilson's last three methods, dating by inclusion in hoards, by stratified archaeological contexts, and by stylistic and typological dating are all important for late Viking Age finds.²

The dating of single finds presents the greatest problems. In some cases they can be compared to similar finds in hoards or settlements but far more often no such analogies exist. As a result, typological and stylistic methods must often be used, although each has limitations and difficulties in correlating with an absolute chronology. Moreover, although a greater number of objects can be dated by typologies than by art historical styles, the typological method often provides much wider dating parameters; the smaller number of objects relevant to stylistic dating result in chronological problems as well. As a result, this chapter will deal with the major problems inherent in typological and stylistic methods, the objects they identify as of eleventh century date, and the connections these objects show.

First, however, it is of value to review the range of objects which from documentary sources belonged to the first half of the eleventh century. In Scandinavia, the lack of comprehensive contemporary sources prevents all but a superficial view. Skaldic poems tell of various weapons and rings but without specific detail; moreover, their poetic nature prevents one from determining whether the details are anachronistic or based upon contemporary objects. Runic inscriptions also by their nature do not concern themselves with details of objects. On the other hand, contemporary Anglo-Saxon sources provide a fairly good idea of the objects present in the first half of the eleventh century. Some will never, or extremely rarely, be found in the archaeological record whereas others have hitherto not appeared but potentially will be found.

The Anglo-Saxon wills provide a good idea of what the wealthy, both laymen and clergy, could possess and felt were of enough value to pass on. It would be valuable if the wills could be associated with known Scandinavian figures in England, but this is not possible. In fact, they are difficult to associate with any known personages at all. Nor on the basis of the name can one identify the person with any certainty as either Norse or Anglo-Saxon; the sources clearly show Scandinavians giving their children English names, and vice versa.³

Items mentioned in the wills which generally would not be found in the archaeological record include bed clothing with a tapestry and curtain, table covers with all the cloths associated with it,⁴ a cloak,⁵ a woolen gown, a seat cover,⁶ or a tent and bed clothing described as "the best that I had out on my journey with me".⁷ Other objects are rarely preserved in a complete form: a ship complete with sailing tackle,⁸ "a good chest well decorated",⁹ or ornamented horns.¹⁰ Other wills suggest objects which have been found or should be present in the archaeological record: armrings, drinking cups, a silver vessel,¹¹ a pectoral cross, ring, crucifix,¹² brooches, a bowl and cups,¹³ and most common of all, weapons, either alone or part of the heriot payment. The heriot, paid by men and women, clergy and laymen alike, was clearly important. At times it is simply listed as the "due heriot"¹⁴ but elsewhere the heriot is fully detailed and thereby shows the variations alluded to in Knútr's laws.¹⁵ The will of the Ætheling Æthelstan, dated 1015, not only indicates the immense riches possible for the upper class (for example, a gold belt, a silver cross of five pounds, a silver cauldron, a silver-coated trumpet), but also clearly shows the use of heirlooms; of the eleven swords he bequeathed, one formerly belonged to King Offa (757-796).¹⁶

Other documents reveal the great wealth the churches possessed at this time. For example, the Anglo-Saxon Chronicle mentioned a gold chalice valued at five marks which Ealdred had presented to a tomb in Jerusalem.¹⁷ Ealdred also gave to the minster at Beverley a bronze pulpit ornamented with gold and silver, modelled after one he had seen in Germany.¹⁸ Knútr presented a large golden cross studded with precious stones, and two large "images" in gold and silver to the New Minster in Winchester, as well as other gifts to a number of religious foundations in England.¹⁹ Many of these ecclesiastical objects, however, no longer survive. For example, in post-Conquest times most of the metal treasures from Ely were melted down; these are said to have included crosses, shrines, chalices, patens, basins, buckets, goblets, dishes, altars, and a figure of the Virgin and Child on a throne made by Abbot Elsin (d. 1016).²⁰

It is clear from these wills and documents that the church and nobility had the wealth to commission splendid objects. But it is far more difficult to determine from documentary sources the objects the less wealthy might possess. The Gerefa, an eleventh century treatise on how a reeve should run an estate, mentioned a number of objects to^{be} found in an agricultural estate, yielding not only information on the variety of artefacts available to the archaeologist, but also the activities for which they were used. A large number of carpentry tools, farming equipment, and domestic artefacts are mentioned in detail, plus a more general description of tools for a millwright, shoemaker, and plumber. Many of these objects have been found in the archaeological record in both England and Scandinavia but others, such as a mousetrap, have not yet been discovered or identified as such.²¹

Finally, some objects are illustrated in manuscripts which can be dated either by internal evidence or paleographical analysis

to the first half of the eleventh century. Some illustrations of this period depict weapons resembling late Viking Age types. For example, Knutr's sword in the well known picture of his presentation with Emma of the cross to the New Minster²² (Plate 1) appears similar to Petersen's Type S,²³ as does perhaps a sword from a Canterbury Psalter.²⁴ Many people are shown in secular dress, usually with a round brooch to pin the cloak at the shoulder.²⁵ Such brooches in both fine and base metals with various ornamentation have been found throughout England and Scandinavia,²⁶ and must have been an essential feature of dress. Other illustrations from this period show a variety of farming implements²⁷ or pruning tools,²⁸ together with the dress of the laborer. The evidence from manuscripts, however, must be used with care since many manuscripts copied much older ones or were illustrated in a conventional style, and therefore do not reveal contemporary objects or dress. Nevertheless, when used with other descriptions they provide a further indication of the life and objects in use in the early eleventh century.

All these documentary sources reveal a wide range of objects in England in this period, and there is no reason to doubt similar objects existed in Scandinavia. Some of the objects mentioned in the sources, for example weapons, lend themselves to typological analysis. The major problem arises in linking the typologies to a chronological framework, and whenever possible, hoard analogies have been used. However, a number of objects which are put in typologies do not appear in hoards. Some are found in settlements and can be dated by stratigraphical context although this dating is in most cases somewhat vague as well. The fact that many of the objects relevant to typological dating occur in graves allows a certain degree of cross correlation between objects. Nevertheless, typological analysis requires finds which are fairly numerous

and which vary over time. The range of such objects is not particularly great, and as a result/^{they}present only a limited picture.

The typological approach is often used for single finds or those objects found in graves which do not appear commonly in hoards or other stratified contexts. Of these the weapons provide the best examples. The basic typology for Viking Age weapons is still that of Petersen.²⁹ He dealt primarily with Norwegian objects, a significant point since graves with goods which provide much of the cross correlations declined in Norway in the eleventh century, as indeed they did in Denmark.³⁰ It is also far more difficult to determine the chronological variations which may have existed in other countries, both within Scandinavia and elsewhere. In the years following Petersen's publication in 1919 some modifications have been made and various local types and developments identified, but by and large finds discovered since then have confirmed its general accuracy, especially for swords.³¹

Seven sword types are of relevance to the eleventh century (see Figure 4.1). Type Q dates mainly to the tenth but also into the eleventh century, with the later examples displaying a trend towards longer guards. In general this type appears to be a local Norwegian form; while over a hundred are known, only a few examples have been found in Sweden and Denmark, and very few outside Scandinavia.³² Far more widespread is Type S, dating from the tenth through the eleventh century. It appears to be a development from the tenth century Type R, but with a heavier guard and without animal heads on the pommel.³³ Although the Type S swords are widespread, the greatest number, twenty-six, have been found in Norway, primarily in graves, while eight examples are known from Denmark and six from Sweden. Isolated examples occur elsewhere in western Europe, but the other finds are mainly to the east.

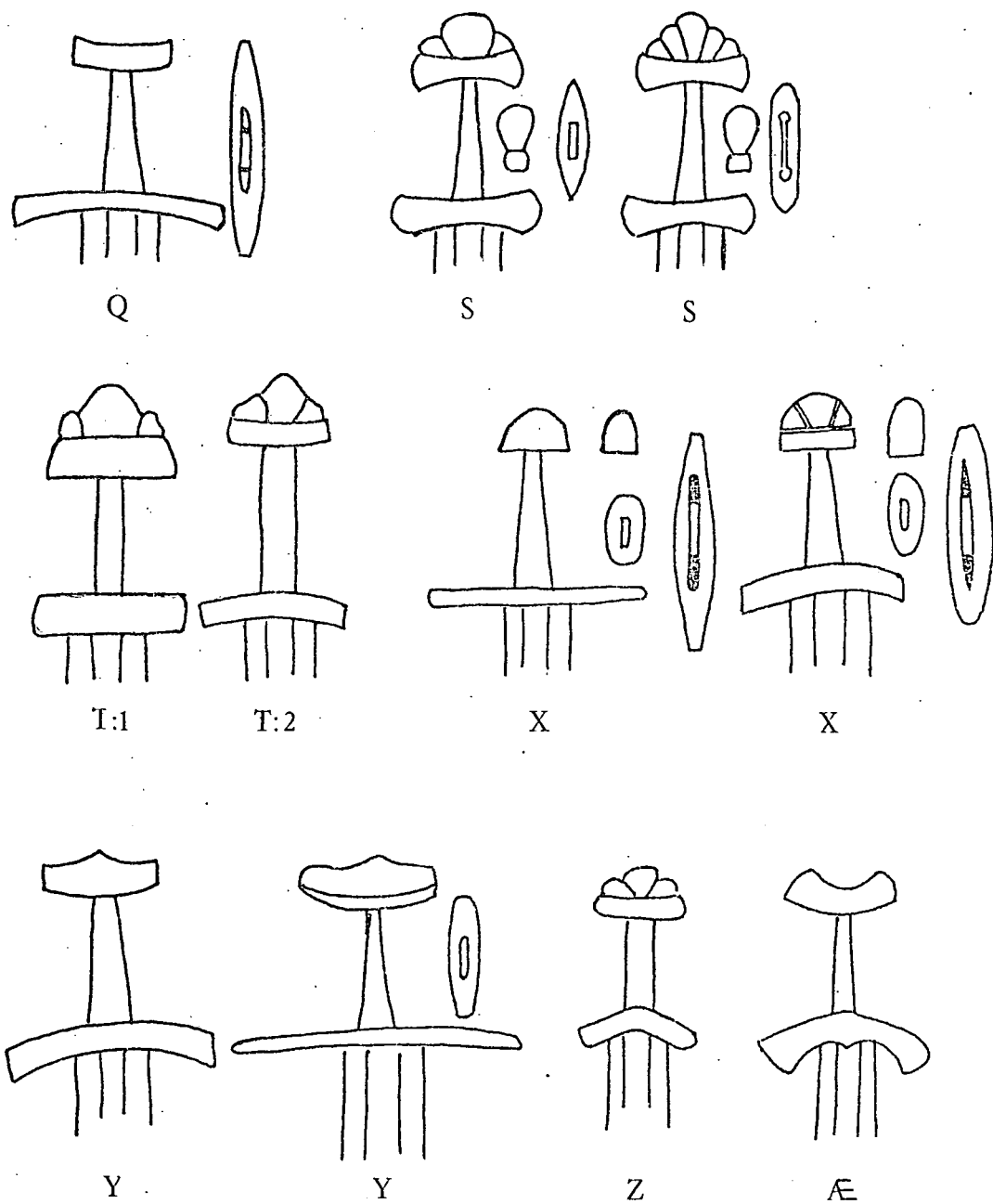


Fig.4.1

Six have been found in Finland, thirteen from Russia, seven from Poland, five from Hungary, and one from Rumania.³⁴ Many of the blades of Type S swords are inscribed with the name Ulfberht, suggesting a number of the blades at least originated from the Rhineland.³⁵

Type T appears to be a development from Type S, and is dated primarily to the end of the tenth through the eleventh century³⁶ although some have been found in ninth century Polish contexts.³⁷ Petersen subdivided this class into two groups, of which Type T-1 predominates in Norway.³⁸ Type T-2 more often occurs in the eastern Baltic countries where it constitutes the most common type of sword found, and gave rise to a local eleventh century variation.³⁹ Type T swords as a whole are also found in other eastern countries but rarely to the west.⁴⁰ As with Type S swords, the blades often have the name Ulfberht, again suggesting they have a Rhineland origin, although no Type T swords are known from there. Despite the fact that fewer examples of Type T swords are known from Scandinavia and western Europe, the Baltic examples have generally been viewed as Scandinavian imports on the basis that many are ornamented in Urnes style.⁴¹ Their scarcity in Scandinavia may partly be the result of changes in burial customs due to Christianity, and partly the limited inclusion of swords in Swedish and Gotlandic eleventh century burials.⁴²

Even more widespread are Type X swords, both geographically and chronologically. Some ninth century Frankish examples are known, but in general most seem to date to the tenth and eleventh centuries, with a continuation into the Middle Ages in some areas.⁴³ The characteristic features are a semicircular pommel and a narrow guard, usually long but sometimes short or slightly downwards curving.⁴⁴ At least forty-nine examples are known from Scandinavia, seven from

Britain, thirteen from France, six from the Netherlands, three from Bohemia, twenty-one from Hungary, five from Russia, eleven from Poland,⁴⁵ ^{and} a number from the other southern Baltic regions and Finland.⁴⁵ This type appears to have been the most popular sword in central and eastern Europe, especially Hungary where it may have been the utilitarian army issue.⁴⁶ The widespread distribution makes it difficult to determine its origin, although the fact that some blades are inscribed with Frankish names combined with the early finds suggests they originally derived from the Frankish area.⁴⁷ Regardless of the original impulse, it appears that local production occurred in a number of areas, including Scandinavia which in turn may have affected eastern types.⁴⁸

Type Y from the find combinations seems to have been contemporary with Type X, and in fact the two are sometimes found together. Petersen noted a number of variations but felt the material fell into two groups, one with a rather heavy guard, and the other more common type with a narrow guard and a pommel with rounded off ends.⁴⁹ Other authors, however, have argued that Type Y should not be considered a class of its own, but either a variation of Type X⁵⁰ or a later development of Type L.⁵¹ Like Type X, however, it appears to have been a soldier's utilitarian sword.⁵² It is not as widespread as Type X, found outside of Scandinavia almost exclusively to the east, although medieval examples with different grips are known from Germany and France.⁵³ The origin of this type is unclear, but some blades again are marked with Frankish names.⁵⁴

The Type Z sword is one of the youngest Viking Age swords, dating primarily to the eleventh century. The pommel resembles that on Type S swords but the guard is bent downwards on both sides. In Norway eight or nine examples have been found, all with an eastwards distribution. Elsewhere they occur primarily to the

east, although a few examples are also known to the west. Petersen felt this type was a development from Type S, and therefore of Scandinavian workmanship.⁵⁵ The contemporary Type A seems to be a development from Type Q, and like it, primarily a local Norwegian form.⁵⁶

Although some of these swords are single finds, a large number of them are from burials. As a result, the distribution maps are to some degree meaningless. In areas where swords were not generally placed with the corpse, as in late Viking Age Gotlandic burials,⁵⁷ the swords may have been in use and not reflected in the record. Furthermore, the influence of Christianity was felt at different times in different areas; it is not surprising that eleventh century English swords are found not in graves but in other contexts, notably river finds.⁵⁸

Nevertheless, the study of the origins and influences must be based upon the distribution of known objects. Recent work has emphasized the difference between the blades and the sword as a whole. Many of the blades suggest a Frankish origin from the inscriptions and marks sometimes visible on the blade. The names Ulfberht and Ingelrii, both with various spellings, appear on a number of swords throughout Europe and Russia.⁵⁹ The Ulfberht swords appear from the ninth through the eleventh centuries while the Ingelrii swords seem slightly later, from the tenth through the twelfth centuries.⁶⁰ A number of Russian blades which initially did not show any markings were chemically cleaned and revealed not only such names but also a wide range of geometric symbols. Of these a number had crosses, crescents, and circles, corresponding to a ninth century Arabic work on swords which noted the use of such symbols on Frankish swords.⁶¹

Although the blades are often of Frankish origin, it seems clear they were often exported to various other regions which added local forms of pommels and guards and native ornamentation.⁶² This applies to most of the Scandinavian types but the question of the eastern sword finds is more difficult. While the early dating of some eastern types suggests some direct importation of blades from the Rhineland along the Baltic to the east, many seem to have arrived via Scandinavia. Arabic authors, for example, mentioned swords as a Scandinavian item of trade.⁶³ Some of the eastern finds are ornamented in Urnes decoration, again indicating a Scandinavian origin; imitations also occurred of this ornamentation as shown by some Finnish examples.⁶⁴ Imitations of the markings on the blades are yet another possibility. As a result, the origins of the swords themselves are quite difficult to determine from the evidence available.

Although as a whole Petersen's spear typology appears overly elaborate, no other system has yet been put forward which has won universal acceptance. Whereas Petersen divided his material by the shapes of the spearheads, other studies have concentrated on the functions, dividing between thrusting and throwing spears.⁶⁵ Nevertheless, Petersen's typology for the late Viking Age will be followed here since it by and large seems accurate and is most often referred to. His dating of the late Viking Age types is also aided by the fact that many of the later spears are ornamented by Ringerike and Urnes decoration.

Petersen identified four types of spears relevant to the first half of the eleventh century (see Figure 4.2). Type G consists of a short, thick socket, widening to a broad base, and often ornamented with silver mounts. The intersection of the socket and blade is generally straight and rarely rounded off,

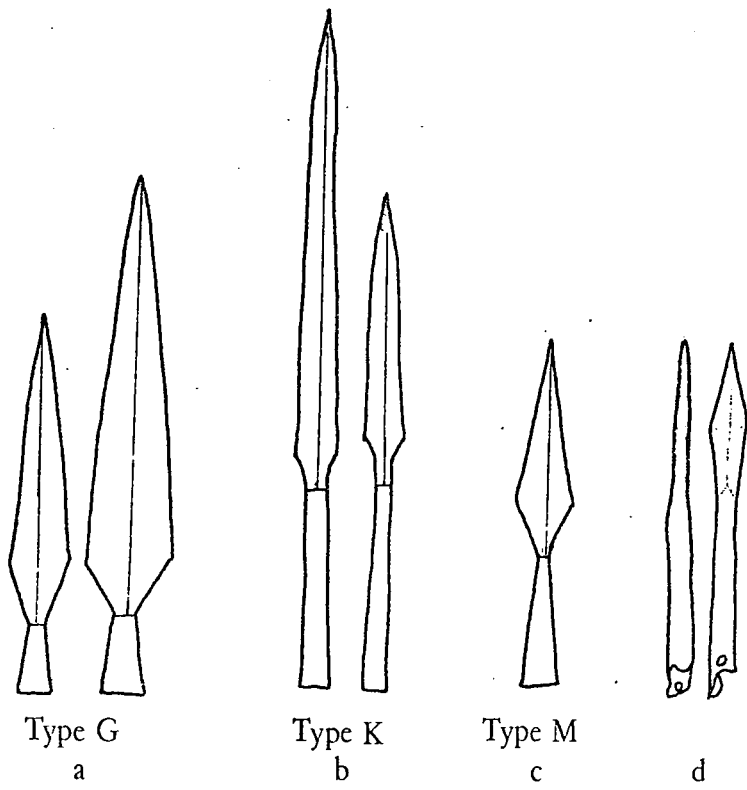


Fig 4.2

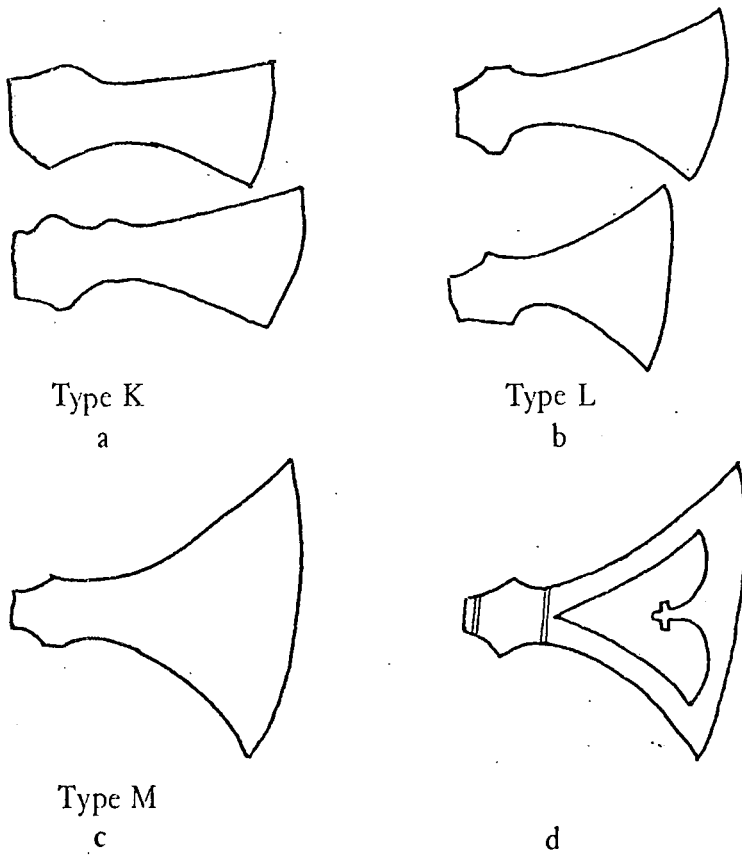


Fig 4.3



while the blade is rather flat. Type G appears only with swords and axes of the late Viking Age, probably ranging in date from the second half of the tenth through the eleventh century.⁶⁶ Spears of this type have a wide distribution within Scandinavia and are found in England and to the east. In the southern Baltic they are the most common type of spear, often decorated in Urnes style.

Finland as well has a number of fine Urnes decorated Type G spears.⁶⁷

Type K is the most common Scandinavian spear type from the middle Viking period, appearing with a wide range of swords and axes. Unlike Type G it does not appear that commonly in the east, but is fairly well known from western Europe.⁶⁸ Type K has a long, slender form both in the blade and socket, with a rather short, straight intersection between the two parts. Two variations are known, differing mainly in size. The sockets, like Type G spears, are often ornamented with inlaid silver mounts, especially on the smaller version.⁶⁹ On a group of spears of Type K or K/M or M this ornamentation is in Ringerike style.⁷⁰

Type M spears appear to belong only to the eleventh century, occurring with sword Types Z and A and axe Types L and M. It is not very long but has a sharp intersection between the blade and socket. The Norwegian examples are without metal mountings although they occur quite often on Swedish spears of this type. These spears appear over much of Europe, especially to the east where a number of examples have been found in Finland and Russia.⁷¹

The fourth spear type (Figure 4.2d) has a thick blade which is little separated from the socket. Petersen did not give this a classification letter, merely noting it occurred with swords Q and A and continued into the Middle Ages.⁷²

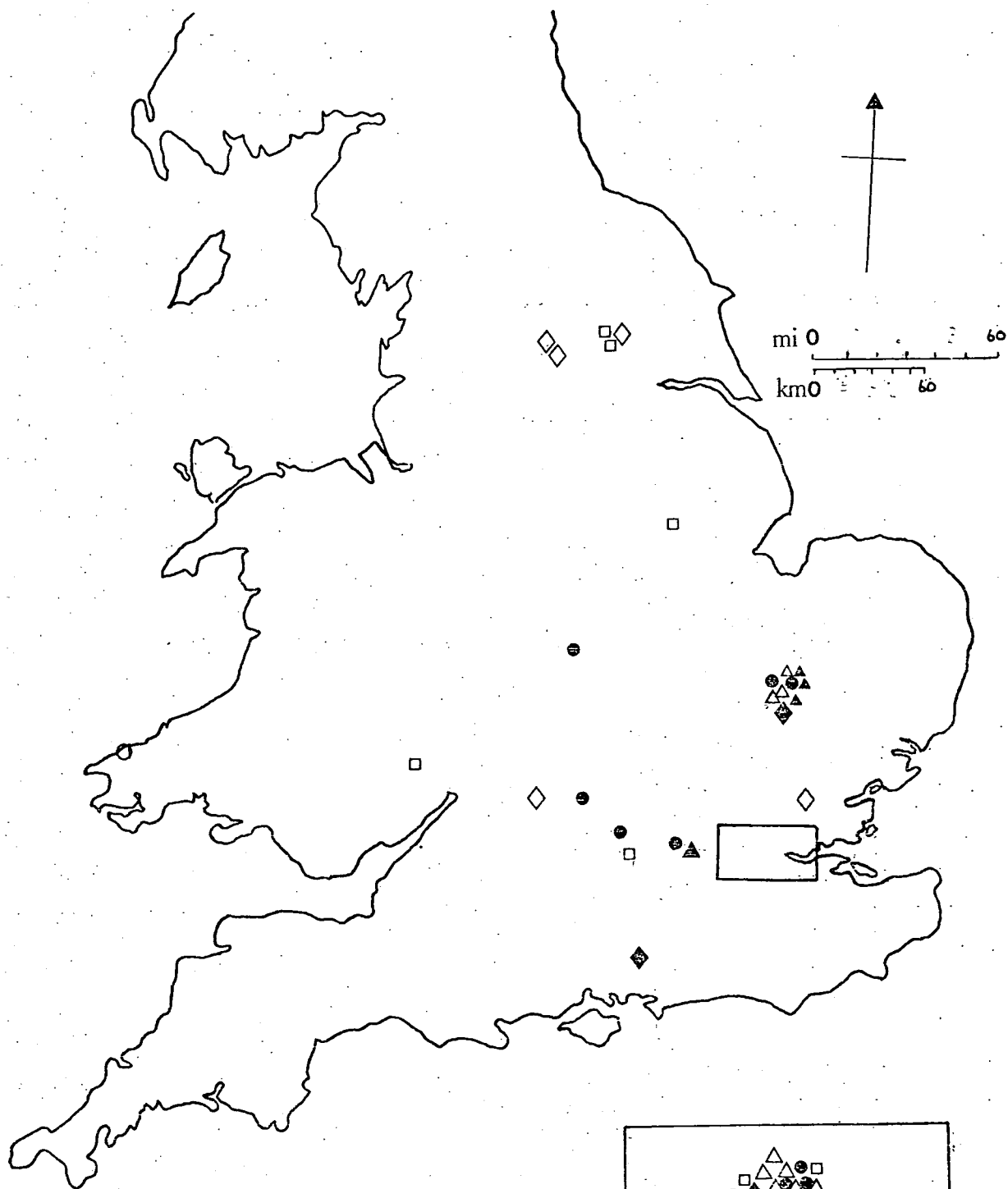
The discussion of the origins and influences of these spears is hampered by many of the problems that existed for swords. However, in England the Scandinavian spearheads were quite distinct

from the contemporary Anglo-Saxon types, thereby presenting little problem in the identification of Viking types.⁷³ It may then be significant that all examples of late Viking Age spear types in England are from the London and Cambridgeshire area, a distribution also reflected to a great extent in swords and axes (see Map 3). As a result, it is quite possible these English finds relate to the wave of Viking soldiers in Sveinn's and Knutr's armies, either as weapons lost in combat or kept by followers settling in England after the conquest.⁷⁴

Axes appear widely in Europe in the eleventh century. Some utilitarian types have a wide geographical and temporal range and are of little use in tracing influences.⁷⁵ In Scandinavia Petersen identified three types relevant to the eleventh century (see Figure 4.3). The first, Type K, has a long history, dating from the tenth century into the Middle Ages. Type L appears slightly later and seems to be a development from Type K with a more sharply defined shaft.⁷⁶ Type M, the classic broad battle axe, dates primarily to the eleventh century and into the Middle Ages, especially in Scandinavia. This form of axe is quite widespread throughout Scandinavia and the rest of Europe.⁷⁷ As a result of this wide distribution, although the origin may stem from Scandinavia, Type M axes do not appear to be distinctly Scandinavian; the Bayeux tapestry, for example, shows their general use among English soldiers⁷⁸ and a number of Baltic variations are also known.⁷⁹ In addition, in the Baltic regions a form of the bearded axe developed in the tenth and eleventh centuries, some of which have been found in Sweden.⁸⁰

Axes in this period were not only utilitarian objects but also had some symbolic functions. Miniature axes, often of the above mentioned Baltic type, are found in some eleventh century Gotlandic

MAP 3



KEY

□ Types S, X or Y swords

▲ Type M spears

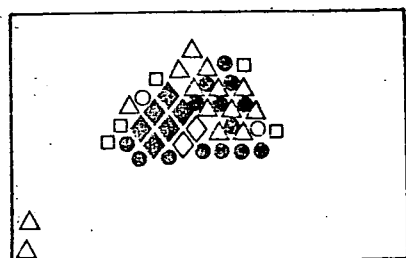
△ Type K or G spears

● Type M axes

○ Type L axes

◆ Ringerike object

◇ Possibly Ringerike or Ringerike—derived

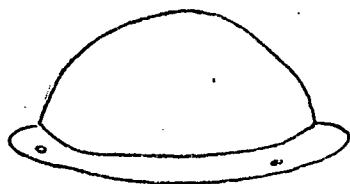


SCANDINAVIAN FINDS IN ENGLAND

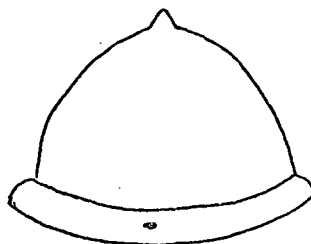
graves showing their use as heathen symbols.⁸¹ A few axes of Type M form have an openwork center with a cross in silhouette (see Figure 4.3d).⁸² These latter clearly had no functional use and must have been symbols of personal and Christian status. Other sources show that battle axes of Type M also served as symbols of power and wealth. For example, in the Bayeux tapestry, when Harold was offered the English throne, he was presented with the crown and an axe of Type M shape while he held a similar axe himself.⁸³

Arrowheads and shield bosses are not as common as swords, spears or axes, nor do they provide as good an indication of influences. Petersen noted a number of types of arrowheads, generally based on those identified in Rygh. While he ordered them chronologically,⁸⁴ the results are not that satisfactory. As a result, further work is necessary on the Scandinavian material.⁸⁵ There were few forms of shield bosses in the Viking Age. Of the four Petersen discussed, only two are relevant to the eleventh century (see Figure 4.4). The first, Rygh 563, is generally found with swords of Type Q and axes of Type K, and continues into the Middle Ages. The second, Rygh 564, is contemporary, found with swords Q, T, U, Y, Z, and E. This type may derive from the east where it is common in Sweden, Finland and Russia.⁸⁶

Some sword chapes can also be attributed to the eleventh century but with overlaps both before and after. Two main types are known. The first, ornamented with an openwork bird, is widely found, especially with Type Y swords. As a result, these sword chapes appear to date from the tenth and into the eleventh century.⁸⁷ The widespread distribution has led to a number of theories concerning their origin, with arguments usually centering upon Scandinavia and Russia. In any case, it is clear that local imitations

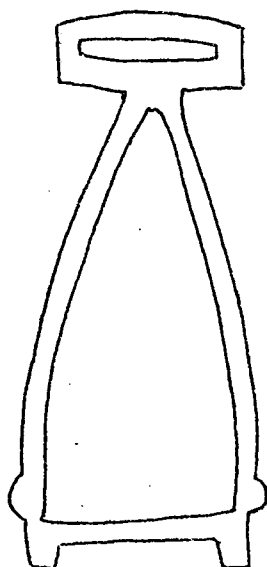


R 563



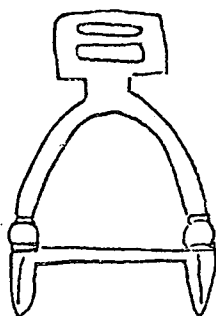
R 564

Fig 4:4



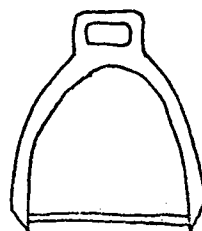
R 590

a



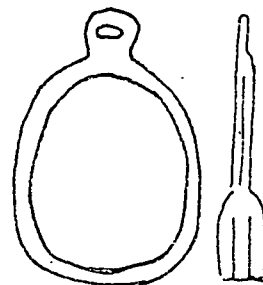
Tuna
Grave III

b



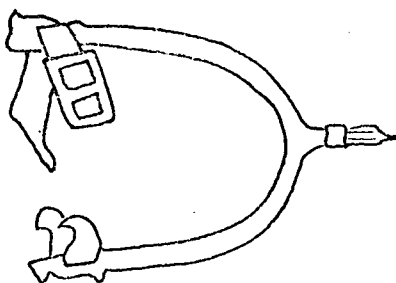
Tuna
Grave VIII

c



Tuna
Grave I

d



e

Fig 4:5

appear in many areas.⁸⁸ The second type of sword chape, with palmette ornamentation, dates from the eleventh century and well into the Middle Ages. These are also widespread, occurring throughout Scandinavia, the Baltic areas and Russia, all of which have been cited as possible places of origin, though the east appears more likely.⁸⁹

A number of these weapons are associated with riding accessories such as stirrups, spurs, bridles and straps. In Scandinavia these objects primarily occur in wealthy graves, allowing some correlations with weapon types; in addition, in some cases the ornamentation provides some idea of dating. The early Viking Age stirrup forms had given way, probably in the tenth century, to a long roughly triangular straight-footed type (see Figure 4.5a) which lasted through the Viking Age.⁹⁰ These stirrups are quite widespread, appearing throughout Scandinavia, England, the southern Baltic, Czechoslovakia, and Hungary.⁹¹ The graves at Tuna in Sweden have also produced several other types relevant to the eleventh century (see Figure 4.5b-d).⁹² The first, Figure 4.5b, Arne felt was current from c. 975 to 1025, although Wheeler argued it was already fully developed by the tenth century.⁹³ It, too, is quite widespread, known throughout Scandinavia, the southern Baltic, and England where it is the most common Viking type found.⁹⁴ The second type, Figure 4.5c, was in a grave that Arne dated 1000 to 1050 based upon other artefacts in the burial, but he felt this dating was not inconsistent with the stirrup.⁹⁵ Although the exact parameters of the dating of this type are vague, it clearly represents a late Viking form which is found over Scandinavia, especially mid-Sweden.⁹⁶ The third type from Tuna, Figure 4.5d, is characteristic of eastern and central Europe where round-footed stirrups are most common. Examples are known from tenth century

contexts from Birka and Russia, and from Hungary in the tenth and eleventh centuries. Stirrups of this type found in Scandinavia are generally considered imports.⁹⁷

Spurs often appear in conjunction with the stirrups but show little variation. In general they are in a sideways U-shape with a strap at the top and metal attachment at the bottom (see Figure 4.5e). These occur throughout Scandinavia and Iceland in the tenth and eleventh centuries, spreading with Scandinavian influence to England and northern France. Gotland had a unique late Viking and early medieval form with short pyramid or conical pricks; unlike other Scandinavian spurs it appears mainly as a loose find.⁹⁸

These weapons and riding equipment form the major basis for the dating of men's graves in the late Viking Age. However, as has been shown, few have a uniquely eleventh century date, much less one limited to the first half. As a result it is difficult to date graves to this period, especially when the documentary evidence shows the increasing hold of Christianity. For those objects in graves which the typologies suggest a date of the tenth or the eleventh century, it is probable, with the exception of Sweden and Gotland, they are to be dated to the earlier period of use. Single finds are less easy to attribute and one can only state the possibility that they belong to the eleventh century. The long period of use for most of the objects means one must rely most heavily upon the swords, spears, and axes which appear in greater numbers and undergo more discreet changes.

Despite the fact that the distribution record is distorted, it appears that many of these objects were quite widespread. As a result, they are very difficult to use as indicators of influence, especially when the dating is so vague. A number show if not contacts, at least common technology and equipment with the east. In

those cases where they are ornamented in a Scandinavian art style, the probability of Scandinavian origin is greater, although imitation clearly occurred. The distribution of the English material, however, seems more significant. If such types were common throughout England, one would not expect such a dense concentration in southern England, especially in those places known to have been affected by the invasions of Sveinn and Knútr.

Typologies are of less use for women's objects, especially those from graves, in this period. It is noteworthy that few women's graves attributed to the eleventh century are done so on the basis of typological analogies. Petersen's main typology for jewelry was based upon oval brooches but only one, Type 55 (Rygh 656) may carry over into the eleventh century. They are unknown in Denmark and only nine examples have been found in Norway, most of which seem from the find combinations to date to the second half of the tenth century. In Sweden, however, they are more common and continue into the eleventh century. Petersen felt this scarcity in Norway was the result of the increased spread of Christianity, but the continuing pagan traditions in Sweden allowed for a longer development there.⁹⁹

Combs have great potential for typological dating since they not only appear in men's and women's graves but are also commonly found in settlements, often in great numbers. Their dating is generally dependent upon the stratigraphical context of the settlements, most of which do not permit a dating as fine as the first half of the eleventh century. Lund is the one exception in Scandinavia, and a clear idea can be obtained of those forms in use from 1000 to 1050. In general the combs from Lund in this period are single-edged with a bow-shaped profile, and usually

ornamented with simple geometric designs. In addition, some rectangular-profiled combs and a few double-sided combs are known from the early period.¹⁰⁰ Unfortunately comb types appear to have been long lasting and widespread, and as a result are difficult to use in the study of influences. Although some work has been done on the classification of combs from the Baltic region, many of which correspond quite closely to Scandinavian examples,¹⁰¹ further analysis is necessary on the eleventh century Scandinavian combs in order to determine regional differences and influences.

Ceramics appear in large numbers in Scandinavia, but like combs, they are often of widespread and long-lived types. The standard work is still that of Selling who dealt with examples found in Sweden. He divided his material into four major categories. The first consists of western European imports which although not common in the eleventh century, are known in some settlements.¹⁰² Selling's second type consists of a Slavic or Slavic-influenced ware, and is quite important to the study of influences in this period. Examples are known already in the graves at Birka, but the type became quite common in early eleventh century settlements in Denmark and Sweden, lasting into the medieval period. Type All:3c2 in particular seems to belong mainly to the first half of the eleventh century.¹⁰³ Much discussion has occurred concerning these eleventh century finds as to whether they are imports or imitations¹⁰⁴ but the original influence seems to have derived from the Slavic regions. The third type is of southwestern Finnish origin and shows the presence of a trade route between this area and the Mälär region of Sweden. These also occur in Birka graves, but are seldom found into the eleventh century in Scandinavia.¹⁰⁵ Selling's last type is a native Swedish ware which occurs throughout the Viking Age in a number of variations, some of which continue into the Middle Ages. Most of the sub groups

are long lasting, and therefore difficult to attribute to the eleventh century alone.¹⁰⁶

While many of the import groups are also relevant to the rest of Scandinavia, local forms existed in these places but no comprehensive studies like Selling's have yet been undertaken on this material. These local wares present more problems in dating than the Swedish examples. Selling relied to a certain degree upon grave finds, combined with datings from settlements. In Denmark and Norway, however, few grave finds from the eleventh century are known with which to compare the material, and the dating must depend heavily upon settlement stratigraphy which in general is rather vague, especially in rural sites.¹⁰⁷

The decoration used on objects can also help in their dating if it can be identified as a discreet style which varies through time. In some cases, for example on some swords and spears, such styles appear on typologically relevant objects, but more often they appear on single finds for which there would otherwise be little indication of date. Moreover, in many cases they appear on fine objects which obviously belonged to the wealthier echelons of society. The number of such objects is relatively small, however, despite the attention they understandably receive. As a result it is often difficult to determine whether the objects or styles are imports, or the work of a travelling craftsman, or that of a particularly skillful and adaptive native artist.

The identification of the styles hinges upon the selection of a number of motifs together with characteristic manners of combining these elements. In both cases problems of interpretation arise. The art styles are usually defined by fine examples with a number of motifs, many of which can be traced back to earlier styles as well. Yet far more often objects contain only a few of these motifs, resulting in problems of attribution. Clearly it is a

subjective matter how many motifs must appear in order to be labelled either one style or another; various interpretations by different scholars often occur concerning the same object, based upon each author's selection of the more important diagnostic features.¹⁰⁸

This problem can be quite important, as will be seen, when applied to the objects found in hoards, which provide the main chronological fixed points in this period. Often these objects contain only one motif, yet are compared to much larger and finer pieces (see Table 1). Moreover, the objects in hoards do not necessarily reflect current artistic trends since they were primarily kept for their metal weight rather than for aesthetic reasons.¹⁰⁹

In addition, the selection and treatment of motifs by a craftsman is often dependent upon the type of object to be ornamented, both in size and medium. For example, the "classic" Ringerike animal with windswept tendrils is less likely to appear on small objects such as round brooches, due to size restrictions. And similarly, the use of pelleting which has often been cited as a characteristic Mammen feature¹¹⁰ may simply be a technique more easily used on wood and bone than smoothing down a background; moreover, it is not confined to objects identified as Mammen style.¹¹¹

Further pitfalls of the art historical approach involve the general practice of viewing art styles as an ongoing progression. Certainly this occurred, but alongside it existed an anachronistic attitude and a looking back to older styles. Regional differences and varying skills of craftsmen must also be taken into account; a crude piece is not necessarily degenerate but may be the result of an inept craftsman in an area away from the artistic mainstream. Hence various styles may be contemporary either because of diverse tastes or a less forward-looking area adhering to the old style, unaware of the new trends produced at the same time elsewhere.¹¹²

As a result of all these problems, the chronology of art styles is necessarily relatively fluid. A look at the dates assigned to Viking art styles clearly shows the lack of agreement. In such a case, art history has limited value when dealing with a period as short as 1000 to 1066. Nevertheless, it is necessary to review those styles assigned to this period and the cultural influences they suggest between Scandinavia and other areas.

In the standard progression of Scandinavian art styles, the three which are important to the first half of the eleventh century are Mammen, Ringerike, and Urnes. The first and last are peripheral to the period but must be examined for the reasons explained above. The Mammen style has caused scholars a number of problems, to the point some have argued it does not warrant to be considered a style upon its own.¹¹³ Most scholars would see Mammen as a bridging style between Jellinge and Ringerike.¹¹⁴ As a result, it is difficult to obtain an exact definition of the style which changes throughout its use. Most seem to agree, however, that central to Mammen is the new use of vegetable ornament, in particular the acanthus leaf, and the use of more naturalistic and distinct animals;¹¹⁵ recent studies have also emphasized the asymmetrical nature of the ornament.¹¹⁶ These new types of plants and the semi-naturalistic quadrupeds seem to be new motifs in the Scandinavian art, and much debate has been raised concerning whether they are imported ideas or part of a native evolution.¹¹⁷

The use of Mammen as a bridging style presents dating problems since different areas worked away from Jellinge type ornamentation at different times. The Jelling stone is identified as Mammen work and dated either to the 980's or 960's.¹¹⁸ No objects decorated in Mammen are known from Birka or Hedeby, both of which were declining in importance at the end of the tenth century. As a

result, most scholars would agree on a late tenth century date for Mammen with some overlap into the eleventh century with the subsequent Ringerike style.¹¹⁹ The number of objects cited as Mammen, however, is fairly small. The finest works, such as the Jelling stone, Bamburg casket, Cammin casket, and Mammen axe all seem to be from Denmark, and in fact some have argued Mammen is merely a regional style;¹²⁰ however, examples have been found elsewhere in Scandinavia and Europe, and there seems little basis on which to attribute the style purely to Denmark.¹²¹

The acanthus ornament and new use of the semi-naturalistic animal, both of which first appear in the Mammen style, become major features in the following Ringerike style, and the influences they suggest will therefore be discussed in conjunction with Ringerike. The Ringerike style, as illustrated by the Heggen vane from Norway (Plate 2), is unmistakable in large scale objects of this type but rather difficult to define. Wilson identified it by an analysis of motifs, stressing the use of long swirling tendrils, basal spirals, pear-shaped offshoots, floriated crosses, the lion, and the snake.¹²² This approach is useful on pieces where a majority of the elements are present, but creates problems if only a few appear. The tendril, for example, is known from earlier Scandinavian art¹²³ and alone may not represent Ringerike style. Fuglesang's analysis of Ringerike which acknowledged the motifs but concentrated primarily upon compositional schemes is of far more value. She emphasized the use of two major compositional schemes, both of which can be seen on the Heggen vane. The first scheme employs an alternating tendril and single lobe while the second involves the use of clusters of tendrils. The result often presents an axuality not found in the previous Mammen style.¹²⁴

The dating of Ringerike is crucial to the study of the influences it suggests. The few fixed points, however, consist

primarily of small pieces of metalwork from hoards (see Table 1). It is important to remember that hoards in general contain only small objects of varying quality. As a result, it is difficult to compare Ringerike on larger finer works such as the Heggen vane with the much more insubstantial metalwork found in hoards. These smaller objects sometimes have some of the features identified as Ringerike, but never all of them; hence the identification often takes on quite a subjective nature. For example, the armring from a hoard from Undrom, Boteå, in Sweden (Plate 3a) is perhaps the best example of a Ringerike object from a hoard, but due to the nature of the object, has only controlled tendrils, resembling those found on the border of the Heggen vane, and none of the clusters or windswept fans of tendrils also known to Ringerike. This hoard is of great importance to the dating of the style. It has often been published as dating from c. 1026 and thus cited as one of the earliest examples, showing a fully developed style by that time.¹²⁵ However, recent analysis of the German coins in this hoard have shown it could not have been deposited before 1050.¹²⁶

The earliest hoards which are cited as containing Ringerike objects all date to the second half of the eleventh century, but these objects are much more questionably Ringerike (see Table 1). The brooch from "Aspinge (or Espinge), Skåne (Plate 5, no. 17) is a case in point, and important for comparisons with English Ringerike objects. The animal has few of the Ringerike characteristics, confined to a tendril or two. Similarly, the crucifixes from Trondheim (Plate 3c) merely show the use of tendrils to define parts of the body, a use that may relate partly to technique.

Surprisingly, none of the works mention a hoard from "Öster Torp in Skåne containing a gold armring (Plate 3b) which is best

Table 1: "Ringerike" objects in hoards

No objects in hoards embody the full range of Ringerike motifs, and as a result their attribution can often be questioned. Wilson and Klindt-Jensen 1966 pp. 144-6, Nordhagen 1974 p. 64ff, and Wilson 1978 pp. 140, 145-6 described hoards containing Ringerike objects, but their lists are not identical. Moreover, the recent work by Hatz 1974 and Skaare 1976 on Swedish and Norwegian hoards respectively has shown many of the traditional datings to be wrong. As a result, the easiest way to summarize these hoards is in the following chart form where column 1 is the dating by Wilson and Klindt-Jensen 1966, column 2 by Nordhagen 1974, column 3 by Wilson 1978, column 4 the terminus post quem dating by either Hatz 1974 (for Sweden, including Gotland and Skåne) or Skaare 1976 (for Norway), and column 5 any additional comments.

	1	2	3	4	5
O. Torp, Skåne			996		Tendrils on an armring. See Plate 3b.
Kånnungs, Gotland	c. 1025		c. 1025	1025	Wilson and Klindt-Jensen 1966 said this related to Ringerike, but except for a few tendrils, it has none of the Ringerike characteristics.
Årstad, Norway	c. 1030		1029 +	1029	Wilson and Klindt-Jensen 1966 said this related to Ringerike, but the attribution is questionable.
Trondheim, Norway		1020/ 1035	c. 1030	1035	Filigree tendrils used to depict Christ on two silver crucifixes (see Plate 3c). This may relate more to technical than stylistic considerations.
Lilla Valla, Gotland	c. 1050	mid 11th	c. 1050	1042	Transitional Ringerike-Urnes. See Plate 7.
Aspinge, Skåne	c. 1048	mid 11th	c. 1045	1047	Questionable Ringerike. See Plate 5 no. 17.
Undrom, Sweden		1026 +	1026/ 1030	1050	Stylized tendrils on an unusual armring. See Plate 3a.
Sutton, Isle of Ely, Engl.	c. 1085	c. 1085	1084/ 1085		The coins suggest a <u>tnq</u> of 1066. Questionable Ringerike. See Appendix II.
Bonderup, Denmark		1053 +	c. 1074		Skovmand 1942 p. 156 dated it to c. 1070 but the coins suggest a <u>tnq</u> of 1047. Very questionable Ringerike.
Gerete, Gotland	c. 1055	1053 +	1053 +	1080	Interlaced animal bodies with Ringerike-like tendrils on a round brooch (see Plate 8 no. 2). Nordhagen 1974 felt it is transitional Ringerike-Urnes.
Gresli, Norway	c. 1085	c. 1085	1080/ 1085	1080	Openwork brooch which is questionably Ringerike. Nordhagen 1974 noted that although it has previously been attributed to Ringerike, it more likely is Urnes style or transitional Ringerike-Urnes.

compared to that from Undrom. Although this armring only has tendrils, much more simply depicted than on the Undrom armring, it is nonetheless closer than any of the other hoard examples in its claim to Ringerike style. Moreover, it is in a hoard with a terminus post quem date of 996.¹²⁷ As a result, the beginnings of Ringerike can be viewed as early as the late tenth century, at least on high quality objects such as the gold armring. The bowl from the Lilla Valla hoard (Plate 6), dating after 1042, contains transitional Ringerike and Urnes elements.¹²⁸ Together these two hoards place the Ringerike style primarily in the first half of the eleventh century, a dating also confirmed by the one English manuscript to have Ringerike features integrated into the work, the Cambridge Ef. I. 23.¹²⁹ Although the Lilla Valla bowl suggests a transition into the Urnes style towards the mid-eleventh century, it is difficult to know how long Ringerike continued.¹³⁰ If the later hoard evidence does not indicate merely old, unfashionable pieces, a fact which cannot be determined one way or the other, the Ringerike style may have continued into the later eleventh century.

A fair number of objects ascribed to the Ringerike style are known throughout Scandinavia and England. The English examples are interesting in that they appear almost exclusively in southern England (see Map 3). Since the dating of the style corresponds to the time when Denmark and England were linked politically, there would appear to be a direct relation between the appearance of the style in both areas. As a result, various theories have been put forward concerning the origin of Ringerike. Some authors have argued that the vegetable ornament is entirely derived from Anglo-Saxon manuscript ornamentation. Kendrick, for example, felt its source was the Winchester style but reinterpreted

in "the ragged and irregular Scandinavian manner ..."¹³¹ Holmqvist went even further and traced all the Ringerike motifs to manuscript sources. In the process he argued that the entire style originated in England, and because of the political situation was then transported to Scandinavia.¹³²

Central to Holmqvist's arguments, and in fact to most discussions of Ringerike in England, is the St. Paul's stone (Plate 4). There is no doubt on its attribution to Ringerike style, as a comparison with the Heggen vane clearly shows. Holmqvist felt all the elements on the stone could be derived from Winchester style, and as a result he considered it to be purely English work.¹³³ Consequently, he argued that any objects in England or Scandinavia with similar ornamentation must be of English manufacture or influence. He compared the St. Paul's stone to the brooch from Äspinge (Plate 5, no. 17) and felt that it also must be English. In addition, he used the dating of the Äspinge hoard to suggest the St. Paul's stone probably also dated to the mid eleventh century.¹³⁴

This last point clearly shows a lack of appreciation of the nature of hoard evidence. The date of the hoard merely provides a terminus ante quem and there is no way to determine how long before the brooch was made or used before its deposition. Moreover, although the Äspinge brooch has some similarities to the St. Paul's stone, it does not have that many Ringerike features. The closest affinities between the two pieces lie in the backward looking head and the body of the animal, both of which are known from earlier Scandinavian objects.¹³⁵ Moreover, it has ties with other animals carved on stones in Skåne¹³⁶ and fits quite well into a local milieu.

Consequently the elements of the St. Paul's stone can also be traced back into earlier Scandinavian art styles.¹³⁷ These affinities

combined with the Danish or Swedish runic inscription suggest the stone must be viewed as Scandinavian, an attribution most other authors believed without question.¹³⁸ Holmqvist's view that all Ringerike vegetable ornament derived from English Winchester style is also untenable. Only one Anglo-Saxon manuscript, the Cambridge Ff. I. 23, displays Ringerike type ornamentation.¹³⁹ The second example usually cited, the Caedmon manuscript, has Ringerike decorations but not integral to the work, and merely shows an artist capable of the two styles.¹⁴⁰ Although other English manuscripts sometimes display Ringerike-like features synthesized into the dominant Anglo-Saxon style,¹⁴¹ this is quite in keeping with the political situation where a few of the Scandinavian features brought over in the conquest were to some degree gradually incorporated into the artistic repertoire.

As a result, there does not appear to be any reason to accept Holmqvist's views of a total English origin. Nevertheless, the exact relationship between the Winchester and Ringerike styles and the degree to which they affected one another is difficult to determine, especially since the political union resulted in a continuing interaction over a number of years. That some merging of at least elements occurred in England is suggested by the previously mentioned Ringerike features in some Anglo-Saxon manuscripts as well as a few pieces of sculpture.¹⁴² To some degree, however, the styles appear to have retained their separate identities. The illustration of Knútr's and Emma's presentation of the cross to the New Minster (Plate 1) is in pure English style, suggesting its continued use in a royal idiom. Conversely, objects like the St. Paul's stone, which is carved on English stone, show a desire by Scandinavian for their own ornamentation; it is therefore quite likely some high ranking Scandinavians in England commissioned some workmanship in Ringerike style.¹⁴³

If, however, the vegetable ornamentation did not derive from England, its origin must be looked for elsewhere, since the motif is new to Viking art when it appears in the Mammen style. Shetelig felt the Ringerike style was composed of Scandinavian elements brought forward from the Jellinge style, but these were merged with Oriental influences and some forms derived from Anglo-Saxon art. The Oriental influence he viewed as arriving with the stream of Arabic coins which also brought some ornaments and, he argued, perishables like textiles decorated in floral designs.¹⁴⁴ However, the Arabic coin imports declined dramatically at the end of the tenth century,¹⁴⁵ precisely when Shetelig felt these influences must have made themselves felt. Moreover, the vegetable elements can be fully explained by analogies to western styles, a more plausible attribution considering the political and religious ties as well as the increased importation of German and English coins into Scandinavia at this time.

As Brøndsted noted, the acanthus ornamentation which features so prominently in late Anglo-Saxon manuscripts must derive from Carolingian prototypes, although it was modified and blended to some extent with native traditions. Since he could find no evidence to establish a link between the Anglo-Saxon and Scandinavian uses of this vegetable ornament, he concluded the Scandinavians must have directly received their impulses from the south.¹⁴⁶ This view, as mentioned earlier, was discounted by Shetelig, Kendrick, and Holmqvist,¹⁴⁷ but recent studies have suggested an Ottonian origin as more likely.¹⁴⁸ Brøndsted, however, did feel that the Winchester style executed its influence upon the Scandinavian Ringerike,¹⁴⁹ and Fuglesang's thorough analysis of the Ringerike style has shown that one of her compositional schemes, the alternation of a single tendril and bulbous lobe, is best explained as

derived from Anglo-Saxon art.¹⁵⁰ One would, in fact expect such influence due to the increased political and religious ties which presumably resulted in a number of Anglo-Saxon objects and manuscripts travelling back to Scandinavia.

On the other hand, Fuglesang's second compositional scheme, that of clusters of tendrils, cannot be explained by Anglo-Saxon origins. Instead it has its best parallels with Reichenau and Trier manuscripts,¹⁵¹ suggesting further Ottonian influence. Moreover, the naturalistic beast which first appears in the Mammen style has some affinities with manuscripts from St. Gall and Reichenau.¹⁵² Brøndsted, it is true, felt the animal derived from the Anglian beast of northern English sculpture,¹⁵³ but it is far more likely that the beast is a mixture of native elements and German features brought with the new vegetable ornamentation,¹⁵⁴ or perhaps of purely Scandinavian development.¹⁵⁵ The importance of Carolingian and Ottonian art to Scandinavia at this time is not surprising either, especially since German missionaries were responsible for much of the Scandinavian conversion. Hamburg-Bremen is a logical choice from where these influences might have travelled to Scandinavia, but very few manuscripts can be ascribed with any certainty to Hamburg-Bremen.¹⁵⁶

As a result, the formation of the Ringerike style appears to derive from a number of areas, drawing upon native elements, Carolingian motifs transmitted by the Ottonians, and compositional schemes from both Germany and England. It is logical that the church would have been a major factor in the merging and spread of these influences. But the relatively small number of motifs in the Ringerike style and their basically homogenous use throughout Scandinavia suggested to Fuglesang a deliberate merging of influences in one Scandinavian center, and from there its diffusion.

She argued that if the motifs had travelled to Scandinavia separately and were each gradually incorporated into the developing art styles, one would expect far more variation in the motifs and forms than is represented in the extant material. Obviously it is impossible to pinpoint such a workshop or group of workshops, based upon the material available, but Fuglesang suggested Denmark as a logical choice. It is the most convenient geographically, had the closest ties to both Germany and England politically, and the more advanced church organization to facilitate the spread of the style.¹⁵⁷

At some time towards the end of the period under discussion the Ringerike style merged into the Urnes style, a process which can be seen in both metalwork and stone carving in Scandinavia.¹⁵⁸ The Urnes motifs can be seen in previous styles¹⁵⁹ and do not seem to reflect new foreign impulses as in Mammen and Ringerike, but rather a new mixture and development. In addition, regional variations can be discerned, both within Scandinavia and with those objects identified in England as Urnes.¹⁶⁰ The dating of these English objects is problematic but in the past has sometimes been placed in the first half of the eleventh century, based upon the political ties of the period and a belief that such ties were broken by the Norman Conquest.¹⁶¹

An examination of the Urnes decorated material does not support such a stand, however. Too great a reliance has been placed upon the dating of the Swedish runestones, based partly on the runic types and partly upon the inscriptions themselves, although neither is capable of such finite dating.¹⁶² One hears quite often of the Yttergårde stone which mentions the taking of Knútr's geld and is decorated with an Urnes style animal.¹⁶³ However, it must be remembered that the monument was raised after the man was dead; the inscription does not suggest he died in England and it could there-

fore have been many years after he was in England. One stone which does in fact mention a man who died in England in the host has no Urnes ornamentation at all.¹⁶⁴ Other stones which commemorate men serving with Knutr are ornamented in a very early form of Urnes style, if Urnes at all.¹⁶⁵ Clearly the runestone evidence must be used with care; it cannot suggest the Urnes style proper on stones already flourished by the mid-eleventh century.

Few objects in hoards help with the dating. The Lilla Valla bowl (Plate 6) with its transitional Ringerike-Urnes decoration is in a hoard dating after 1042, suggesting the elements of Urnes style began to emerge in the mid-eleventh century. No other examples can as confidently be assigned to the Urnes style, but in any case they all date to the second half of the eleventh century and even into the twelfth century.¹⁶⁶ The openwork brooches found throughout Scandinavia are clearly to be viewed as Urnes style, but unfortunately have not been found in hoards. On the other hand, molds and examples from Lund have been found in contexts dating from 1100 to 1150.¹⁶⁷ Woodcarvings in the Urnes style are difficult to date but the Urnes church carvings are certainly post-Conquest in date.¹⁶⁸ Recent finds in Trondheim can only be ascribed to the eleventh century in general.¹⁶⁹

The English examples of Urnes present similar difficulties in dating. The number of objects in an Urnes style resembling that in Scandinavia is quite small.¹⁷⁰ While there also appears to be an English Urnes style, this presents a different set of problems; these objects as well are poorly dated.¹⁷¹ The Urnes influenced ornamentation appearing in conjunction with Romanesque on stone sculpture clearly date, however, from the post-Conquest period,¹⁷² and are best explained by continuing contacts of the church in this later period. The Irish Urnes material is also late, but the relationship of influences is far more difficult to determine

for these objects.¹⁷³

Consequently, too little evidence exists to place the Urnes style in England to the first half of the eleventh century. Although, as shown by the Lilla Valla bowl, many of the motifs were developed at this time, the evidence of the dated objects suggests its major flourishing in the post-Conquest period. The English objects, however, need not be compressed into the pre-Conquest period; there is sufficient contact after the Conquest to account for the objects.¹⁷⁴ Nor is it necessary to see them as a new infusion of Viking taste arriving with the Normans as Wilson has done,¹⁷⁵ since the evidence elsewhere suggests a great deal of assimilation in Normandy by this time.¹⁷⁶ Instead, the evidence of religious, political, and trading contacts in the post-Conquest period provides adequate explanation of the movement of ideas, objects, or even craftsmen in this period.¹⁷⁷

Both typological and stylistic dating help identify a wide range of objects present in the eleventh century but the problems inherent in both approaches do not allow for close dating, nor do they reveal by any means a comprehensive idea of objects present in the archaeological record. Nevertheless, for single finds these are often the only means of dating the objects. Both approaches give some idea of lines of influence, if only on a limited basis. The stylistic approach reveals connections with both Germany and England, and on a reciprocal basis for the latter. The typological approach is more useful in identifying types of objects common in this period, and the areas in which they are found, both within Scandinavia and to the east and west. However, the widespread distribution of many of these objects makes it difficult to determine in which directions impulses moved, especially since imitations

occurred as well. As a result, objects defined by these approaches as current in the eleventh century must be correlated with finds from graves, settlements, and hoards.

Chapter 4: Footnotes

1. Klindt-Jensen 1970 pp. 40-1.
2. Wilson 1978 p. 135.
3. E.g. Tovi the Proud named his son Æthelstan (see Bascombe 1976 p. 77). Conversely, some of Godwine's sons had Norse names while others were given English names (see ASC 1051 C).
4. Whitelock 1930 no. XXI. Will of Wulfwaru, dated 984 x 1016.
5. ibid. no. XXVII. Will of Wulfsige, dated 1022 x 1043.
6. ibid. no. XXXII. Will of Wulfgyth, dated 1046.
7. ibid. no. XXVIII. Will of Ælfric Modercope, dated probably 1042 or 1043.
8. ibid. no. XVIII. Will of Archbishop Ælfric, dated 1003 or 1004. Clearly Ælfric was a very wealthy man. With this ship he also left sixty helmets and sixty coats of mail. In addition, he bequeathed another ship to the people of Kent and a third ship to the people of Wiltshire.
9. ibid. no. XXI. Will of Wulfwaru, dated 984 x 1016.
10. ibid. no. XXXII. Will of Wulfgyth, dated 1046.
11. ibid. no. XV. Will of Ælfflæd, dated 1002, or a bit earlier.
12. ibid. no. XVIII. Will of Archbishop Ælfic, dated 1003 or 1004.
13. ibid. no. XXI. Will of Wulfwaru, dated 984 x 1016.
14. E.g. ibid. no. XXXII. Will of Wulfgyth, dated 1046.
15. II Cnut 71 (see Robertson 1925 pp. 208-11). For a discussion of the variations in the heriot and their relation to Knútr's laws, see Brooks 1978 pp. 81, 83-8.
16. Whitelock 1930 no. XX.
17. ASC 1058 D.
18. Barlow 1963 pp. 89-90.
19. Larson 1912 p. 175.
20. Rice 1952 p. 226.
21. Addyman 1976 pp. 316-9. His Appendix II pp. 319-21 shows where archaeological finds can be associated with those mentioned in the Gerefa.
22. British Library, Stowe 994, folio 6.
23. Petersen 1919 p. 142ff.

24. British Library, Arundel 155, folio 93. Illustrated in Kendrick 1949 plate XV.
25. E.g. British Library, Cotton, Tiberius B. V, folios 5 and 34. Illustrated in Temple 1976 illus. 273 and 276.
26. E.g. in England, the Cheapside hoard contained a number of such brooches (see Wilson 1964 p. 36). A number of different types of Scandinavian round brooches are discussed in Stenberger 1958 p. 32ff.
27. E.g. British Library, Cotton, Tiberius B. V, folio 6^v. Illustrated in Temple 1976 illus. 274.
28. E.g. British Library, Cotton, Julius A. vi, folio 3^v. Illustrated in Wormald 1952 plate 17.
29. Petersen 1919.
30. See Chapter 5 pp. 137-45.
31. Nordhagen 1972 col. 523.
32. Petersen 1919 pp. 136-40.
33. ibid. p. 142.
34. Müller-Wille 1973 pp. 79-85. See also his distribution map p. 72.
35. Bakay 1967 p. 165.
36. Petersen 1919 pp. 150-3.
37. Nordhagen 1972 col. 523.
38. Petersen 1919 p. 150.
39. Nerman 1929b p. 76; zur Mühlen 1975 pp. 32-3.
40. zur Mühlen 1975 p. 33.
41. Nerman 1929b pp. 80-2.
42. Nylén 1973 pp. 162, 164.
43. Nordhagen 1972 col. 523.
44. Petersen 1919 pp. 159-60.
45. ibid. p. 159; Bakay 1967 pp. 164, 168; Müller-Wille 1978 pp. 77-9; Björn and Shetelig 1940 pp. 15, 23, 71, 74, 93. Nerman 1929b pp. 82-3; Leppäaho 1964 Tafeln 2, 3.2, 4.1, 5.
46. Bakay 1967 p. 169.
47. ibid.
48. ibid., Adams 1974 p. 156.

49. Petersen 1919 p. 168.
50. Nordhagen 1972 col. 522.
51. Nordman 1943 p. 52.
52. Bakay 1967 p. 169.
53. zur Mühlen 1975 findlist no. 30; Bakay 1967 pp. 164, 169; Nordman 1943 p. 52.
54. Nerman 1929b pp. 83-4; Bakay 1967 p. 169; Kirpičnikov 1970 p. 60.
55. Petersen 1919 pp. 175-7; Strömberg 1961 vol. 1 p. 138.
56. Petersen 1919 pp. 159, 178-9.
57. Stenberger 1958 p. 359.
58. Wilson 1965 p. 50.
59. Bakay 1967 p. 170; Kirpičnikov 1970 p. 60; Müller-Wille 1970 pp. 70-3.
60. Müller-Wille 1970 p. 82; Nordhagen 1972 col. 524.
61. Kirpičnikov 1970 pp. 58, 60-1.
62. ibid. p. 64.
63. Sawyer 1971 p. 62.
64. Nylén 1973 p. 167.
65. See Graham-Campbell 1980 p. 68.
66. Petersen 1919 p. 29.
67. For Danish examples from graves which probably date to the second half of the tenth century, see Brøndsted 1936 pp. 82, 83, 92, 94, 112, 188. Nordman 1943 p. 55 noted they occur, especially with silver mounts, commonly in eastern Sweden, Gotland, and Finland. The few Norwegian examples are listed in Petersen 1919 pp. 29-30. For the few British examples see Bjørn and Shetelig 1940 p. 85. For the eastern Baltic see Nerman 1929b pp. 105, 113, 116. For Finland see Leppäaho 1964 Tafeln 44-53, where a number illustrated are Type G.
68. Petersen 1919 p. 33; Graham-Campbell 1980 p. 73.
69. Petersen 1919 pp. 31-3. No corpus of Type K spears in Scandinavia appears to have been made. It appears to be less common in Danish grave finds than Type G: Brøndsted 1936 listed only one find (no. 96 p. 186) from Elkenør, Falster. A few single finds and variations are recorded in Skåne (Strömberg 1961 vol. 1 p. 141) which can be paralleled in Gotlandic finds (Strömberg 1961 vol. 1 p. 142). For

Britain, see Bjørn and Shetelig 1940 pp. 67, 84-5 and Wheeler 1927 p. 23, all of which were found in southern English rivers. For eastern Baltic finds see Nerman 1929b p. 105.

70. See Graham-Campbell 1980 p. 73.
71. Petersen 1919 p. 35. An English example from the Thames is mentioned in Wheeler 1927 p. 29, while three from Cambridgeshire may also be of this type (see Bjørn and Shetelig 1940 pp. 64, 69). For eastern finds see Nerman 1929b p. 105 and Kirpičnikov 1970 p. 71.
72. Petersen 1919 p. 35.
73. Wheeler 1927 pp. 26-7.
74. ibid. p. 16; Wilson 1965 p. 50.
75. Nordman 1943 pp. 56-7.
76. Petersen 1919 pp. 44-6.
77. ibid. p. 46. For Denmark see Brøndsted 1936 p. 183; for Sweden see Simonsson 1969 pp. 78-9 and Wideen 1955 pp. 51, 57; for Gotland see Stenberger 1961 p. 40; for Britain see Wheeler 1927 pp. 23-5, Bjørn and Shetelig 1940 pp. 86-8, and Devenish and Elliot 1967 pp. 251-2; for the east see Kirpičnikov 1970 p. 72.
78. Mann 1957 p. 66.
79. Paulsen 1956 p. 18.
80. ibid. pp. 25, 27.
81. Arne 1934 p. 62; Trotzic 1969 pp. 25, 29.
82. Schiørring 1978 p. 28.
83. Gibbs-Smith 1973 illus. 15.
84. Petersen 1919 p. 48.
85. Arne 1934 p. 62; Nordman 1943 p. 58. See also Wegraeus 1972-3 p. 200ff., and Farbregd 1972 pp. 26-8, and Sognes 1975-6 for some recent work on arrowheads in Sweden and Norway.
86. Petersen 1919 p. 47.
87. Paulsen 1958 p. 142; Strömberg 1961 vol. 1 p. 140; zur Mühlen 1975 p. 38, findlist no. 32; Kirpičnikov 1970 p. 69.
88. zur Mühlen 1975 p. 37; Kirpičnikov 1970 p. 69; Graham-Campbell 1980 p. 130.
89. Paulsen 1953 p. 142; Stenberger 1958 p. 237; Strömberg 1961 vol. 1 p. 141; Bakay 1967 p. 166.
90. Petersen 1919 pp. 51-2.

91. Arne 1934 p. 65; London Museum 1954 repr. 1967 p. 87.
92. See also the discussion of the Tuna graves in Chapter 5 pp. 145-8.
93. Arne 1934 p. 65; Wheeler 1927 p. 40.
94. Arne 1934 p. 65; London Museum 1954 repr. 1967 p. 87.
95. Arne 1934 p. 71.
96. Norberg 1972 cols. 178-9.
97. Arne 1934 p. 65; Norberg 1972 col. 178.
98. Norberg 1971 cols. 530-1.
99. Petersen 1928 pp. 71, 73. See also Graham-Campbell 1980 p. 28 who argued Type 55 is contemporary with Type 52, and not a later development.
100. Persson 1976 pp. 317-23; see also Blomqvist and Mårtensson 1963 pp. 203, 205.
101. See, for example, Wilde 1953 p. 72ff., especially his groups 2, 3, and 4, and Cnotliwy 1973, especially p. 346 and the relevant distribution maps. See also Blomqvist 1975 p. 134.
102. Selling 1955 pp. 67, 228; Stenholm 1976c p. 258.
103. Selling 1955 pp. 72-3, 225, 228-9, and the distribution map p. 71.
104. See, for example, Stenholm 1976c pp. 255-8 and Ohlsson 1975-6 pp. 134, 138-9.
105. Selling 1955 pp. 154-5, 228-9.
106. ibid. pp. 226-7, 229.
107. See below Chapter 6.
108. See, for example, the various opinions concerning the Sutton Isle of Ely brooch in Appendix II.
109. See below Chapter 7.
110. Wilson and Klindt-Jensen 1966 p. 119.
111. Lang forthcoming.
112. ibid.
113. Christiansson 1959 p. 35.
114. Fuglesang 1978 pp. 209-10.

115. ibid. p. 210; Wilson and Klindt-Jensen 1966 p. 121.
116. Fuglesang 1978 p. 206.
117. See below pp. 120-1.
118. Wilson 1978 p. 139; Fuglesang 1978 p. 207.
119. Wilson 1978 p. 139.
120. For literature arguing a regional basis for Mammen see Fuglesang 1978 p. 214, fn. 5.
121. Wilson and Klindt-Jensen 1966 pp. 132-3; Fuglesang 1978 p. 206.
122. Wilson and Klindt-Jensen 1966 pp. 132, 136-9.
123. For example, on some of the Oseberg ship carvings. See ibid. Figures 17, 19, 20, 22, or 23.
124. Fuglesang 1978 p. 210.
125. E.g. Nordhagen 1974 p. 64, Wilson 1978 p. 144.
126. Hatz 1974 no. 278.
127. Hårdh 1976a no. 151 p. 75; Hatz 1974 no. 86.
128. Hatz 1974 no. 175. It must be noted, however, that a number of coins from this hoard, especially the German coins, have not survived, and as a result, the hoard may date later.
129. Fuglesang 1978 p. 212.
130. Some Ringerike (and Urnes) objects are known from Ireland, some of which have inscriptions which allow them to be dated. The dating show a much later use in Ireland, outside of the period under discussion, and seem to represent a separate phenomenon. Other Ringerike objects from Dublin have been ascribed to the eleventh century but with no indication of which half. See Wilson and Klindt-Jensen 1966 pp. 143-5, 155-9 and Ó Ríordáin 1976 p. 136.
131. Kendrick 1949 p. 98.
132. Holmqvist 1951 p. 24ff.
133. ibid. pp. 24-5.
134. ibid. pp. 48-9.
135. Petersen 1928 p. 134; Wilson and Klindt-Jensen 1966 p. 121.
136. E.g. the Tullstorp and Hunnestad stones. See Jacobsen and Moltke 1941 Figs. 650, 672, 678.
137. Wilson and Klindt-Jensen 1966 p. 135-6.

138. E.g. Brøndsted 1924 p. 236, Shetelig 1948 p. 103, Wilson and Klindt-Jensen 1966 pp. 135-6, Fuglesang 1978 p. 212. Jacobsen and Moltke 1942 col. 478 noted the inscription was either Danish or Swedish but were unable to differentiate on epigraphic grounds.
139. Fuglesang 1978 p. 212.
140. Wilson and Klindt-Jensen 1966 p. 141.
141. Fuglesang 1978 p. 212.
142. Brøndsted 1924 p. 294; Wilson and Klindt-Jensen 1966 p. 143.
143. Shetelig 1948 p. 103; Fuglesang 1978 p. 212.
144. Shetelig 1948 pp. 106-7.
145. Rasmusson 1961 p. 4.
146. Brøndsted 1924 pp. 242, 277.
147. Shetelig 1948 pp. 106-7; Kendrick 1949 p. 98; Holmqvist 1951 pp. 16, 28ff.
148. Mageröy 1961 pp. 160-1; Nordhagen 1974 p. 140ff.
149. Brøndsted 1924 pp. 293, 295-6.
150. Fuglesang 1978 p. 210.
151. ibid. pp. 210-1.
152. Mageröy 1961 pp. 160-3. Compare, for example, her Figures 7 and 8 with the Jelling stone (her Figures 5 and 6).
153. Brøndsted 1924 pp. 288-9.
154. Fuglesang 1978 p. 210.
155. Wilson and Klindt-Jensen 1966 p. 121.
156. Fuglesang 1978 p. 211.
157. ibid.
158. Wilson and Klindt-Jensen 1966 p. 149-50.
159. ibid. pp. 150, 153.
160. E.g. see Nylén 1973 p. 164 for Gotlandic variations of Urnes style. See Owen 1979 p. 72ff. for a discussion of the English Urnes variation.
161. Shetelig 1948 pp. 109-10.
162. Christiansson 1959 pp. 42-6.

163. E.g. Fuglesang 1978 p. 209. For the Yttergårde stone see Jansson, S. 1965 (1966) p. 12, Plate 9.
164. The Råby stone. See Jansson, S. 1965 (1966) p. 16, Plate 13.
165. E.g. the Simris stone and the Landeryd stone. See ibid. pp. 14-5, Plates 11 and 12.
166. E.g. see Wilson and Klindt-Jensen 1966 p. 160, Capelle 1968 pp. 64-5.
167. Bergman and Billberg 1976 pp. 206-7.
168. Hauglid 1978 p. 60.
169. Long 1975 p. 12, Plate IV B.
170. See Wilson and Klindt-Jensen 1966 pp. 154-5.
171. See Owen 1979 pp. 165-75.
172. Kendrick 1949 pp. 120-2; Wilson and Klindt-Jensen 1966 pp. 154-5, 160.
173. See Wilson 1978 p. 143, Fuglesang 1978 p. 207.
174. See Appendix I.
175. Wilson and Klindt-Jensen 1966 p. 153.
176. Stenton 1947 p. 546.
177. See Appendix I.

Chapter 5: Graves

With the increasing hold of Christianity in the first half of the eleventh century, the burial evidence in Scandinavia becomes far more limited and difficult to interpret. Dating is generally dependent upon grave goods associated with the body, but few eleventh century objects as identified from hoard evidence, typological analysis, art historical styles, comparisons with foreign objects, or settlement analogies have been found with the exception of Swedish and Gotlandic graves. In some cases this may result from a practice of using other objects of long lasting type which are not easily identified as eleventh century, or a custom whereby few objects were placed with the body. In a few cases a coin was deposited in the grave, sometimes converted into jewelry, but this provides only a terminus post quem dating, and of a far less precise margin than the hoard finds. A few graves have also been dated by dendrochronological analysis of the timbers where a wooden coffin was used, but such analysis is obviously dependent upon good preservation and regional work on the wood in the area with which to correlate the findings.

In those graves with grave goods, very few are able to be compared to hoard finds, nor with the exception of Gotland and parts of Sweden are there many with foreign objects attributable to the eleventh century. As a result, objects of a typological nature have primarily been used in the dating. Yet as explained previously¹ there are relatively few which are specifically eleventh century. Moreover, they comprise mainly weapons, especially swords, spears and axes. Hence in those areas without a tradition of including weapons, or in graves of relatively poor

people, such weapons are unlikely to be found. Similarly, women's graves are extremely difficult to identify in this period. It must also be kept in mind that Petersen's works which supply the basic typologies for weapons and jewelry were based upon the Norwegian material and, as a result, are less likely to be as accurate for other Scandinavian countries where the dating and types may differ to some degree.

The burial customs and types of graves are also little indication of date since a wide variety of funeral practices coexisted throughout much of Scandinavia. Burials occurred in a number of forms: placed in wooden chambers, simple wooden coffins, wagons, ship settings, or stone settings, sometimes under mounds, cairns or level ground, all of which could be marked by stone heaps, stone settings, a single large upright stone or wooden markers. Throughout the Viking Age rich burials are known but many more contain modest grave goods or none at all, either from custom or lack of wealth. It also has become increasingly clear that burials without goods existed in a pre-Christian context and cannot be viewed as a later Christian influenced custom.² Cremation and inhumation both appear in the late Viking Age, often together in the same area. As a result of this variety, it is almost impossible to reconstruct the religious beliefs which lay behind the burial practices. The written sources concerning the pagan religion and burials are almost exclusively very late,³ and many appear to have been literary reconstructions and not genuine tradition. Several contemporary accounts by Arabic authors concerning Scandinavian burials in Russia exist, but none are from the early eleventh century, and it is impossible to know how relevant they are to this later period in Scandinavia.⁴

Some regional trends, however, can be discerned in the Scandinavian graves. Danish graves were usually inhumations, often with stones over the body, and generally in an earthen barrow or under level ground. Less common but also known are stone boat settings, chamber graves, or burial in a wagon.⁵

Northern Jylland, however, by and large used cremation, although a number of variations in the actual customs and form of the exterior can be identified.⁶ Throughout Denmark relatively few grave goods were deposited with the body, and usually comprised only simple personal belongings; the cremation graves especially have very poor furnishings.⁷ The burials from Skåne are also generally poor inhumations. Most have been discovered under flat ground, but it is possible the mounds may have been levelled during the relatively recent intensive cultivation.

The graves are so similar to most of the Danish examples that Strömberg felt Denmark and Skåne must be viewed as one culture region.⁸ The graves from Bornholm in particular closely resemble those from Skåne. They generally consist of inhumations under flat ground or a mound; in the later Viking Age oval or rectangular stone settings also occurred. Like Skåne, few weapons were deposited with the corpse, although women's graves usually contained personal belongings.⁹

In the rest of mainland Sweden cremation was the general burial type, although some wealthy inhumations are known. Boat burials, both in actual boats and stone settings have also been found. In more ordinary graves where goods were placed with the body, they are generally quite simple. Inhumation burials began to become more common in the late Viking Age.¹⁰

Oland was different from the rest of Sweden, however. Although relatively few graves are known, the Viking Age examples are usually inhumations in stone cists or wooden coffins under an

earthen or stone mound. Few weapons were deposited with the corpse, and as a result dating is quite difficult.¹¹ Gotlandic graves show a mixture of inhumation and cremation, although the late Viking period is characterized more by inhumations. A large assortment of grave goods are found, especially in the tenth and eleventh centuries, many of which are of eastern origin.¹²

In Norway both inhumation and cremation appear in approximately equal numbers in the Viking Age, both often placed under mounds. The same types of grave goods are associated with each form of burial, and often present a wide array of objects. Not only personal artefacts, but also farming implements, craftsmen's tools, and women's domestic objects appear. As in Sweden, boat burials are also known.¹³ It must be emphasized, however, that these regional characteristics are only generalizations, and variations occurred in each country. As Brøndsted has remarked: "There are no hard and fast rules about Scandinavian funeral practices; numerous factors determined the methods adopted — local customs, wealth, social status, and the relative importance of Christian or pagan tradition."¹⁴

Unless dendrochronological analysis has been made of coffin timbers or a clearly dated archaeological layer overlies a grave and permits a terminus ante quem date, the identification of late Viking Age burials must depend on grave goods. In Denmark graves with distinctly eleventh century finds are almost unknown. Of the cremation graves, only one has been tentatively ascribed to the end of the tenth/beginning of the eleventh century. It contained a small gilt bronze plate ornamented with a crudely punched cross and with an imitation beaded border.¹⁵ Brøndsted identified only two inhumations which he dated to his time period. One, probably a flat grave, from Johannesminde on the island of Lolland con-

tained a skeleton, Type M axe, a small iron knife, and a fragment of a shield boss which appears most similar to Rygh 565 from the extant remains.¹⁶ The second grave, from Velds in Jylland, was in a barrow, and contained a skeleton with various riding accessories. Two stirrup plates were ornamented in English Winchester style, leading Brøndsted to feel that the grave belonged to a Viking who had fought in England.¹⁷

Two other finds were ascribed to the late tenth century by Brøndsted but could also date to the early eleventh century. In both finds an axe with an openwork cross such as in Figure 4.3d was found. The first was found in a barrow from Sortehøj in Jylland but is in a fragmentary state, and no other information is known concerning the find.¹⁸ The second, from Ludvigshave on Lolland, was also found in a barrow, together with a small penannular brooch and two iron nails, perhaps from a wooden coffin. The brooch is paralleled in late Viking Age Swedish finds but the axe is closest to Petersen's Type M, although not as broad as many examples. Brøndsted knew of only one other Danish example of such an axe, the one from Sortehøj, but he said it was not unknown in Sweden. As a result, he felt the objects were of Swedish origin.¹⁹ Nevertheless, an unprovenanced similar axe is also known from Denmark, of classic broad Type M form, but only one is known from Sweden.²⁰ The appearance of such axes in seemingly pagan barrows is puzzling but the lack of other artefacts suggests the burials could be that of a Christian or in a time of transition. On the other hand, both graves were not professionally excavated and the records of the finds, especially from Sortehøj, are incomplete. The combination of the form of the axes together with the iconography suggests the possibility of an early eleventh century date, although it is,

of course, possible that Type M axes appeared slightly earlier in Denmark.

A few other finds ascribed to the late tenth century are also somewhat ambiguous in dating. A number of graves contained stirrups of the type as in Figure 4.5a, but these permit a tenth century as well as an eleventh century date. Similarly, a number of finds contained axes of Type K, spears of Type G, and swords of Type X, all of which have a possible dating into the eleventh century but are more likely, as Brøndsted concluded, to belong to the second half of the tenth century.²¹

Clearly there is a danger of a circular argument here, but several factors do suggest the decline of grave goods and therefore pagan customs in the eleventh century. Although weapons are not overly common in Danish graves,²² they do appear, especially the axe, in a fair number of graves, mainly from the tenth century.²³ Yet with the exception of the three above mentioned axes of Type M, no distinctly eleventh century weapons are known. In women's graves oval brooches are most common but none date to the end of the tenth or eleventh century.²⁴ While other finds are known from men's and women's graves including knives, whetstones, vessels, beads, keys, or other personal ornaments, they alone do not provide any indication of date. Imported objects are also rare and of little help in dating.²⁵ As a result, although the evidence is primarily of a negative nature, it does appear that very few graves with grave goods can be ascribed to the eleventh century. Brøndsted attributed this lack to the influence of Christianity²⁶ which given the historical evidence available seems quite reasonable.

In Skåne as well there is little evidence of eleventh century burials. Most Viking Age graves, however, are very austere and

if they do contain grave goods, have objects of a simple nature which are quite difficult to date. Weapons seldom occur which makes the dating of even pre-Christian graves problematical. Even so, of the thirteen finds with weapons, only two are even possibly eleventh century. One contained a Type X sword while the other had an ornamented Type K spear; in both cases a tenth century date is most likely.²⁷ Women's graves sometimes contain oval brooches but none that can be attributed to the eleventh century, nor can other objects be dated that finely.²⁸ On the other hand, in a few cremation graves where the pottery fragments have been examined, some have been identified as Selling's Type AII: 3c2 which dates primarily to the late tenth and eleventh centuries.²⁹ Again, as with other Danish graves, the scarcity of eleventh century finds is attributed to the influence of Christianity. This is probably the case, but the lack of finds in general from the Viking Age graves in Skåne makes it difficult to be certain. Moreover, no complete cemetery spanning the later Viking Age has been excavated yet;³⁰ future excavations may therefore present a fuller picture of this time of transition.

The study of the orientations of the graves known in Skåne, however, has suggested some possible trends. While it appears clear that pagan graves were also orientated east-west, Strömberg felt an important distinction could be seen in graves with such an orientation. Those with the head to the west are almost always without grave goods while objects were often deposited in graves where the head lay to the east. As a result, she interpreted the former as indicative of Christian influence.³¹

In Lund few graves have been found with grave goods but the good preservation allowed some of the coffin timbers to be dated by dendrochronology. The burials were in two overlying cemeteries, one associated with an early stave church while the graves

underlying these were not associated with any structure, but were presumably Christian. The earlier cemetery was dated to the early eleventh century while the later was dated after 1051, an important point for the dating of primitive stave churches.³² The coffin boards also provided evidence of the environment and resources used for these eleventh century burials. The wood is from a number of species and has very narrow rings, both facts suggesting it was from natural forest, presumably nearby to Lund. This is in marked contrast to the boards used in the construction of the stave church which have wide tree rings and must have been taken from trees in an open woodland pasture. Analysis of the wood anatomy in the area further showed that the natural forest from which the coffin boards were presumably made, disappeared around Lund and elsewhere in Skåne in the period 1000 to 1200.³³

Altogether the information which can be derived from Danish graves is very small indeed. While regional variations in customs can be seen for many of the areas controlled by Denmark, the lack of contexts datable to the eleventh century suggests a wide permeation of Christianity or at least of the custom of burial in churchyards, many of which are still in use today.³⁴ On the other hand, the lack of diagnostic objects necessitates some caution in attributing this scarcity of eleventh century burials purely to Christianity; the case of Skåne which in general had few grave goods in the pagan time provides a cautionary note. Moreover, although no distinctly pagan burials are known in Lund, a small ivory statue, most likely of Thor, was found in a context probably dating to the first half of the eleventh century.³⁵ Whether Christian or pagan, the tradition of including few grave goods in burials results in little indication of social

status or influences. Only by the fact that no eleventh century examples occur in areas previously with a wealthy grave custom, as in the tenth century around the Jelling area,³⁶ can one detect a change in social grouping, political emphasis, wealth, or religious custom, but no way to determine which factors were more important nor why the custom changed.

The evidence from the rest of Scandinavia is also of interest, and provides some insights into the interpretation of the Danish material. The evidence from Norway is not as accessible as from the Danish areas, partly because of the variety and large number of Viking graves known which make the compilation of all known graves and their finds quite difficult. Norwegian graves usually included a wide range of accompanying goods, which enabled the cross correlations of Petersen's studies. While whenever possible he linked the jewelry finds to hoard examples, in general the types were quite different. For example, armrings which appear in most eleventh century hoards are quite different from those appearing in graves.³⁷ Moreover, the range of objects found in hoards of this date is relatively small, and they are often simple and widely datable.

The most common find in women's graves consists of beads, mostly glass but also of amber, rock crystal, bronze, steatite, and a few of bone, silver or jet.³⁸ These, however, provide little chronological distinction, and Petersen relied more heavily upon the oval brooches, which in fact often had beads fastened to them. The oval brooches span the Viking period but the only type possibly relevant to the eleventh century is Petersen's Type 55 (Rygh 656). These are fairly rare in Norway where only nine examples are known, and Petersen felt they dated to the second half of the tenth century based upon the

few find combinations available.³⁹ In Sweden, however, they seem to have continued into the eleventh century, and will be discussed below in conjunction with Swedish graves. The lack of typologically relevant women's goods means it is extremely difficult to ascribe women's burials to the eleventh century.

Petersen's weapon typology, however, enables greater dating potential for men's graves. His sword Types Z and Æ seem to be almost exclusively eleventh century, and Type Æ in particular is a fairly numerous local type.⁴⁰ Similarly Type M spears and Type M axes appear to belong primarily to this time.⁴¹ The reliance upon Petersen's typology for the dating of most eleventh century graves can be seen in Kaland's study of all the grave finds from the Øvre Telemark region. Of the eleven or twelve graves she dated purely to the eleventh century, six seem dependent upon weapons and/or riding accessories, two are based on riding equipment alone, one is based upon an axe and a brooch of a medieval type, one is based upon a celt, and only one is based upon jewelry alone, containing an oval brooch of Type 55. The doubtful example contained three axes, a sickle, and a balance with case; Kaland dated this grave in one place to the eleventh century and in another to the tenth century.⁴² The six finds she dated to the end of the tenth and eleventh centuries, and the six finds attributed to the tenth and eleventh centuries in general are all dependent upon weapons.⁴³ Unfortunately, in most cases Kaland did not go into detail concerning the specific type of weapon in relation to Petersen's typologies. Yet in four cases where a sword of Type Z was found, two of these were attributed to the tenth century while the third was only listed as Viking Age.⁴⁴

In a few cases coins were included in Norwegian graves

allowing a terminus post quem dating. A wealthy grave from Tomberg, Møre og Romsdal, had a silver "medallion" pendant of Oriental origin, a silver brooch, two silver beads, thirty-nine glass beads, and some iron objects together with two German coins from the end of the tenth century;⁴⁵ the grave, however, could date to the eleventh century since there is no way of knowing how long the coins were kept. Also probably dating around this time is a grave from Vegusdal, Aust-Agder which contained two Anglo-Saxon coins with a tpq date of 991, some burnt bones, a piece of leather, perhaps from a purse, a bronze weight, an iron knife, and an unspecified iron object.⁴⁶ A grave with similar objects was found at Viki, also in Aust-Agder, which had an eleventh century penny, perhaps Danish, two pieces of leather and three bronze weights.⁴⁷ From Nomeland, in the same parish as Viki, a wealthy woman's grave contained five coins, the latest of which has a tpq date of 1065, together with an axe, beads, mountings, bronze ornaments, and twenty-one bronze weights.⁴⁸ While this list may well be incomplete, it shows one type of eleventh century women's burial where weights and leather purses, objects of economic importance, were included.

Although graves ascribed to the end of the Viking Age in general contained few imported objects,⁴⁹ in some cases where they are present, they suggest an eleventh century date. For example, a grave from Storsletten, Troms contained three bronze pendants, two of which seem to derive from the east, perhaps from Estonia or Finland, while the third may be Anglo-Saxon workmanship or influence. Comparisons with the eastern parallels suggest the grave should be dated to the eleventh century.⁵⁰

Although no exact corpus is available, the number of Norwegian graves with objects from this period does not seem that

great. For example, in Kaländ's study of an entire region, the number attributable to the eleventh century was very small,⁵¹ although it is possible this may to some degree be a regional characteristic. It is, however, noteworthy that a large number of the graves with Type 55 brooches, or coins which allow dating, or even the above mentioned example with foreign objects, are often from interior, highlying areas or to the far north, where it may have taken longer for Christianity to penetrate. Furthermore, the traditional custom of including many goods in the graves, including indicative weapon types, suggests negative evidence may carry more weight in Norway. As a result, it does seem that Christianity affected burial customs fairly widely in the first half of the eleventh century.

As in Norway, no corpus of Swedish grave finds exists but it is nonetheless clear that the custom of placing grave goods with the body continued into the eleventh century; the documentary evidence as well suggests a persistent pagan presence.⁵² Even in towns like Sigtuna, a pagan element was probably present as shown by excavations in a mound nearby to the city.⁵³ Criteria for dating depend to a large extent upon Petersen's typologies. Nevertheless, the Swedish material may possibly extend in date further into the eleventh century than the Norwegian examples where Christianity in general seems to have halted their inclusion in graves. Such a situation can be seen with regard to the previously mentioned oval brooch of Petersen's Type 55. This type is relatively common in Sweden where in many cases it appears to date to the eleventh century.⁵⁴

A number of Swedish graves have been dated by comparison with the objects from the boat graves from Tuna, Uppland which as a result should be looked at more closely. Arne dated three graves

to the period 1000 to 1050, one he felt quite securely but two with some reservations. The grave he felt most confident about was Grave VIII which contained a small iron axe, various iron mounts, rivets and nails, two stirrups of a type like Figure 4.5c, a bridle bit, a cross-shaped strap divider, iron rings, a rock crystal bead on a silver wire, and a double-sided comb. He dated the grave to 1000 to 1050 on the basis of the axe, comb, and strap divider.⁵⁵ The axe is quite different from those in Petersen and appears to be an eastern type. It is fairly close to an example in a Gotlandic grave which Arne dated to the eleventh century,⁵⁶ although the basis for this dating is not entirely clear. The reasons behind the dating of the comb are not clear either; Arne only stated that it is certainly late and common in Gotland.⁵⁷ Elsewhere in Scandinavia such combs are known from Bergen and Sigtuna, which does suggest a rather late date, and several other examples are known from Poland and Russia.⁵⁸ Moreover, the axe and comb are roughly paralleled in a grave from Thre, Gotland, found after Arne had written his book, and which dates to the eleventh century.⁵⁹ The strap divider is similar to others in Sweden, often appearing with other objects of a late date.⁶⁰

The second grave Arne placed tentatively in the first half of the eleventh century is Grave I which contained a spear of Petersen's Type D, a silver inlaid mount to another spear, an iron shield boss of Type Rygh 565, three arrowheads, a bone comb with case, a knife, four beads, four buckles, two stirrups of a type as in Figure 4.5d, an axe of Type M, a fragment of woven silver wire, and various nails and mounts.⁶¹ Arne felt the stirrups dated to the second half of the tenth century based upon Russian analogies of the tenth century. Although

he noted there were Hungarian examples dating to the tenth and eleventh centuries, he felt the Tund examples were Russian imports and therefore of tenth century date, but no reasons were presented for favoring Russia over central Europe.⁶² Arne argued that the other relevant finds from Grave I, the spear, axe, and shield buckle, belong to the first half of the eleventh century.⁶³ Although he noted the spear is of Type E, dating to the tenth century, he felt it was ornamented in Ringerike style comparable to the Vang stone in Norway.⁶⁴ The ornamentation, however, is not that similar, and its only claim to Ringerike is its use of a few tendrils which in fact do not correspond to the compositional schemes Fuglesang identified.⁶⁵ The shield boss of Type Rygh 563 is a long-lived form, appearing with swords of Types Q and axes of Type K, both of which date from the tenth centuries onwards;⁶⁶ hence the shield boss cannot be dated as finely as Arne suggested. The axe, however, is of Type M which Petersen attributed to the eleventh century.⁶⁷ As a result, with the exception of the axe, all of the finds could be tenth century. Arne believed the grave dated around 1000 which would seem the most likely considering the finds.⁶⁸

Arne also placed Grave XI tentatively in the period 1000 to 1050, but again felt the finds suggested a date of around 1000. The grave finds included a firesteel of openwork design, a whetstone, a penannular brooch very similar to the one found at Ludvigshave in Denmark, fourteen arrowheads, an iron knife, an iron ring, a horn comb, a horn tool shaped with an animal head with the fragments of an iron ring in its mouth, a large spindle whorl or playing piece, a smaller spindle whorl, and various iron mounts, hooks, and nails.⁶⁹ Arne did not specify what his dating was based upon but merely noted that many of the

objects appear to be late Viking Age types, often with eastern parallels.⁷⁰

Grave III was considered under the period 950 to 1000 but Arne noted it could date somewhat later, and in fact he again felt the finds suggested a date of around 1000. Analysis of these finds is to some degree complicated by the fact the later boat grave disturbed an earlier deposit. The following finds, however, appear to have belonged to the later grave: several buckles, two stirrups like Figure 4.5b, two spurs, parts of a bridle, a mount from a horse collar, a spear of Type G, and fragments of a comb and case.⁷¹ Arne felt the spear, bridle-bit, stirrups, and spurs dated from 975 to 1025, although he did not specify how he came to his exact date. While these finds by comparison with others elsewhere suggest a late Viking Age date, it does not seem possible to attribute them as finely as Arne has done.⁷² The mount from the horse collar is also interesting. Although it appears to belong to the later grave, it is ornamented in an early Viking Age style and appears to date around 900.⁷³

These four graves have been dealt with in depth since far too often authors have compared other finds to the general categories of the grave itself without paying enough attention to the individual dating both of the graves and objects which Arne also noted.⁷⁴ The range of objects included in these four graves is fairly wide. Nevertheless, as the close examination showed, only Grave VIII provides a useful group of objects to compare against non-typologically relevant finds, since Graves I, III, and XI seem by and large to stem from around 1000.

Such objects are not confined to inhumations as the excavation of a graveyard from Åsta, near Köping in Västmanland has demonstrated. There thirteen graves from the tenth and

eleventh centuries were found, all with circular stone settings in which the cremated corpse was placed with various objects.⁷⁵ Two of the graves had a collection of riding equipment which was comparable to Grave II and to a lesser extent, Grave VIII from Tuna, and eleventh century graves ^{from} Valsgårde.⁷⁶ At Åsta a woman's grave was also found which contained an oval brooch of Petersen's Type 55, a bronze penannular brooch of rhombic section with rolled up ends and ornamented with a double row of punched triangles, a fragment of a silver schildförmige pendant, a number of beads, an iron ring, an S-shaped key and parts of a casket.⁷⁷ In this case hoard analogies exist for the schildförmige pendant which Swedish hoard finds date to the tenth and eleventh centuries.⁷⁸ Both the oval brooch and penannular brooch also suggest a late tenth or early eleventh century date.⁷⁹ Another grave of indeterminate sex contained three bronze fragments, six iron fragments as well as a coin which dated to around 1050.⁸⁰

Not all the graves ascribed to the eleventh century in Sweden are as wealthy as those from Tuna or Åsta, and in most cases the dating must, as elsewhere, be based on typologically relevant weapons or the terminus post quem dating if a coin is present. Eastern Baltic imports also appear in a number of Swedish graves, especially from the Mälars region, Öland, and Gotland. Most of these must date to the eleventh century by comparison with the eastern finds.⁸¹ In general, the total range of Swedish graves reveals a widespread pagan tradition by and large absent in Denmark or Norway. Nevertheless, a trend can also be seen in the late Viking Age towards inhumations in areas where cremation previously prevailed, and often in simple coffins with few or no grave goods;⁸² it is reasonable to associate these with Christian influence.

In Gotland the tradition of burial with grave goods also continued into the eleventh century, although the late Viking Age burials are usually inhumations. This transition has been vividly demonstrated by excavations at the cemetery at Ihre which spanned from the Vendel period through to the twelfth century. The earliest graves at the northern end are cremations while the youngest at the southern end dating to the late Viking Age and early Middle Ages, are inhumations. The central area which included graves of an early to mid Viking date shows a mixture of both rites.⁸³ Gotlandic graves in general contained weapons throughout the Viking Age, and those found show an interesting trend. In the ninth century, graves usually contained a sword or spear but this became less common in the tenth century. Swords do not appear, however, in the eleventh century nor are spears common. Instead, if a weapon was found in these late graves, it almost always was an axe.⁸⁴ A distinction is also visible in the types of objects deposited in graves, where the earlier Viking Age graves contained primarily Gotlandic objects but the late tenth and eleventh centuries showed a sharp increase in imported goods. These are almost exclusively from the east, especially from Finland, Russia, and the southern and eastern Baltic countries. In addition, these later graves are wealthier than the earlier burials, a wealth also reflected in the hoards and indicative of the increased participation in the Baltic trade.⁸⁵

The women's graves from Gotland are especially rich. Often they contain a wide range of jewelry including pendants, brooches, armrings, beads, and chains, as well as knives, keys, combs, pins, and spindle whorls. Gotlandic women did not seem to favor the oval brooch as elsewhere in Scandinavia, but instead wore a three dimensional roundish box-shaped brooch (dosenförmige Spange).

These seem to have declined towards the end of the tenth century but the Gotlandic graves show the emergence of new forms such as an animal head-shaped brooch decorated with punched ornamentation. This new type is widespread in Gotland yet so similar that they suggest one workshop.⁸⁶

Men's graves show less variety than women's. In the eleventh century, as mentioned above, the axe is often found, and in addition penannular brooches, especially those with poppy-shaped heads, belong to most men's graves of this period. Combs, knives, buckles, belt mounts, often of eastern types, beads, often in groups of three, or small axe-shaped amulets are also quite common.⁸⁷ Armrings which are so often found in hoards do not appear in men's graves, although twisted armrings are known from some women's graves. Some analogies to the twisted armrings are found in eleventh century hoards, but these usually occur in silver. The examples from graves are most probably of local manufacture.⁸⁸ Some cemeteries in Gotland, such as the above mentioned one at Ihre, relied more heavily upon imported Baltic armrings.⁸⁹

Altogether only grave finds from Sweden and Gotland provide much information concerning eleventh century contacts, in general suggesting importation of Baltic objects. This eastwards trade is little reflected in Danish gravefinds although it is evidenced in the hoards.⁹⁰ Norwegian hoards, on the other hand, provide little indication of this eastern contact⁹¹ but the grave finds confirm some participation in this trade, if only indirectly. Contact to the west is far more difficult to demonstrate, primarily because the economic systems and Christianity resulted in few objects in western graves or hoards to compare against Scandinavian finds. Moreover, Denmark and Norway from

historical accounts had closer relations to the west, but their general lack of grave goods prevents any record of the contact which must have existed.

Nevertheless, because of these political ties one would expect to find some indication of Scandinavian grave customs in England. The invading armies were made up of men from all countries, some of whom must have been pagan. Yet no English graves contain weapons or any other objects which can be dated to this period. Even in earlier periods pagan burials are relatively uncommon.⁹² As a result, it seems likely the Scandinavians adopted Christian burial rites quite quickly or at least were buried in churchyards.⁹³

Only one burial in England may date to this period, and deserves to be looked at more closely. It is a poorly recorded woman's grave from Saffron Walden in Essex which has been variously dated from the early tenth to the mid-eleventh century.⁹⁴ The grave contained a skeleton, three silver pendants and a number of beads, including a silver one with scroll filigree, another with concentric filigree, two of rock crystal, two octagonal cornelian ones, and two of glass.⁹⁵ The dating of the grave is based on two almost identical pendants ornamented in symmetrical imitation filigree. Brøndsted compared them to the so-called "Sigillum Ælfrici" from Winchester, and argued both display Carolingian derived ornamentation. His sketch of one of the pendants shows floral-like elements which do in fact have some similarities to the Sigillum Ælfrici.⁹⁶ Nevertheless, a closer examination of the pendants shows they do not resemble vegetable motifs as much as stylized animal's feet.⁹⁷ Moreover, the total layout of the pendants is closer, as Evison pointed out,⁹⁸

to brooches of Stenberger's Type Sp 2 which appear in tenth century Danish and Swedish contexts and eleventh century Gotlandic hoards.⁹⁹ There are some notable differences, however. The Saffron Walden pendants do not have any granulation or even mock granulation characteristic of this type, but on the other hand possess stylized feet and bound trefoil buds which are not generally found on Sp 2 brooches. These feet have been compared to similar earlier Borre style gripping beasts on other objects.¹⁰⁰

Nevertheless, it seems best to view the pendants as related to the Scandinavian Sp 2 brooches or the copies in baser metals which were made into pendants and are found in Danish and Swedish tenth century contexts.¹⁰¹ Evison argued that the Saffron Walden pendants must have been made in Denmark or southern Scandinavia at this time¹⁰² but the atypical features mentioned above do not exclude the possibility of English manufacture based on a Scandinavian original. The other finds from the grave have Scandinavian affinities but are of long-lived types and of little help in narrowing down the dating.¹⁰³ The inclusion of these grave goods in a burial in a culture without such a custom, and the nature of the objects themselves, suggest strongly it is to be viewed as a Scandinavian burial¹⁰⁴ and a moderately wealthy one in comparison to many Scandinavian examples. Evison placed it in the late tenth century during the time of the renewed raiding, based upon the brooches and political probability.¹⁰⁵ Kendrick, on the other hand, felt the vegetable ornament and other features suggested a mid-eleventh century date.¹⁰⁶ Nevertheless, the analogies with the Sp 2 brooches favor Evison's tenth century date, and the Borre type features suggest, as Wilson pointed out, the possibility of an earlier dating in the tenth century than Evison envisioned.¹⁰⁷

As a result, the grave evidence from England and Denmark

little reflects the political ties, nor does it provide much indication of contacts in this period with the exception of the stirrups from Velds. Yet although Brøndsted felt they belonged to a man who had fought in England,¹⁰⁸ it is also possible they arrived via trade. This problem in the interpretation of grave finds will be returned to later when the significance of Scandinavian objects in foreign graves is discussed.¹⁰⁹ However, simply from this survey of the eleventh century Scandinavian graves, it is clear that graves only provide a limited picture of contacts known to exist, and even when they demonstrate connections, they cannot determine their nature.

Chapter 5: Footnotes

1. See above Chapter 4 p. 95ff.
2. Brøndsted 1965 pp. 289-90. For a discussion of the use of wagons in wealthy tenth century Danish graves see Roesdahl 1976 p. 42.
3. See Turville-Petre 1964 p. 7ff.
4. See Jones 1968 p. 255; Smyser 1965 pp. 97-101.
5. Brøndsted 1936 pp. 214-7; Strömberg 1961 vol. 1 p. 47.
6. Ramskou 1950 pp. 178-9.
7. ibid. p. 179; Brøndsted 1936 pp. 218-26; Shetelig 1945 pp. 2-3.
8. Strömberg 1961 vol. 1 pp. 37-9, 47.
9. ibid. p. 46.
10. ibid. p. 45; Shetelig 1945 p. 3.
11. Strömberg 1961 vol. 1 p. 45.
12. Stenberger 1958 pp. 358-9.
13. Shetelig 1945 pp. 3, 30-1.
14. Brøndsted 1965 p. 290.
15. Ramskou 1950 pp. 164-5.
16. Brøndsted 1936 no. 94 p. 183.
17. ibid. no. 33 pp. 103-4.
18. ibid. no. 63 pp. 122-3.
19. ibid. no. 92, grave 2, pp. 181-2.
20. Schiørring 1978 p. 28. Schiørring felt the Ludvigshave axe was identical in shape to the unprovenanced Danish example, but a comparison of the pictures in Brøndsted 1936 p. 181 and Schiørring p. 28 shows otherwise.
21. E.g. see Brøndsted 1936. Stirrups of the type like Figure 4.5a include Brøndsted's nos. 7, 8, 14, 23, 28, 42, 49, 87, 88, 89, 93, and 95. Stirrups like Figure 4.5b include Brøndsted's nos. 9, 12, 41, and perhaps 67 and 106. Type K axes include Brøndsted's nos. 2, 8, 12, 28, 93, and perhaps 86. Type G spears have been found in Brøndsted's nos. 2, 12, 14, and 101. Type X swords are fairly common, found in Brøndsted's nos. 2, 14, 15, 26, 41, 66, and 93 while Type Q is known from at least one find (no. 101) and Type S from at least two (nos. 102 and 103).

22. Randsborg 1080 p. 126.
23. Brøndsted 1936 p. 218.
24. ibid. p. 220.
25. ibid. pp. 219-27.
26. ibid. p. 227.
27. Strömberg 1961 vol. 1 pp. 42-3, vol. 2 pp. 21, 57.
28. ibid. vol. 1 pp. 43-4.
29. ibid. pp. 64-5; Selling 1955 p. 226.
30. Strömberg 1961 vol. 1 p. 37.
31. ibid. pp. 40-1.
32. Bartholin 1978a p. 276.
33. Bartholin 1978b p. 125.
34. Randsborg 1980 p. 6.
35. Blomqvist 1975 pp. 138-9, Tafel 33; see also Graham-Campbell 1980 p. 25.
36. Randsborg 1980 p. 127.
37. Petersen 1928 p. 158.
38. ibid. pp. 162-70.
39. ibid. pp. 70-3.
40. Petersen 1919 pp. 177, 183.
41. ibid. pp. 35, 46.
42. Kaland 1969 pp. 188-215. Graves with weapons and/or riding accessories: nos. 120, 275, 305, 348, 384, and 576. Graves with riding equipment only: nos. 364 and 496. Grave with axe and medieval type brooch: no. 153. Grave with celt: no. 366. Grave with oval brooch Type 55: no. 22. Grave with axes, sickle and balance: no. 544 (dated pp. 212-3 as eleventh century or c. 1000, but on p.133 dated to the tenth century).
43. ibid. Late tenth/eleventh century graves: nos. 43, 150, 259, 344, 345, and 527. General tenth or eleventh century graves: nos. 93, 94, 127, 224 (although on p.92 she qualified this dating and argued it was late tenth century), 304, and 472.
44. ibid. Grave nos. 129, 162, 185, but see also p. 81. No. 576 was attributed to the eleventh century.

45. Skaare 1976 no. 134 p. 162.
46. ibid. no. 68 p. 144.
47. ibid. no. 71 p. 145.
48. ibid. no. 70 p. 145.
49. Petersen 1928 p. 210. See, e.g. Kaland's study of eleventh century graves from one region (footnotes 42-4 above) which contained mainly native objects.
50. Petersen 1928 pp. 146, 148; Petersen 1955 pp. 31, 33.
51. Kaland 1969 p. 176. It should be noted, however that some of Kaland's datings are questionable. Although she does not specify why she dates each grave, it must be based on typologies. As a result, it is difficult to see how she gets an eleventh century date for Graves 364 and 496 based only on riding equipment or Grave 366 based on a celt.
52. See above Chapter 3 pp. 67-8.
53. Floderus 1930 pp. 100-1.
54. Petersen 1928 p. 73; Strömberg 1961 vol. 1 p. 151.
55. Arne 1934 pp. 34-6, Tafeln XIII, XIV.
56. ibid. p. 62. See also Paulsen 1956 p. 18.
57. Arne 1934 p. 59.
58. Cnotliwy 1973 Ryc. 82.
59. Stenberger 1961 Grave no. 149 pp. 99, 132. For illustrations see his Abb. 45 p. 46 and Abb. 46 p. 47.
60. Arne 1934 p. 64.
61. ibid. pp. 24-5, Tafel IV.
62. ibid. pp. 65, 70.
63. ibid. p. 70.
64. ibid. p. 60.
65. Fuglesang 1978 p. 210. Compare her Plate 10.2 of the Vang stone with Arne's Tafel IV of the spear.
66. Arne 1934 p. 62; Petersen 1919 p. 47.
67. Petersen 1919 p. 46.
68. Arne 1934 p. 70.
69. ibid. pp. 40-1, 71, Tafeln XVII, XVIII.
70. ibid. pp. 56, 57-8, 59, 62, 63, 69, 71.

71. ibid. pp. 26-8, 70, Tafeln VI, VII.
72. ibid. p. 70. See also Wheeler 1927 p. 40 concerning the dating of this type of stirrup.
73. Arne 1934 p. 66.
74. For example, the stirrup typology listed in the London Museum 1954 (repr. 1967) Medieval Catalogue p. 88 dated the stirrups by the general grave categories and not by Arne's individual analysis.
75. Simonsson 1969 pp. 70-1.
76. ibid. pp. 72-4, 78-9. See also his illustrations pp. 80-1.
77. ibid. pp. 74-5, 85.
78. ibid. p. 84; Stenberger 1958 p. 160. See also below Chapter 7 p. 234.
79. Simonsson 1969 pp. 84, 87.
80. ibid. pp. 70-1.
81. Nerman 1929b p. 180. See also Nerman 1953 pp. 126-7.
82. Strömberg 1961 vol. 1 p. 45. See also literature cited in Swedish Archaeological Bibliography 1971-5 pp. 66-7.
83. Stenberger 1961 pp. 12-3.
84. Stenberger 1958 p. 359.
85. ibid. pp. 358-60; Stenberger 1961 p. 45.
86. Stenberger 1961 pp. 56-7, 65-8, 73.
87. ibid. pp. 38, 43-4, 46, 50, 51-2, 53, 56.
88. Stenberger 1958 pp. 100-1.
89. Stenberger 1961 pp. 32, 82.
90. See below Chapter 7 pp. 249-52.
91. See below Chapter 7 p. 249.
92. Bjørn and Shetelig 1940 pp. 11-26.
93. Sawyer 1971 p. 64.
94. See Wilson 1976 pp. 504, 506.
95. Evison 1969 pp. 343-4. Kendrick 1949 p. 38 called the two similar pendants bronze escutcheons but Evison's analysis is to be preferred.

96. Brøndsted 1924 pp. 255-6.
97. Evison 1969 Plate LXXI.
98. ibid. p. 338.
99. ibid. pp. 337-8; Skovmand 1942 p. 57; Stenberger 1958 pp. 41-2.
100. Wilson 1976 p. 506.
101. Stenberger 1958 pp. 41-2. See also distribution map in Capelle 1968 Karte 31, although it does not present a complete distribution.
102. Evison 1969 p. 338.
103. ibid. p. 340.
104. ibid. p. 341.
105. ibid. p. 342.
106. Kendrick 1949 p. 38.
107. See Wilson 1976 p. 506 and Graham-Campbell 1980 p. 48, both of whom argue that the brooches are best seen in the context of Scandinavian settlement in East Anglia.
108. Brøndsted 1936 p. 104.
109. See Chapter 9.

Chapter 6: Settlements

The information from graves and single finds provides some indication of contacts within Scandinavia and abroad in the first half of the eleventh century. Both, however, give a limited picture confined primarily to the nature of the evidence where graves contain objects of religious or personal significance and single finds provide little context at all. Objects in settlements, however, are set in a much wider perspective. Given an area large enough to be somewhat representative, the finds reveal a range of objects in use for a variety of reasons and for a greater diversity of people. In turn, ideas of manufacture, technique, subsistence, social stratigraphy and a range of human activities can be correlated.

As a result, the settlements provide several indicators of influence. The first is the objects themselves. Some are similar to hoard and/or grave finds or objects decorated in art historical styles, and provide yet another chronological check. For example, the openwork brooches in the Urnes style have been found in well dated contexts in Lund where they showed a surprisingly late date, 1100 to 1150, for both the use and manufacture of such brooches.¹ Similarly, although foreign objects and coins in general disappear from Danish hoards in the second half of the eleventh century, the find of a complete Slavic earring in Lund dating to c. 1050 to 1100 shows continued contact.² Unfortunately few sites have the dating potential of Lund, and most, as will be seen, provide relatively imprecise limits, few of which correspond to a period as finite as 1000 to 1066. A further difficulty arises in the identification of significant objects. A large number, especially those of a utilitarian nature, are similar throughout Europe and reveal little

indication of influence.

The study of the lay out of the site may also to a certain extent suggest contacts and influences. However, this evidence is difficult to deal with since it is dependent on so many factors. Local resources, topography, soils, and access to communication links all played their part in the siting of a settlement and the determination of its nature. As will be seen, within Scandinavia the diversity is so great in the first half of the eleventh century that little can be concluded from such study. Moreover, the differences between rural and urban sites is only beginning to emerge as more work is done on rural sites. As a result, this chapter is to a certain extent more heavily leaned towards urban sites of which more are known, dated, and provide a greater range of indicative objects.

A number of Danish towns are known from documentary and numismatic sources although archaeology has only begun to reveal the nature of most of them. Clearly not all were towns in the same sense of the word. Some functioned primarily as trading centers, some as religious centers, some as political administration centers while others as regional distribution centers; a number obviously overlapped in function as well. By the mid-eleventh century a wide range of such towns had evolved in Denmark.³ Some like Hedeby show a long history of development while others, like Lund, arose later with shifts in trading networks and political consolidation.

The most important town in Viking Age Denmark was Hedeby. Its period of use spanned much of the Viking Age, although its major flourishing occurred in the tenth century. Archaeological excavations have shown Hedeby's importance as a trading center but by its position on the German-Danish border, it clearly was important in

a political sense as well. This is reflected in the defensive semi-circular earthen rampart which was built at some time before the mid-tenth century, and linked to the southern Danish defensive network, the Danevirke. Other small extensions or additions continued to be added to Hedeby's defenses throughout its history.⁴

Good conditions of preservation have resulted in a number of finds as well as a good idea of the nature of the settlement. It appears to have been planned quite early on, and the subdivisions respected throughout later rebuildings. The finds show craft specialization but no craftsmen's quarters as such.⁵ Unfortunately there was little stratigraphy, and much of the dating was obtained through dendrochronology; the relative correlations between features on the site are somewhat vague, however. In addition, the later layers are much more fragmentary than the earlier, resulting in a very unclear picture of eleventh century Hedeby.⁶ From earlier levels there is extensive evidence of craft production and metal-working. Finds display foreign contacts both in raw materials and finished objects. Iron was probably imported from Sweden while other metals such as gold, silver, and bronze must also have been imported. Steatite vessels probably came from Norway while other ceramics and quernstones derived from the Rhineland.⁷ In addition, various techniques such as filigree and granulation arrived from the south and may have found their first home in Hedeby.⁸

The fragmentary record of the later contexts makes it difficult to determine the nature of Hedeby in the eleventh century. Traditionally this has been seen as a period of decline, perhaps with Sleswig coexisting and taking over a number of its functions. That some sort of activity continued into the eleventh century is indicated by the latest wood-lined well whose timbers had been cut in 1020.⁹ The documentary evidence also suggests some activity in the first

half of the eleventh century although the references increasingly confuse the names of Sleswig and Hedeby, suggesting a time of transition. Adam of Bremen, writing in the 1070's, used both names synonymously¹⁰ despite the fact that the archaeological evidence shows a settlement shift. As a result, it is difficult to determine which area Adam referred to when he used the term Sleswig.

According to saga evidence, Haraldr Harthráði plundered Hedeby sometime in the 1050's,¹¹ suggesting the town was still important enough to have goods of value. Adam, however, said that Sleswig was raided,¹² but as mentioned above, it is difficult to know which settlement is meant. That Adam most probably referred to Hedeby is suggested by a later reference to Sleswig being utterly destroyed in the Slavic raids in 1066;¹³ this probably refers to Hedeby, and has generally been viewed as its deathblow.¹⁴

When Adam wrote in the 1070's he described the trading connections of Hedeby/Sleswig as to Sweden, the Slavic lands, and Greece,¹⁵ and these connections probably apply for both Hedeby and Sleswig. Excavations in Sleswig have revealed settlement traces to the mid-eleventh century but the majority of early finds belong to the twelfth century. A mid-eleventh century settlement was situated on the waterfront and showed traces of buildings and a wharf.¹⁶ Elsewhere in the city isolated finds suggest an eleventh century date,¹⁷ but a clear idea of Sleswig in this period is lacking. Future excavation will hopefully shed more light upon early eleventh century Sleswig and its transition from Hedeby.

The other important towns of present day Denmark mentioned in Adam of Bremen are Ribe, Århus, Ålborg, Wendila, Viborg, Odense, and Roskilde;¹⁸ all except the unknown Wendila were mints in the eleventh century, as was Hedeby.¹⁹ Ribe was already in existence by the time of Anskar's mission in the mid-ninth century according

to Adam.²⁰ When Denmark was divided into bishoprics in the mid-tenth century, Ribe was made one of the three centers, the others being at Hedeby and Århus.²¹ Adam also noted that at the time he was writing, ships sailed from Ribe to Frisia, England, and Saxony.²² Hence the documentary evidence suggests an important center right through the Viking Age. Archaeology has confirmed much of this. A number of eighth and ninth century deposits have been found, including traces of buildings with some similarities to those from Hedeby. The finds from these layers show contacts, as Adam noted centuries later, with western Europe, as well as flourishing craft industries.²³ However, recent work has concentrated upon the earlier settlement, and as a result, to a great extent the nature of Ribe in the first half of the eleventh century is unclear.

Although Århus was one of the first bishoprics, it clearly was not viable as an ecclesiastical center; Adam recorded that from the death of Adaldag in the first decade of the tenth century, the see was vacant until it was re-established in the mid-eleventh century.²⁴ A cluster of runestones of the after-Jelling runic type around Århus and in the hinterland suggest an area of some importance in the first half of the eleventh century.²⁵ Archaeological excavations have begun to shed light on late Viking Age Århus. Like Hedeby, in the tenth century it was enclosed by a circular wall which was strengthened many times in the following centuries. The settlement in this part of town seems to have been planned from the beginning, conforming to this circular wall. Unfortunately the stratigraphy did not allow close dating. The ceramic sequence has a very broad first phase of 900 to 1200; moreover, the preservation often did not allow the identification of individual phases of building.²⁶ A wide range of finds are present but few can be dated precisely within this first ceramic phase. Some craft production is evident as well as imports of basalt quernstones from

the Rhineland, steatite and whetstones from Norway, and glassware from western Europe.²⁷ The pottery of the first phase included some wares which may have been imported from the Slavic region as well as ornamentation techniques on local pots which also probably derived from Slavic pots.²⁸ In general, the excavators saw Århus as participating in some international trade, but also characterized as a local trading place.²⁹

Viborg was made a see at the same time that Århus was re-established.³⁰ Unlike the other towns mentioned, its importance lay not in its trading or manufacturing but rather in its function as a central thing-place, combined with a seasonal market. Excavations have shown activity from the eighth century onwards, continuing into the early eleventh century when there is evidence of the establishment of some of the medieval street plans.³¹ The seasonal nature of the site is reflected by the scarcity of evidence of craft production or imports.³²

Little is known of the other towns in Jylland. Wendila was important enough to be created a bishopric in the mid-eleventh century,³³ but its location is unknown except that it lay in Jylland. Ålborg was mentioned by Adam³⁴ and had a mint at least by the time of Hórfhagnútr,³⁵ but nothing is known archaeologically before c. 1100.³⁶ Adam noted that many travellers went from Wendila and Ålborg to Viken in Norway and then up the coast to Trondheim to visit St. Óláfr's relics.³⁷ Ørbæk is not mentioned by Adam but was minting coins by Knútr's reign;³⁸ it too is unknown archaeologically.³⁹

Odense on the island of Fyn was called a great city by Adam but he provided little other information concerning its nature. Since Adam mentioned no other towns on Fyn, Odense must have been where the see was placed when it was established in Fyn in the mid-eleventh century.⁴⁰ Numismatic evidence shows Odense had a mint by the time

of Knútr,⁴¹ but few archaeological traces survive of any Viking Age settlement. Across the river from Odense at Nonnebacken a Viking Age fortress similar to Fyrkat and Trelleborg was situated but few traces remain from there either.⁴²

On the island of Sjælland three mints are known from the eleventh century but from two of these, Slagelse and Ringsted, no further archaeological information is known nor were they important church centers.⁴³ The third town, however, was quite important. Roskilde not only had a mint⁴⁴ but was also most probably a bishopric from the time of Knútr; in addition, Adam referred to it as the seat of Danish royalty.⁴⁵ This seems to be a shift from the tenth century when Jelling appears to have been the royal center.⁴⁶ Other documentary references hint at its importance. Adam recorded that Haraldr Blátönn had built a church dedicated to the Holy Trinity in Roskilde, and his body was brought back from the Slavic lands to be buried there.⁴⁷ The Encomium Emmae attributed the building of this church to his son Sveinn, and added that Sveinn's body was brought from England to be buried in Roskilde,⁴⁸ a fact which other Icelandic and Danish sources concur on.⁴⁹

Unfortunately, archaeological finds relating to the first half of the eleventh century are disappointingly small but the few that are known confirm the importance of Roskilde. Traces of the earliest stone church known in Denmark have been found, dating back to the first half of the eleventh century.⁵⁰ The strategic importance of the town is shown by the blocking in this period of the two major channels leading to Roskilde with deliberately sunk ships.⁵¹ Outside of Roskilde itself but on the fjord, a seasonally occupied site through the entire Viking period and into the early Middle Ages indicates an area for ship repairs or construction, perhaps with some trading activities occurring as well.⁵²

The Danish provinces in present day southern Sweden have fortunately yielded more information. Skåne especially is rich in finds and sites, of which the most important is the town of Lund. Although traditionally founded by Knútr, coin evidence and dendro-chronological analysis of the timbers show a settlement was already present at the beginning of the eleventh century.⁵³ The excellent preservation has resulted in a large number of finds and evidence of settlement. Even more fortunate, these are well stratified and allow close dating from coins and dendrochronology to an initial period of 1000 to 1050. Around 1050 a flood layer covered much of the area in Lund, providing an easily recognized division between Phases I and II.⁵⁴

As a result, a good idea can be obtained of the town in this period, its layout, contacts, and activities. A number of house types were identified which will be discussed later. The house furnishings themselves were by and large very austere, consisting of simple beds, boxes and chests (usually surviving only in locks, keys, and mounts), three-legged stools, and simple oil lamps. A number of other finds suggest the scope of daily life with domestic vessels, buckets, cooking tools, fishing implements, and carpentry tools.⁵⁵ Bronze and tin working is suggested by steatite molds, crucibles, an iron chisel, bronze punch, and bronze pendants from two mid-eleventh century workshops. A number of fragments of bone also attest to its use in manufacturing various objects throughout Lund. In addition, textiles were made as shown by spindle whorls, objects for twisting thread, and loom weights.⁵⁶

The finds also provide an idea of what the average person wore in this period. Two different types of leather shoes are known, one with a pointed heel and the other with a rounded heel. Combs and knives in leather sheaths were also common finds.⁵⁷ Brooches

are usually simple and of base metal. Two main types can be distinguished: the common penannular brooch with rolled up ends found widespread in the Viking Age,⁵⁸ and round brooches, simply decorated with punched dots, triangles, and/or raised bosses.⁵⁹ Fingerrings of various types and metals were also found as well as some glass beads. Twisted neckrings and armrings are known but only in fragments.⁶⁰ Since Skåne hoards clearly show the use of fragmentary neckrings and armrings for economic purposes,⁶¹ these examples from Lund may represent payment metal and not jewelry. A number of Urnes openwork brooches have been found in Lund, as well as a mold, but these are very late, dating from 1100 to 1150.⁶² Finds suggesting human activities include bone skates, some in conjunction with sticks with iron tips, and a number of gaming pieces.⁶³ A rare find of fragments of ring mail dating to this first phase was also discovered.⁶⁴

Imports are surprisingly few. One special group of objects suggests ties with the west. This collection consisted of a pen case lid carved in English Winchester style, an ivory comb of a type not found in Scandinavia but with parallels in sixth to eighth century Syrian work, the back of a beech and maple stool, a piece of embroidery of red and yellow taffeta, and a bronze dragon's head in a Romanesque style. Blomqvist and Mårtensson argued that these are not the objects of an ordinary man in the first half of the eleventh century, and instead suggested that they might have been the possessions of a missionary priest, probably of English origin.⁶⁵ A strap end of English manufacture or of strong English influence indicates some more ordinary contacts with England.⁶⁶

More objects, however, suggest eastern ties. A fragment of a blue and white glazed "Ascension egg" suggests contact either direct or indirect with Russia; this also provides one of the few dated

contexts for these objects.⁶⁷ A Byzantine enamelled brooch shows further ties to the east, again either direct or indirect.⁶⁸ A complete bronze earring of the Slavic type similar to ones in hoards was also found, although dating to the second period, c. 1050 to 1100.⁶⁹ Combs showed a number of similarities with Wolin and the Baltic although the exact nature of this connection is difficult to determine. Most likely each had their own production centers but because of stepped up economic contacts, mutually influenced types.⁷⁰

Contact with the Slavic region is further borne out by the pottery. In the first period vessels of a type found in the Slavic regions, especially around present day Poland, East Germany and even Russia, are very common. A large number are so close to the Slavic examples that they have been considered imports. Some authors have argued, however, that the types and techniques are quite simple, and it is possible these ideas were imported and the pots made locally; Blomqvist and Mårtensson noted such types occur throughout Skåne, often with individual features.⁷¹ Minerological studies have not been carried out on the Lund examples but some analysis has been made on those vessels with impressions or carvings on their underside, comparing them with Slavic examples. Some of these were directly paralleled and are most probably imports.⁷² It is impossible to conclude for the others until minerological analysis has been undertaken, but elsewhere in Skåne studies have shown such pots were probably made from local clay.⁷³ These Slavic pots are not limited to the first phase in Lund but continue right through to the twelfth century.⁷⁴

In addition, vessels of western European origin are known, also of a relatively crude nature but fewer in number. They differ from the Slavic pottery in their use. The Slavic vessels were

designed to be set upright in an oven or similar apparatus. The western European pots, however, were made for a "quick boil" type of cooking where they could be hung over an open fire or fixed with stone pins directly into the hearth.⁷⁵ Steatite vessels are known in Lund only from a few sherds; the very small number suggests they were a luxury item imported from Norway.⁷⁶

The relatively small number of imports, and the similarity of finds in southern Sweden suggest Lund was not an international trading center in the sense Hedeby was, but rather a local distribution center and political focal point. Its mint functioned from an early date and had the largest output of all Danish mints.⁷⁷ Its importance can also be seen in the cluster of runestones of the after-Jelling type which most probably date to the first half of the eleventh century.⁷⁸ Lund continued to be an important town in the early Middle Ages; in fact, the first Scandinavian archbishop was based there in 1104.⁷⁹

The study of rural sites in Denmark is only in its beginning stages, but a number of excavations in the last decade have begun to show certain characteristics and trends. As more work is done, hopefully a clearer picture will emerge of the types of settlements, perhaps with regional differences as well as their relationship to town centers and subsistence patterns. The dating of the rural sites, however, is often very difficult, creating problems in the interpretation of the phases within the settlements. Often the finds are of types found throughout the Viking Age, and indicative imports or finds of a datable nature are far less common. In addition, most of the mainland Danish Viking Age settlements do not continue much past the mid-eleventh century and cannot be linked with modern villages, most of which have their roots in the Middle Ages. This gap is puzzling and has been attributed to replanning in the eleventh century due to new systems of land ownership or agriculture, perhaps

related to the intensification of cereal production evidenced in pollen diagrams.⁸⁰

Although at present relatively few sites are known, in general from the excavations a trend is emerging of farm complexes throughout the Viking Age composed of long houses, often bow-shaped, associated with Grubenhäuser. In the late tenth or early eleventh century a new settlement form appears as well, composed of clusters of buildings often placed around a courtyard. These settlements, sometimes called magnate farms, are often near and probably associated with the traditional type of settlement.⁸¹ Whether this trend is representative of all of Denmark will be shown by future excavation; if, however, it is accurate, it suggests a new system of land holding, perhaps related to the increased political control and centralization of the time.⁸²

Lindholm Høje in northern Jylland was a massive cemetery in the early Viking Age but in the early eleventh century after it had fallen into disuse, a settlement was built. A number of houses of varying types have been identified, some of which were situated in the magnate farm arrangement.⁸³ Finds from this settlement included nails, knives, scissors, a small axe, iron rings, and pottery fragments. Steatite fragments, probably of Norwegian origin show foreign contacts,⁸⁴ perhaps via a Danish trading town such as Århus. Coins ranging from Knútr Sveinsson to St. Knútr provide not only dating evidence but also some indications of the economic background; interestingly, the Danish coins are all from northern Jylland mints.⁸⁵

Vorbasse in southern Jylland had a much longer history of settlement. An early planned village was in existence in the fifth century, but then abandoned and unoccupied until a new village was established in the early Viking Age with long houses and Grubenhäuser. In the late tenth century this village was extended and partially replaced by three farm complexes, one of great size. Various buildings

within the complexes appear to have had special functions, including a smithy, bronze working shop and stables. Grubenhäuser are unknown from this later settlement.⁸⁶ Some finds from the late Viking Age suggest foreign contacts including steatite vessels from Norway, quernstones of basalt lava from the Rhine, Slavic-type pottery, and a coin from Stade, Germany dating from 1038 to 1040. Nevertheless, a large number of the finds seem to have been of native workmanship.⁸⁷

The settlement of Omgård presents a similar picture to that of Vorbasse. The early settlement from the ninth and early tenth centuries was characterized by a number of wooden structures associated with Grubenhäuser, but no fences were used to define boundaries. Later in the tenth century a settlement resembling the large farm phase at Vorbasse was constructed, with halls and associated buildings defined by fences, but no Grubenhäuser. In fact, the activities associated with the Grubenhäuser in the earlier settlement were no longer evident, and a greater number of imported objects were found. As a result, both Vorbasse and Omgård have been interpreted as aristocratic settlements at this time, where the greatest investment in resources was applied to habitation buildings rather than farm buildings.⁸⁸ The objects of foreign origin indicate the wealth of the settlement. A large amount of Slavic-type pottery was found in the main farm complexes while in more peripheral buildings simple Jylland wares were used, suggesting a distinct social difference. As at Vorbasse, steatite vessels from Norway and quernstones from the Rhineland were found.⁸⁹ The nature of the settlement as a whole is also beginning to emerge as cross country fences, roads, and perhaps a corn mill have been discovered in the region around the settlement.⁹⁰

These farm complexes by their size alone and quality of the artefacts indicate settlements with some command over the region.

But the imported objects are not limited to this type of settlements. Other contemporary villages of the more traditional type have also yielded steatite vessels and Rhineland quernstones. In the more traditional villages a single long house was associated with smaller buildings, sometimes Grubenhäuser, and like the large farms, often surrounded by fences.⁹¹

The type of long house, however, can vary greatly even within one settlement as the excavations at Trabjerg in northwest Jylland have shown. Here a settlement existed from c. 725 to c. 1050. Although the finds were relatively scarce, a number of building types were identified, some overlying others to give a relative chronology. By far the most common house type was a wooden frame built structure defined by a single series of postholes in either a straight or slightly bowed outline generally on an east-west orientation, and with bowed gables. No trace of internal supports was found although five such houses of various construction are known and seem to belong to the later phases of the site. Other wooden house types include two stave built rectangular houses, three rectangular straight walled houses partitioned into three rooms, and small variously shaped wooden structures. Grubenhäuser are also known in various shapes throughout the settlement history. Altogether this site with its range of building types shows the diversity in construction that appears in rural Danish sites as a whole.⁹²

Some of these houses were associated with one another by fence systems on the site but the stratigraphy was too poor to ascertain whether some of the later groups formed complexes. The southern part of the settlement consisted of a large well with buildings grouped around it while to the north the buildings were far more spread out; many of the Grubenhäuser lay in a line at the settlement's highest point and contained finds suggesting various specialist activities.⁹³

All of the examples of farms mentioned above occur in Jylland, and in fact most of our knowledge of Danish rural sites is based upon Jylland and Skåne. In Skåne, however, at present there is no evidence of large farm complexes. In fact, there is little evidence of wooden post buildings at all. Grubenhäuser of various kinds are most commonly found; it is still unclear whether other house types were constructed as well but have not survived, due perhaps to recent ploughing which has destroyed much evidence. In some of the Grubenhäuser traces of wattle and daub, probably for walls, were found. The dating of the Skåne rural sites is also a problem, but in general those from the later Viking Age often show continuity from earlier settlements.⁹⁴ A typical example of a rural settlement from this period is found at Oxie dating to the tenth and eleventh centuries. There several Grubenhäuser and Slavic-type pottery were found, together with a number of settlement finds.⁹⁵

The recently excavated site of Löddeköpinge also provided good dating evidence. Its name, traces of a rampart, and some of the finds suggest it may not have been as much a rural site as a seasonal market,⁹⁶ and perhaps should have been considered under urban sites. Yet it has many similar features to Oxie. Despite careful excavation, no structures other than Grubenhäuser were found, but these exhibited much variation. Two of the houses are especially interesting in that they are not of a type found elsewhere in Sweden, but instead resemble Slavic house types.⁹⁷ On the other hand, comparatively little is known about rural sites, and future work is necessary before this type can be considered significant. The site has a long occupation history extending into the eleventh century and even beyond. The eleventh century finds are dominated by the Slavic-type ceramics, but studies have shown that they were probably made from local clay. Other finds included animal bones, iron objects, slag, and steatite.⁹⁸

In Denmark one other form of settlement must be mentioned.

The Viking fortresses of Aggersborg, Fyrkat, Trelleborg, and Nonnebacken have generated much discussion from the time of their discovery. No documentary sources exist concerning these fortresses but the similarity in plans and construction as well as the resources called upon to build them suggests an organized, coherent, and almost certainly royal policy. Each fortress was enclosed by a circular rampart constructed of earth and timber, and pierced by four gates at ninety degrees to one another. Streets, paved in wood, intersected the interiors and linked the gates. Within the quadrants thus defined, four houses forming a square were constructed, at times with another building within the courtyard. None of the fortresses, however, is exactly identical. Aggersborg, for example, is much bigger, with an inner street system and more houses. Trelleborg had additional houses built outside the first rampart, radially set respecting the line of the rampart.⁹⁹

Of the four camps, most information is known concerning Fyrkat and Trelleborg. Little remains of the plan or buildings of Nonnebacken where almost all traces have been destroyed by later building. Nevertheless it is considered with the other three on the basis that its rampart is circular and turf built like the others; moreover, its internal diameter is the same as Fyrkat. Finds from the area also roughly correspond in date to those from the other fortresses.¹⁰⁰ The interpretation of Aggersborg is complicated by the fact that it was built upon an earlier settlement; in addition it was only partially excavated and published. The earlier settlement dates back to the eighth century and continued into the tenth century. A number of house types were identified and the finds point to a wealthy community, perhaps of strategic importance.¹⁰¹ The strategic position in the Limfjord area may explain the siting of the fortress

in this spot. Unfortunately the plan is difficult to determine except by analogy, and few objects can with certainty be attributed to the fortress.¹⁰² As a result, both Nonnebacken and Aggersborg provide little help in the interpretation of these sites.

The great similarities between all the fortresses suggest they were roughly contemporary. Moreover the evidence from Trelleborg and Fyrkat suggests they were not in existence very long.¹⁰³ Nørlund believed that the fortresses were built in the last decades of the tenth century and used by Sveinn and Knútr as military barracks for their armies preparing for the conquest of England.¹⁰⁴ In the following years this theory has been questioned, both concerning its dating and interpretation. Roesdahl has examined all the finds from Fyrkat where no occupation before or after the fortress complicates the picture, and in addition she re-examined the Trelleborg finds. She concluded that the finds within the fortresses as well as the associated cemeteries point clearly to a tenth century date with no firm evidence of continuation into the eleventh century. As a result, she would associate the fortresses with Haraldr Blátönn or perhaps the first years of the reign of his son Sveinn.¹⁰⁵

Much of the problem in the dating arises from the theories of the function of the fortresses. If they are viewed as military barracks, the historical background suggest they must be tied in with the late tenth, early eleventh centuries. Olsenfelt that although the fortresses may have had other functions, their prime use must have been as military barracks. As a result, he felt the fortresses could have continued somewhat into the eleventh century, and may well be related to campaigns of Sveinn Haraldsson, either east or west.¹⁰⁶ Roesdahl, on the other hand, did not deny the fortresses had some military functions but felt they were more

probably to be viewed as local royal centers designed for a number of reasons. In the military sphere they could have been used to launch expeditions but could also have been used by the king to control areas of Denmark; it is noteworthy that none of the fortresses occur around Jelling. But other functions are possible as well. They could have served as refuge centers for the population, much as the Burghal Hidage forts did in England. Moreover, they would have enabled administrative functions such as tax collecting to be regionalized.¹⁰⁷

In support Roesdahl noted that the finds from Fyrkat suggest that the houses had different functions. Service buildings such as smithies, store houses, and stables were all placed facing the rampart, while dwelling were situated on the east-west axial street. The north-south street may originally have been designed for dwellings but occasionally seems to have been occupied by goldsmiths. The cemetery attached to the fortress showed a mixed population of men, women and children whose finds are similar to those from a prosperous large farm.¹⁰⁸

While both Trelleborg and Fyrkat contained many locally made products, objects of foreign origin are also known. Very few show contact with England or western Europe. From Trelleborg a bronze brooch was found whose ornamentation is based on an Æthelred coin, although this is, of course, not evidence of a direct link with England. Most of the foreign finds, especially those from Trelleborg in fact show closer ties with the Baltic.¹⁰⁹ In one of the houses from Fyrkat some rye was found which seems to have been imported from the east, perhaps from Russia.¹¹⁰ The actual idea of the fortresses must have been imported as well, and theories suggesting origins from western Europe, the Slavic regions,

the Orient, or Byzantium have been put forward.¹¹¹ However, no exact parallel for the fortresses exists, and they may well be an accumulation of different ideas; certainly at present no firm conclusions can be made. If, as seems most likely, the fortresses were constructed in the late tenth century in Haraldr's reign or perhaps early in Sveinn's reign, the historical background suggests influences with northern Germany, the Slavic regions or perhaps further east as most likely. It is also worth remembering that in 972 Otto II of Germany married Theophano, a Byzantine princess, resulting in Byzantine influences to Germany in the late tenth century.¹¹²

Altogether the Danish fortresses clearly reveal a strong political control by a monarch able to command resources on a large scale. The dating evidence suggests this occurred in Haraldr Blátönn's reign. Other Danish finds confirm the ability of Haraldr to initiate large scale projects. A part of the Danevirke was renewed and small new bits constructed in the late tenth century.¹¹³ Furthermore, at Ravning Enge in Jylland excavations have revealed a bridge c. one kilometer long with a two lane roadbed. An enormous amount of wood was used, and the construction shows sophisticated and well-planned engineering. Dendrochronological dating of the timbers with the outermost ring preserved all gave a felling date of around 979, i.e. in Haraldr Blátönn's reign.¹¹⁴ Clearly Haraldr had the resources and political control to undertake large scale projects; the construction of the camps for military as well as local governmental purposes fits quite well into this picture.

This wide range of urban, rural, and aristocratic sites is not known from Sweden or Norway. In part this may be the result of inadequate preservation and excavation, but in part it may result from different social structure, degree of political centralization, and settlement patterns. Although Adam of Bremen was most concerned with Denmark, he also paid attention to Sweden since much of the

missionary work was done by German clergy. From his descriptions it appears that Sweden had nowhere near as comprehensive an urban set up. Helgö and Birka had declined, the latter probably the victim of changing economic supplies,¹¹⁵ but Sigtuna arose to take the place of Birka. At the beginning of the eleventh century it already was a wealthy town with a mint and foreign contacts.¹¹⁶ In the 1070's Adam described it as a great city,¹¹⁷ and finds and a concentration of runestones confirm a flourishing settlement throughout the eleventh and twelfth century. As in the Danish trading towns there is evidence of craft production both in metals and bone. The finds show contacts east and west. For example, a copper box was found of a type used to carry a balance and weights, with a runic inscription saying that Djärv had obtained the box with a balance from a man from Samland. A small glazed "Ascension egg" similar to the one found in Lund suggests contacts with Russia. Further afield, contacts with Byzantium are indicated by a cast silver crucifix, probably locally made but from a Byzantine prototype. To the west, the Frisian trade must have been of some importance. Not only are there finds, especially in bone and horn, resembling Frisian objects, but in addition a runestone mentions a Frisian guild. Evidence of English influence, however, is rather late, dating to the beginning of the twelfth century by and large.¹¹⁸

Very little is known of the other early eleventh century towns in Sweden. Adam mentioned that Archbishop Unwan of Hamburg-Bremen¹¹⁹ created a bishopric for Óláfr Skötkonung at Skara but excavations have only revealed occupation from the end of the eleventh century.¹²⁰ Nothing is known of the Gotlandic trading centers which from the evidence of hoard and grave finds must have existed at this time. A trading town has been found at Paviken with evidence of craft production and foreign trade but it declined at the end of the tenth

century. The town of Visby may well have arisen at this time and taken over many of Paviken's functions but little is known of early Visby.¹²¹

There is also much uncertainty concerning eleventh century rural sites in Sweden. While there have been a number of regional studies by geographers and archaeologists attempting to reconstruct general trends of settlement through the Iron Age and into medieval times, these are still in the beginning stages.¹²² They depend partly upon grave and archaeological finds indicating settlement areas even where no house traces remain, archaeological evidence of settlements themselves, and an approach of working backwards from later documentary sources and maps. These regional studies have revealed no simple progression of settlement but various expansions and regressions at different times.¹²³ The development from isolated farmstead to hamlet has also been much discussed and seems to vary from place to place.¹²⁴ Unfortunately relatively few settlements have been excavated from the Viking Age, much less the eleventh century, with which to test these models against or compare with the Danish sites.¹²⁵

A few Swedish rural sites, however, have produced good dating evidence for this period and can be mentioned. A recently excavated site at Burge in Gotland produced a number of objects paralleled in hoards from the first half of the eleventh century. The house itself appears to have been almost square with a rectangular area connected to this along one of the gables. Post holes were placed down the center to form two aisles. The number and quality of the finds from just this one farmstead confirm the picture of wealth on the island as shown by the hoards.¹²⁶

Nearby on Öland an impressive late Viking Age/early medieval settlement was found at Eketorp which had been constructed over an

earlier prehistoric round fort. No organic remains survived, and the house constructions, of several types, were revealed only by limestone foundations. The houses were often grouped in rows forming ranges, although it is difficult to determine if they were closed units or long continuous buildings. Unfortunately, there was little stratigraphy in this settlement, preventing more finite chronological divisions of both buildings and finds; moreover, there was relatively little evidence of reconstructions or additions to aid in phasing.¹²⁷

The sites on the Swedish mainland are much more uncertainly dated; most can only tentatively be assigned to the late Viking Age. Wattle-wall houses from "Östergötland may belong to this period¹²⁸ as might the rectangular stone foundations known from Tuna in Uppland which were probably for timber houses of some sort, perhaps grouped in ranges.¹²⁹ Altogether, however, the number of well-dated excavated settlements is too small to make any generalizations, and must await further excavations to reveal variations in plan, techniques, and their relationship to surrounding settlements and regions.

A similar state of uncertainty exists for Norwegian rural sites. Comparable analysis has been made for areas in Norway with a series of models also put forward.¹³⁰ As in Sweden, few late Viking Age houses can be dated with certainty, but in general those known display more diversity than those from previous periods. In addition, the little dating evidence which exists suggests occupation for relatively short periods; nowhere has there been any continuity visible between the Viking Age and medieval periods.¹³¹ The sites which can be dated to the late Viking Age in general have been isolated farmsteads of varying construction including timber ranges in eastern Norway,¹³² small fishing huts with stone foundations and presumably wooden superstructures,¹³³ and smaller buildings with sills and perhaps laft construction.¹³⁴ Alongside these, the use of earth and stone known from earlier periods may

well have continued although there is little evidence for specifically the late Viking Age;¹³⁵ on the other hand, a subsidiary building to the house at Hovden, which probably dates to c. 1100 to 1300 was constructed of stone foundations and earth walls.¹³⁶ As in Sweden further excavation will hopefully provide better dating evidence and further clarification of the relationship between these different houses, both from a regional standpoint and their uses as specialist buildings.

A clearer picture, however, is beginning to emerge of the Norwegian towns from the first half of the eleventh century. The documentary sources for these towns are quite late. Adam of Bremen is of little help, and most of the accounts of the towns derive from the much later West Norse histories and sagas. Few of the towns show evidence of occupation through to the early eleventh century. In some cases it may simply be a matter of time before they are found, but in general the formation of the new towns seems to occur around the mid-eleventh century and appears to be related to the consolidation of Norway and the penetration of Christianity.¹³⁷ Documentary sources show the first half of the eleventh century to have been a turbulent time with several political upheavals. In each case, as will be seen in the discussion below, different rulers often exploited different places, founding new centers of political power or at least providing a political aspect to an already economic nature of the town. Although there is little evidence of early eleventh century trading towns, the amount of Norwegian stoneware found in other Scandinavian sites and further afield would suggest some operated in this period.

According to the sagas, Trondheim, or Nidaros as it was known earlier, was founded by Óláfr Tryggvason, probably c. 997. The sagas credited Óláfr with building a trading center there¹³⁸ but

Theodoricus' history suggests merchants had already settled there before Óláfr.¹³⁹ It is also unclear whether he built his palace and church there, and some sagas implied that he lived at Lade where his predecessor, Jarl Hákon had lived; nothing, however, is known of Lade archaeologically.¹⁴⁰ Upon Óláfr's death, Hákon's sons resumed control but changed their residence from Lade to Mære. Only when Óláfr Helgi returned and took power in c. 1015 was a settlement reimposed at Nidaros, and the royal palace and church dedicated to St. Clemens either built or rebuilt.¹⁴¹ Sveinn Knútsson and his mother Ælfgifu presumably lived in Nidaros as well. Other sagas credited Óláfr's son Magnus with building a new palace, including a stone hall, and another church in which to house his father's relics. Haraldr Harthráthi is said to have completed the church, converted the hall into a church dedicated to St. Gregory and built himself another palace and a church dedicated to St. Mary. Haraldr's son Óláfr Kyrre (1066-93) also built a minster which housed Óláfr Hagi's relics and eventually became the cathedral.¹⁴²

Excavations have not been able to prove or disprove this sequence. They have, however, demonstrated occupation in Trondheim as far back as the early eleventh century. In many places the preservation was quite good not only of buildings but also of fences constructed of interwoven juniper branches which enclosed small areas. An early drain was also found with sides constructed similar to the fences and then covered with logs. Finds from these earliest layers, however, were not that numerous but included some objects of wood, bone and steatite, and occasionally leather and textiles; they suggest craft production as well.¹⁴³

The chronological sequence is still not clearly defined, and many of the finds can only be ascribed in general to the eleventh century. A couple of finds suggest a tenth century date¹⁴⁴ but

they are few in number and cannot alone indicate an early date for the structures. In general the eleventh century dating suggested by the sagas at present seems reasonable. However, the excavations have shown the sagas cannot be taken at face value. The church traditionally ascribed to St. Gregory was built upon a two meter thick accumulation of occupation material suggesting either that the site existed before Óláfr Tryggvason or that Snorri was mistaken in his history or perhaps described a church elsewhere in Trondheim.¹⁴⁵

According to the saga evidence, Haraldr Harthráthi founded Oslo where he is said to have placed a trading town and built a residence. Part of his reason for its founding are attributed to defensive considerations both for launching raids against the Danes and coordinating the defence of Norway from their raids.¹⁴⁶ Some traces of a defensive earthwork system were found, and may relate to those mentioned in the saga.¹⁴⁷ The excavations of the churches have revealed the earliest clear signs of occupation. A small wooden stave church dedicated to St. Mary was associated with the royal palace area, perhaps as the king's court chapel or missionary church, and may date to Haraldr's reign.¹⁴⁸ Some hints suggest a settlement of some kind may have existed earlier. Excavations at the parish church of St. Clemens revealed two groups of Christian graves, both predating the church. One appears to date to the beginning of the eleventh century, and it is reasonable to postulate that it was associated with an earlier church although no traces have been found, and indicative of an earlier settlement.¹⁴⁹ Elsewhere in the city, traces have been found of eleventh century occupation but unfortunately they are quite fragmentary due to later rebuilding, and difficult to date.¹⁵⁰ Some Grubenhäuser of an eleventh century date were found as well as traces of wooden buildings of laft construction and wattle fences.¹⁵¹

The sagas mention an even later founding date for Bergen, in the reign of Óláfr Kyrre and thus probably c. 1070.¹⁵² As with

Trondheim and Oslo, however, it is impossible to determine whether this indicates merely the royal occupation in an already settled area or a new foundation. Excavations thus far have revealed occupation only to the late twelfth century. Tests have shown, however, that the shore line has increased seawards as refuse was piled in and then built upon, and in fact the earlier layers may thus lie unexcavated further inland.¹⁵³ It is also possible that the earliest occupation was not in the wharf area but further to the east and southeast, an area now densely built upon.¹⁵⁴ As a result, the question of Bergen's role in the early eleventh century remains open, dependent on future excavation.

The status of Borgund in Sunnmøre in the eleventh century is also unclear. The sagas indicate it was an important place, but this may well refer to its later history.¹⁵⁵ A graveyard dating back to the early eleventh century has been found which does not, however, seem to directly relate to the present churches.¹⁵⁶ While occupational remains have been discovered, their dating is a real problem. The oldest phase, probably in the eleventh century, showed a number of irregularly scattered sheds and buildings, mainly constructed of wattle. When a floor level could be discerned, it was usually of beaten earth; no hearths or other features were found in the buildings although cooking and refuse pits were located nearby. The nature of these buildings does not suggest living quarters, which probably lie elsewhere.¹⁵⁷

Many of these Scandinavian sites both urban and rural contained foreign objects which indicated contacts, probably of a trading nature. In Denmark these appeared to lead both east and west, with if anything more emphasis on the eastern, especially the Baltic ties. Lund, whose character is best known in this period, contained

close parallels in pottery and combs with this Baltic region.

Even rural sites in Denmark sometimes had imported objects, often Norwegian steatite vessels or quernstones from the Rhineland, indicating not only the wealth of some of these sites but also an efficient local redistribution network within Denmark. Swedish and Norwegian sites also had some imported goods, but the evidence from both places is still too fragmentary to make any general conclusions. The reverse of this connection, the finds of Danish and/or Scandinavian objects in foreign settlements will be dealt with at a later time.¹⁵⁸

The set up and nature of the settlements held some possibilities in the tracing of influences, but even this incomplete survey revealed a wide variety of urban and rural settlements. There was no one urban type in Denmark or Scandinavia as a whole. Some showed signs of initial planning while others exhibited a haphazard arrangement. Some revealed a wide network of imported goods, both luxury and utilitarian while others indicated limited contacts. In some towns craft production was clearly important while in others there was little evidence of it. Moreover, towns owed their importance to different factors. In Denmark, for example, Ribe and possibly Hedeby were important to international trade while Lund, Århus and Odense probably were more important for trade within Scandinavia and local redistribution. Roskilde from the written sources would appear to have been a political and religious center, perhaps followed to some extent by Lund. Viborg on the other hand seems to have been a seasonal market area and of legislative importance as a thing-place. As a result of this diversity even within one country it is questionable whether a comparison with contemporary towns within Scandinavia or abroad is of any value in elucidating influences on the type of site and its setting.

The rural sites are also of little value in indicating settle-

ment influences. Like the towns they show great variety, even within the same regions. Some regional characteristics can be observed, for example, between the Danish timber buildings and the widespread use of Grubenhäuser in Skåne and Sweden. However, many of these apparent differences may result only from an inadequate archaeological sample. Denmark contains more information concerning villages as opposed to isolated farmsteads, but it is possible similar ^{settlements} exist in Norway and Sweden under present day villages. Modern Danish villages may also overlay some eleventh century ones, but if not, it raises a number of questions. In fact, too little is known about rural sites in Sweden and Norway at present to suggest any lines of contact, influence, or even patterns.

More important for both the towns and rural sites are local factors such as topographic conditions, resources available, subsistence activities, relationships and proximity to other settlements, and the wealth and political importance of each individual place. As a result, only in a comparison of the buildings themselves and their constructional techniques in both urban and rural sites might it be possible to determine significant influences upon the settlements.

Although the actual number of settlements which can be dated to the first half of the eleventh century is relatively small, they display a wide range of house types in a variety of constructional techniques. Few sites, however, have good preservation, and as a result, usually have evidence only of the foundation, and often even that is fragmentary. Post holes suggest a timber framed building but there are a number of ways the wall infill and superstructure could have been constructed based on similar foundation evidence. Internal supports are difficult to discern

unless they were dug into the ground, while external buttresses are difficult to find and identify as such. The many interpretations of the Trelleborg and Fyrkat houses illustrate the need for careful examination of the post pits as well as the difficulty in reconstructing the entire dwelling from foundation remains.¹⁵⁹

A sill beam can also often be difficult to detect in the archaeological record, but even if it is present, gives no hint concerning the superstructure. If, as in some Scandinavian sites or this period, the sills are of stone, there is little that can be determined concerning the construction of the building, not even whether it was of stone or wood. In some cases walling has been preserved, and, as will be seen, shows a number of techniques which are rarely specific to one type of foundation. Roofing techniques are a matter of conjecture at best, and usually no evidence exists at all.

These problems of reconstruction combined with the difficult dating of both sites and houses render it quite difficult to trace architectural influences over time and place. The use of distribution maps of types of buildings is also quite meaningless at present since far more is known of Danish buildings than of Norwegian or Swedish. As a result of their scarcity, the Norwegian and Swedish examples will be considered with the Danish in order to see similarities and differences in the Scandinavian material as a whole.

It is quite difficult to categorize the buildings in this period since the elements were combined in a number of ways. Even such a simple type as the Grubenhäuser varied widely in shape and the placement of posts. They have a long history in Scandinavia, appearing throughout the Viking Age in both urban and rural sites; there is little evidence at present for their use in rural sites from Norway, Gotland and Öland but few sites have been excavated

in those areas. In some places, for example, in the large farm complexes in Denmark, the trend seems to be away from such buildings in the eleventh century. Nonetheless, this is probably to do with wealth and social status since other Danish rural sites continue to have Grubenhäuser. Moreover, they constitute the major type in Skåne, although it is still uncertain if this is merely a distortion of the archaeological record.¹⁶⁰ In urban sites they are also relatively common. In Århus they were the principle type of building found, displaying a wide range of functions from dwellings to workshops for specific activities.¹⁶¹ In some cases, traces of wall remains have been preserved, showing both wattle and daub¹⁶² and stave construction.¹⁶³

A wide range of houses of wooden construction are also known, and in some cases the archaeological evidence can suggest constructional techniques. Of the post built structures, most seem to consist of a single row of post holes forming either straight or slightly bowed sides and without internal supports. Such buildings occur throughout the Viking Age but later examples have been found at Hedeby, Lund, and a number of Danish rural sites.¹⁶⁴ Buildings of similar construction but in a square shape are also known, for example at Fyrkat and probably some of the fishing houses of Norway.¹⁶⁵ Another variation consists of posts set in a trench, for example the gate house at Fyrkat,¹⁶⁶ and in relation to stave buildings which will be discussed later. In some less substantial buildings stakes instead of posts were used, interwoven with wickerwork, for example in Århus, Lund, Borgund, and various rural sites in Sweden.¹⁶⁷

Another form of construction in late Viking Age Scandinavia used double rows of posts, again without internal roof bearing

supports. The classic examples are most of the buildings in the Danish fortresses but others are known from Lindholm Høje, Vorbasse, and Omgård.¹⁶⁸ Of the buildings without roof supports, some had external slanting buttresses to support the walls, for example in the buildings from the Danish fortresses, Hedeby, Trabjerg, and probably Lund.¹⁶⁹ Some buildings with internal supports are also known, especially in Danish rural sites but also from Levide and probably Burge, both in Gotland.¹⁷⁰ Some houses clearly were built on sills, both wooden and stone. Wooden sills are known from Sigtuna, Trondheim, and perhaps Lund, while stone sills appear in Eketorp on Öland and slightly later at Hovden in Norway.¹⁷¹ Although all these wooden structures usually appear as distinct buildings, some may have been linked in ranges, such as at Tuna, Eketorp, and some of the rural houses in Norway, especially eastern Norway.¹⁷²

Where the evidence of the wall structure exists, it shows much variation as well and is rarely specific to one type of building. The most common form of wall infill was branches woven around upright posts or stakes, then usually plastered with clay. Such construction has a long history in Scandinavia both in urban and rural sites, not surprisingly since it provided good insulation with a minimum use of resources. In the eleventh century contexts such houses have been found at Århus (in Grubenhäuser), Lund, Sigtuna (where the stakes were placed in a wooden sill), Trondheim, Borgund, and some rural sites in Sweden;¹⁷³ other eleventh century structures may well have had such walls but conditions of preservation have obliterated any traces of wall infill altogether. The examples from Lund, however, are well preserved, often to some height. One house, perhaps of a metalworker, had a collapsed wall where a plank in the middle of the woven

section may have served as a ridge.¹⁷⁴ Such walls are by their nature very weak, and in some houses where preservation conditions are good, external buttressing supports can often be ascertained.¹⁷⁵

In some cases the area between the posts was filled with upright timbers but these will be discussed later in conjunction with stave construction. In a few buildings there is also evidence of walls of horizontal planks in a laft construction.¹⁷⁶ With the possible exception of a crudely constructed house from Lund and a possible laft building upon the stone sills at Eketorp, all of the known examples are from Norway.¹⁷⁷ Such construction is obviously determined by supplies of wood and the size of the structure; at Hovden in Norway where the buildings were quite long, they seem to have been subdivided into a number of smaller ones and thus perhaps built in a laft construction.¹⁷⁸

Buildings of stone construction are by and large unknown in the archaeological record from Scandinavia in the first half of the eleventh century. While some sites like Eketorp and Hovden had stone foundations, they are usually interpreted as possessing wooden superstructures; certainly no secular building with stone courses is known from this period. Similarly there is little evidence at present for turf buildings at this period in Scandinavia¹⁷⁹ although eleventh century examples are known in Scandinavian colonies.¹⁸⁰ It is unclear whether this reflects a real situation or whether they simply have not appeared in the archaeological record hitherto now because of preservation and the fact that they would most likely be humble dwellings which are less likely to be excavated.

^{eleventh century}
The Danish conquest of England certainly resulted in some Scandinavians settling in England, although the evidence of this new wave cannot be differentiated in place-name studies from the

settlements which occurred earlier.¹⁸¹ If a comparison of architectural techniques used on buildings dating to the first half of the eleventh century revealed unique similarities to the Scandinavian techniques, this could be used as evidence of influence arriving with the new settlers. However, even from the outset, a number of problems exist in such analysis. The dating of the sites is an obvious first problem, where as shown earlier, few are specific to the first half of the eleventh century; similar problems in dating apply to the English sites. But even more fundamental is the presupposition that Scandinavian or at least men with knowledge of Scandinavian techniques built the houses in England, instead of native craftsmen building for new employers. In addition, a further complication arises in that English architectural traditions show a diversity like that in Scandinavia, and with many of the same techniques, suggesting mainly parallel developments.

Grubenhäuser are known throughout the Saxon and Viking periods, although they are less common in the later times; as in Scandinavia, they display a range of constructional techniques and functions.¹⁸² Similarly, simple post hole buildings are known throughout this period, some of which, like the Scandinavian examples, have buttresses.¹⁸³ The placing of posts in trenches, as in Scandinavia, appears relatively late. Although sill beams are known from some early sites, in general they appear in late Saxon construction, in urban, aristocratic, and less commonly in rural contexts.¹⁸⁴ Byrhtferth's Manual shows that this technique was common practice by the eleventh century, and in addition it gives some idea of roof construction and the use of buttresses.¹⁸⁵

We first of all survey the site of the house, and also hew the timber into shape, and neatly fit together the sills, and lay down the beams, and fasten the rafters to the roof, and support it with buttresses, and afterwards delightfully adorn the house.

As in Scandinavia, identification of wall construction depends upon favorable preservation. Wattle and daub was also used from an early date,¹⁸⁶ and in fact is described in Alfred's preface to St. Augustine's Soliloquies.¹⁸⁷ The use of stave construction in secular buildings is also known. Lincoln in particular shows a development from uprights set directly in the ground in the late ninth century but at the beginning of the eleventh century set on sills.¹⁸⁸ While raft construction was known, it was not common, probably because the long straight timbers needed for such buildings were rare in England.¹⁸⁹ Stone construction for secular buildings is, however, known in England at this time, although again not common, and in general seems associated with aristocratic buildings.¹⁹⁰

One structure in England has been attributed to eleventh century Scandinavian as opposed to English craftsmanship and must be looked at. Excavations at Waltham Abbey in Essex revealed traces of a post built hall constructed over what seems to have been an earlier drainage ditch. The pottery in the fill of the ditch dated from the ninth to the eleventh centuries, thus providing a terminus post quem for the hall.¹⁹¹ The evidence for the hall consisted of one long shallow foundation trench running approximately east-west and a small portion of a parallel wall. The gable ends were only visible on one end where massive corner holds, presumably for posts, were found. Along the north side of the building four clay foundations were identified, interpreted as aisle posts; on the south side such foundations were not found, but instead a linear foundation interpreted as rests for a timber sill beam on which posts and a bench could have rested. No evidence of the wall superstructure remained. Outside of the presumed south wall a number of pits were found, some of which may have been associated with the hall but

which were in no coherent alignment. Immediately to the north of the north wall a small gully was discerned and immediately to the north of this a pond, both of which coexisted with the hall.¹⁹²

The interior of the hall was much disturbed by later activity but appears to have been divided into at least two rooms. Only in places was it possible to determine the floor level. The excavator identified a small area, not completely preserved, in the center of the building as a fire area; it was not outlined in any coherent manner. Strangely it was situated right between the walls separating the two rooms. Although this would, as Huggins maintained, have provided light for both rooms, it also would have made passage between them quite difficult. Other patches of charcoal and clay were also found suggesting the use perhaps of portable braziers.¹⁹³ A number of pottery sherds, including some of eleventh and twelfth century date were found in the clay floor. Other finds associated with the hall are of little help in dating the structure any closer.¹⁹⁴ It must postdate the ditch, and thus presumably was built in the eleventh century.

Huggins argued this building is best interpreted as a Scandinavian rather than an English structure. He felt its main differences from English architecture lay in its narrow shape with free standing aisle posts but without timber wall posts, its wall construction, and the door construction.¹⁹⁵ The archaeological evidence cannot support this claim, however. In the first place, so little is known of the south wall that the dimensions of the hall, especially the width, cannot be determined. It is also distinctly odd to find foundation posts on one side and a sill on the other; the pits to the south of the presumed south wall were also quite strange. Moreover, aisled buildings are known from the late Saxon period, some also from Essex.¹⁹⁶ The emphasis

on strong gable walls and wide doorways can also be paralleled in contemporary English architecture, for example at North Elmham.¹⁹⁷

Although Huggins admitted there was no firm evidence of wall construction, he seemed to assume that because he had interpreted it as a Viking hall, and since other Viking halls have stone and turf walls, then the Waltham house could therefore have had such walls.¹⁹⁸ Later in his discussion he compared the English example to migration period Scandinavian examples and buildings in the northern settlements.¹⁹⁹ However, as the brief survey of architectural techniques showed, there is little evidence of contemporary turf walled buildings in Scandinavia. Moreover, his foundation trenches could also have supported a wooden sill which might not have survived.

Altogether the fragmentary nature of the evidence prohibits a full understanding of the structure but in general it would seem more profitable to look for building similarities in contemporary English architecture rather than migration age Scandinavia or the Northern Isles. Even if, as the documentary evidence suggests,²⁰⁰ the structure was associated with Tovi the Proud, a local Scandinavian landlord and important noble, there is little reason to assume he would have constructed a turf walled building when he obviously had resources to build a far better structure; moreover, the craftsmen would in great probability have been English.

The problem of the bow-sided building in England has also given rise to various theories concerning Scandinavian influence. The total number of such buildings is not very large and with the exception of possible bow-sided structures at Cheddar and Hamwih which date to the ninth and early tenth centuries respectively, all examples are relatively late.²⁰¹ It is noteworthy that at North Elmham where a continuous sequence from the eighth through

the eleventh century can be observed, three bow-shaped houses were found, all dating to the final period late in the eleventh century.²⁰²

Other examples are known from Thetford, Buckdon, St. Neots, and

Durham, all from the late Saxon period, and rarely allowing more

finite dating.²⁰³ Although it is clear that the bow-shaped building

was known outside Scandinavia, for example at Dorestad, and cannot

therefore be considered an exclusively Scandinavian technique,²⁰⁴

many authors would see these English examples as a result of

Scandinavian influence.²⁰⁵ On the other hand, our knowledge of

mid-Saxon settlements is decidedly incomplete and the isolated

early examples suggest perhaps a parallel development to Scandinavia

rather than direct influence.²⁰⁶ Even if Scandinavian influence

accounts for this type of construction, the dating of the buildings

makes it doubtful whether they can be attributed to the influences

of the Danish kings in the first half of the eleventh century.

In general it appears that northern Europe as a whole had a

number of similar building traditions and it is extremely difficult

to separate influences.²⁰⁷ The middle and eastern European building

traditions, however, were characterized by laft construction²⁰⁸

but at present it is not possible to determine if there is a con-

nection between the laft built Norwegian buildings and the Slavic

ones, and if so, to what period it dates. Some authors would see

the laft construction in Norway as deriving from influences brought

back from Russia²⁰⁹ but if so, it is surprising that it appears

only in Norway, especially since objects found in Norway display

far fewer connections with the east. The medieval Norwegian farm-

house was characterized by sophisticated laft construction which

has also been attributed to Slavic influence, though again it is

difficult to know when this took place.²¹⁰

This brief survey shows a number of similar constructional

techniques for secular buildings throughout northern Europe rendering the study of influences very difficult indeed. It is quite possible each area is the result of indigenous development; far more excavation on well preserved sites needs to be undertaken before one can prove anything one way or the other. Ecclesiastical structures on the other hand have more potential for determining influences. Since Christianity was a relatively late introduction to Scandinavia, it is quite possible the concept of church architecture was brought in as well. Unfortunately, almost nothing is known of the pagan temples, preventing any study of continuity in that respect.²¹¹

With the exception of traces of a stone church dating to the first half of the eleventh century from Roskilde,²¹² all known Scandinavian churches in this period were of wood; stone churches only begin to appear in any numbers in the late eleventh century.²¹³ The use of wood for churches, however, is in keeping with northern European traditions. Although in England only Greensted survives, a number of wooden churches existing in the eleventh century are known from documentary references and excavations.²¹⁴ Similarly, wooden churches were common in Germany, even in such important centers as Hamburg and Bremen. After the Slavs had destroyed the church at Hamburg in the very early eleventh century, a new church as well as the new fortress and houses were built, all constructed of wood, and it was not until the 1030's that Hamburg had a stone church.²¹⁵ Bremen was even longer in getting a stone church. Only after the wooden cathedral burnt down in 1042 was it replaced by a stone church, completed in 1051. The use of stone cannot have been that prevalent, however, since Archbishop Adalbert pulled down a city wall begun by his predecessor, as well as a stone tower and even the stone monastery in order to use the stones for the new

church at Bremen.²¹⁶

All of the earliest Scandinavian wooden churches known from excavations seem to have been built in stave construction. In Denmark the earliest examples known are from Lund. The church of St. Maria Minor was excavated early in this century. Its primitive construction with the wall staves set directly into the ground led the excavators to give it a date early in the eleventh century. A plank lined well was also found towards the west wall of the church and was interpreted as contemporary with the church. Recent excavations on the Thule site have revealed a similar type of stave church, but in this case built over an earlier settlement which included wells similar to that found in St. Maria Minor.²¹⁷ The earlier cemetery was under the flood layer, and dendrochronology of its timbers gave a date of c. 1000. The later cemetery, associated with the stave church, was over this flood layer, thus placing it in the second phase of occupation, from 1050 to 1100. The youngest boards from the coffins of the second cemetery gave a felling date of 1051. Although all the staves from the church could not be dated, the oldest corresponded to the dates of the oldest coffins in the later cemetery. As a result, the earliest date for the stave church at the Thule site is 1051, and it probably relates to the reorganization of Danish sees around 1060.²¹⁸

As a result of these findings concerning the Thule church, St. Maria Minor has also been reinterpreted. It is clear that primitive techniques were used in the second half of the eleventh century, and that an early dating cannot be based on crude construction. Moreover, the presence of a well suggests St. Maria Minor may also have been built on an earlier settlement.²¹⁹ Unfortunately such good preservation and dating of stave churches do not occur elsewhere in Scandinavia; the Lund churches, however, provide a cautionary note when dating by technique alone.

In Sweden at present there is no evidence of early stave churches although runestones in Sigtuna suggest at least one early church was probably there, perhaps associated with the Frisian traders.²²⁰ Documentary sources record the presence of early churches in Birka and Skara²²¹ but no traces have been found. In Norway where the tradition of wooden churches continued through the Middle Ages, excavations have revealed traces of eleventh century churches, sometimes under present day stave churches. Although the saga evidence suggests early church building in Trondheim, excavations have so far not been able to date any structures securely into the first half of the eleventh century.²²² In Oslo an early church was found under the ruins of St. Mary's but since the floor level of this church was the same as later rebuildings, the only traces are post holes below ground; as a result, the structure cannot even be proven to have been stave built although this is most likely. No dating evidence was available either but nonetheless the excavator dated it back to the earliest history of Oslo.²²³

The surviving stave churches in Norway date to the medieval period, but excavations in a few have revealed traces of earlier rebuildings. These early Norwegian stave churches are of simple plan, with a rectangular or box-shaped nave with no internal posts, and a smaller box shaped choir. Traces of early churches at Urnes, Kaupanger, Mære, Kinsarvik and perhaps Lom are all of primitive construction with posts set directly into the earth, and the areas between filled by vertical planks on sleepers, tenoned into the uprights.²²⁴ In such construction, however, the posts rotted quite quickly. As a result, a major innovation was the sill frame under the entire structure which seems to appear from the late eleventh century.²²⁵ In Norway, the earliest known example of a stave church on a sill is the oldest Urnes stave church, probably

dating c. 1100.²²⁶

The origin of the stave technique for the Scandinavian stave churches has been much debated, centering usually between arguments of English or German origin. In England, many of the wooden churches were probably of stave construction. The church of Bury St. Edmunds, which seems to date to the reign of Æthelstan, was described as being constructed of wooden planks. Archaeological investigations have also suggested Thetford and Potterne were both of stave construction.²²⁷ The best evidence, however, comes from Greensted in Essex where a stave built structure with logs fitted into a wooden ground sill survives today. Excavations have revealed traces of a narrower earlier structure but it is still unclear whether the earliest church also had a sill, or like the early Scandinavian examples, had posts and staves set directly into the ground. On the north wall there was evidence of posts set into the ground while the south wall had a sill, perhaps from a later widening. Unfortunately no dating evidence was found for this early church either.²²⁸

This technique of construction with logs embedded in the earth fastened with tenons, sometimes termed palisade construction,²²⁹ is found in southern Scandinavia, including the three early churches at Lund and several slightly later churches in Denmark.²³⁰ The use of the tongue and grooves joining the vertical timbers is also found in some of the Norwegian churches. It may not, however, indicate English influence since it is also known in earlier European contexts.²³¹ In general, the Norwegian churches with their use of planks on sleepers between upright posts set in the ground are closer to secular and religious buildings known from an earlier date in Europe, especially Germany.²³² The typical ground plan of the early Scandinavian churches with a smaller box

shaped choir attached to a rectangular or box shaped nave is found in both England and Germany.²³³

As a result, at first glance it would appear that the Danish churches were influenced by the English and the Norwegian by the Germans. Such an explanation is not entirely satisfactory, however. In the first place, it is surprising since as excavations in England have shown the use of wooden ground sills at this date,²³⁴ this far more advanced technique was not brought over. Moreover, the German analogies are based upon buildings much older than the eleventh century, while eleventh century churches often have very different ground plans.²³⁵ Certainly, in the present state of knowledge, it is impossible to determine whether these early Scandinavian churches were more influenced by England or Germany.²³⁶

A third possibility, that of indigenous tradition, has much to be said for it. A few simple stave buildings are known at Hedeby while later examples occur in Århus, Trøjsgård, Lindholm Høje, Fyrkat and possibly Lund.²³⁷ All these examples had the wall staves directly in the ground or in a wall trench. In the smaller buildings such as those from Hedeby, the use of upright planks was a relatively easy way to fill the space if the resources of wood allowed. On the other hand, their use in large buildings such as Fyrkat and many of the churches probably indicates a wealthier milieu. This suggests the technique of stave construction in important buildings was already known in at least Denmark by the beginning of the eleventh century.

The use of the ground sill under the entire building represents a technical advance, leading to the sophisticated stave construction of the later Norwegian stave churches. The evidence of their introduction in Scandinavia appears to be quite late, although their identification is dependent upon good preservation. In Scand-

inavia the first known examples of stave churches with such construction are from Gotland dating to the late eleventh century.

Hauglid felt this technique was brought northwards from Germany by missionaries, craftsmen and traders, arriving in Norway just before 1100.²³⁸

However, as mentioned above, the use of sills is known from England as well; moreover, it is possible it is a Scandinavian development from the native technique.

As a result, the evidence does not permit any firm conclusions as to whether the early Scandinavian stave churches represent an indigenous development or a foreign influenced technique, and if so, from where and at what time. It can be noted, however, that in all the countries where wooden churches are evident, the techniques appear to a great degree related to secular traditions. Moreover, these construction techniques appear widespread over much of northern Europe. Their use seems dictated by a number of factors such as topographical considerations, climatic factors, the supply of resources, the function of the building, and the size of the structure. It is clear that although the total number of buildings known from archaeological excavations is relatively small, they show a variety of types and techniques coexisting. In such a diverse background and with such common techniques throughout Europe, the architectural factors can tell us little of the spread of influences both within Scandinavia and with other countries, especially in such a short time period.

Chapter 6: Footnotes

1. Bergman and Billberg 1976 pp. 206-7.
2. Stenholm 1976a pp. 303-4.
3. Randsborg 1980 p. 79.
4. ibid. pp. 85-6; Jankuhn 1972 pp. 81-4.
5. Jankuhn 1972 pp. 242-52.
6. Eckstein 1978 p. 270.
7. Jankuhn 1972 pp. 198-209, 250-2; Randsborg 1980 p. 90.
8. Skovmand 1942 pp. 57, 219, 253.
9. Eckstein 1978 p. 270.
10. Adam of Bremen i 57 (59), iv 1.
11. Heimskringla (Haralds Saga Sigurtharsonar ch. 34) vol. 3 p. 114.
12. Adam of Bremen iii 13 (12).
13. ibid. Schol 81 (82).
14. Brøndsted 1965 p. 154.
15. Adam of Bremen iv 1.
16. Randsborg 1980 p. 90.
17. Lobbedey 1977 pp. 141-2.
18. Adam of Bremen iv 1, 4-5, ii 28 (26).
19. Hauberg 1900 p. 69.
20. Adam of Bremen i 29 (31).
21. ibid. iv 1.
22. ibid.
23. Randsborg 1980 pp. 90-1.
24. Adam of Bremen ii 46 (44), iv 2. See also Tschan 1959 p. 46 fn. 148 and p. 135 fn. 86 for the dating of the events in Adam.
25. Randsborg 1980 pp. 36, 42.
26. Andersen, Crabb, and Madsen 1971 pp. 268-70.
27. ibid. p. 270.

28. ibid. pp. 79-80, 85.
29. ibid. p. 271.
30. Adam of Bremen iv 2.
31. Nyberg 1977 p. 69-70.
32. Randsborg 1980 p. 93.
33. Adam of Bremen iv 2.
34. ibid. iv 5.
35. Hauberg 1900 p. 69.
36. Randsborg 1980 p. 93.
37. Adam of Bremen iv 33 (32).
38. Hauberg 1900 p. 69.
39. Randsborg 1980 p. 93.
40. Adam of Bremen iv 3-4.
41. Hauberg 1900 p. 69.
42. Nyberg 1977 p. 77.
43. Randsborg 1980 pp. 79, 93.
44. Hauberg 1900 p. 69.
45. Adam of Bremen ii 55 (53), iv 5, Schol. 109 (108).
46. Randsborg 1980 p. 168.
47. Adam of Bremen ii 28 (26).
48. Encomium Emmae ii 3.
49. Campbell 1949 p. lvii.
50. Olsen, O. and Crumlin-Petersen 1978 p. 68; Randsborg 1980 p. 93.
51. Olsen, O. and Crumlin-Petersen 1978 pp. 66-8.
52. Liebgott 1980 pp. 5-7.
53. Malmer 1972 pp. 17-8; Bartholin 1978a p. 276.
54. Andren 1976 pp. 23-4; Nilsson 1976 p. 48.
55. Blomqvist and Mårtensson 1963 p. 138ff.
56. ibid. p. 167ff.
57. ibid. p. 180ff., 197.

58. Stenholm 1976a p. 297.
59. Blomqvist and Mårtensson 1963 p. 195.
60. ibid. p. 196.
61. See Hårdh 1976a Tafeln 20-56.
62. Bergman and Billberg 1976 pp. 206-7. For a distribution map of the finds of such brooches, see Capelle 1968 Karte 25 with findspots listed on pp. 115-6.
63. Blomqvist and Mårtensson 1963 pp. 205-7.
64. Holmberg 1976 p. 343.
65. Blomqvist and Mårtensson 1963 p. 213ff.
66. ibid. p. 191.
67. ibid. p. 210.
68. Stenholm 1976a p. 298.
69. ibid. pp. 303-4.
70. Blomqvist 1975 p. 134; Wilde 1953 pp. 79-80, 82. See also distribution maps in Cnotliwy 1973.
71. Blomqvist and Mårtensson 1963 p. 147ff.; Stenholm 1976c p. 253.
72. Stenholm 1976c pp. 255-8.
73. Ohlsson 1975-6 pp. 138-9.
74. Stenholm 1976c pp. 257-8.
75. ibid. p. 258.
76. Stenholm 1976b p. 263.
77. Hauberg 1900 p. 69.
78. Randsborg 1980 p. 41.
79. ibid. p. 95.
80. ibid. pp. 67-9.
81. ibid. pp. 65-6.
82. ibid. p. 66.
83. Brøndsted 1965 p. 234.
84. Rasmussen 1953 pp. 194, 196.
85. ibid. p. 195.

86. Hvass 1979 pp. 105, 111-2.
87. ibid. p. 112.
88. Nielsen 1977-8 pp. 66-8, 79.
89. ibid. p. 72; Randsborg 1980 p. 67.
90. Randsborg 1980 p. 67.
91. See ibid. p. 177 fn. 38 and his Appendix VII p. 184 for references to some of the rural sites of this form in Denmark.
92. Jørgensen and Skov 1978 pp. 14-23, 37.
93. ibid. pp. 14-5, 24.
94. See Strömberg 1961 vol. 1 pp. 20-6 for Valleberge which was deserted by the eleventh century but presents the clearest picture of the range of house types and finds. See also pp. 29-30 for Rinkarby which like Valleberge had Grubenhäuser but fewer finds, and may have continued into the eleventh century. See p. 31 for Sandby and for "Tittut" both of which may also date to the late Viking Age but seem to have been seasonal occupation sites.
95. Hårdh 1975-6 p. 38.
96. Randsborg 1980 pp. 95-6.
97. Ohlsson 1973 pp. 30, 36.
98. ibid. p. 40; Ohlsson 1975-6 pp. 138-9.
99. See Roesdahl 1977b p. 162 for the plans of Aggersborg, Fyrkat, and Trelleborg.
100. ibid. pp. 167-8 (201-2).
101. Roesdahl 1977a pp. 3-5.
102. ibid. pp. 5-6.
103. Roesdahl 1977b pp. 164, 172 (204-5).
104. Nørlund 1968 pp. 28, 33-4.
105. Roesdahl 1977b p. 172 (205).
106. Olsen, O. and Schmidt 1977 pp. 99-100, 103 (219, 221).
107. Roesdahl 1977b pp. 175-6 (207).
108. ibid. p. 158 (197-8).
109. ibid. pp. 164-5 (199-200).
110. Helbaek 1977 p. [39].

111. See Olsen, O. and Schmidt 1977 pp. 89-94 (214-7) for a review of the literature.
112. Dalton 1911 (repr. 1961) pp. 93-4; Rice 1952 p. 21.
113. Andersen, Madsen, and Voss 1976 vol. 1 pp. 77, 79-80.
114. Ramskou 1977 pp. 4-5, 8.
115. Sawyer 1971 pp. 197-8.
116. Arbman 1926 p. 174.
117. Adam of Bremen iv 25.
118. Floderus 1930 pp. 98, 104-8. Floderus argued (pp. 105-6) for a strong English influence in Sigtuna from an early date, but the evidence he gave did not support this with the exception of the Anglo-Saxon moneyers. Instead, much of the influence appears to be post-Conquest.
119. Adam of Bremen ii 58 (56).
120. Wideen 1955 pp. 266-7.
121. Lundström, P. 1975 pp. 82, 93. See also Andersson, G. 1976 concerning excavations in Visby.
122. See Dahlbäck 1977 pp. 378-85.
123. Ambrosiani 1974 pp. 41-2.
124. Sporrang 1974 pp. 62-3; Myhre 1974 p. 69.
125. For a discussion of houses which may date to the eleventh century, see Wideen 1955 pp. 265-6; Strömberg 1961 vol. 1 pp. 32-3; and Stenberger 1964 pp. 806-7. For a discussion of recent excavations and work see the Swedish Archaeological Bibliography 1971-5 pp. 71-80.
126. Thunmark and Trotzig 1971 pp. 99-101.
127. Borg 1976 pp. 161, 168, 170-2.
128. Strömberg 1961 vol. 1 p. 33.
129. Stenberger 1964 p. 805.
130. See Myhre 1974 p. 63ff., especially pp. 73, 78.
131. ibid. p. 68.
132. Hagen 1955 (1956) p. 57.
133. Magnus 1974 pp. 75-6.
134. Grieg 1942 p. 176.
135. ibid. p. 171.

136. Martens 1972 p. 94. In this article she dated the site to c. 1000 to 1200 (p. 100) but in her article 1970-1 p. 52. she felt that it dated to c. 1100 to 1300, although with leeway on both ends. The finds were of little help, and the dating is partially based on two c-14 dates of 890 $\pm$ 80 and 1170 $\pm$ 80.
137. Christie 1966 p. 45.
138. Heimskringla (Óláfs Saga Tryggvasonar ch. 70) vol. 1, p. 318.
139. See Long 1975 p. 5. See also Hall 1973 pp. 81-2 who argued that the topography of Trondheim as well as Sigtuna and Bergen where the trading streets are grouped at the upper end, suggest royal interest in the trading sector but probably not founding by the king.
140. See Long 1975 p. 4.
141. Heimskringla (Óláfs Saga Helga ch. 53) vol. 2, p. 70.
142. Long 1975 pp. 5, 7. See Heimskringla (Haralds Saga Sigurtharsonar ch. 38) vol. 3, p. 121; (Óláfs Saga Kyrra ch. 2) vol. 3, pp. 204-5.
143. Long 1975 pp. 12-3, 21-3.
144. ibid. p. 13.
145. ibid. p. 14.
146. Heimskringla (Haralds Saga Sigurtharsonar ch. 58) vol. 3, p. 139.
147. Christie 1966 p. 48.
148. ibid. pp. 57-8.
149. Lidén 1977 p. 96.
150. Christie 1966 p. 48.
151. Høeg et al. 1977 pp. 56-8.
152. Heimskringla (Óláfs Saga Kyrra ch. 2) vol. 3, p. 204.
153. Herteig 1959 pp. 177, 179.
154. Lidén 1977 p. 91.
155. Herteig 1975 p. 23.
156. ibid. p. 26.
157. ibid. p. 30.
158. See below Chapter 9.
159. See e.g. Schmidt 1973 pp. 52-9.
160. Ohlsson 1973 p. 30.

161. Andersen, Crabb, and Madsen 1971 pp. 49-51.
162. E.g. at Århus (see ibid. p. 49) and in some Skåne rural sites (see Strömberg 1961 vol. 1 p. 22).
163. E.g. at Århus. See Andersen, Crabb, and Madsen 1971 p. 49.
164. For Hedeby see Eckstein 1978 p. 269; for Lund see Blomqvist and Martensson 1963 p. 113ff.; for the Danish rural sites see Jørgensen and Skov 1978 pp. 16-7, 23, and Ramskou 1953 p. 196.
165. Olsen, O. and Schmidt 1977 p. 45 (208); Magnus 1974 pp. 75-6.
166. Olsen, O. and Schmidt 1977 p. 46 (208).
167. For Århus see Andersen, Crabb, and Madsen 1971 p. 60; for Lund see Nilsson 1976 pp. 46-7; for Borgund see Herteig 1975 p. 30; for the Swedish rural sites see Strömberg 1961 vol. 1 pp. 32-3.
168. For the Danish fortresses see Olsen, O. and Schmidt 1977 p. 45 (208); for Lindholm Høje see Ramskou 1953 p. 196; for Vorbasse see Hvass 1979 pp. 111-2; for Omgård see Nielssen 1977-8 p. 71; for Trabjerg see Jørgensen and Skov 1978 pp. 18-9. Olsen, O. and Schmidt 1977 p. 144 (237) also mentioned parallels at Lejre and Viborg.
169. For the Danish fortresses see Olsen, O. and Schmidt 1977 p. 45 (208); for Hedeby see Eckstein 1978 p. 273; for Trabjerg see Jørgensen and Skov 1978 p. 18; for Lund see Nilsson 1976 p. 45.
170. Such buildings occur at Sædding, Vorbasse, Omgård, Trabjerg, and Lindholm Høje (see Jørgensen and Skov 1978 p. 23 and Ramskou 1953 pp. 195-6). For Levide, Gotland see Stenberger 1964 pp. 806-7; Levide also probably had external buttressing posts. For Burge see Thunmark and Trotzig 1971 pp. 99-100.
171. For Sigtuna see Floderus 1930 p. 102; for Trondheim see Long 1975 pp. 12-3; for Lund see Nilsson 1976 p. 58; for Eketorp see Borg 1976 pp. 168-9; for Hovden see Martens 1972 p. 92.
172. For Tuna see Stenberger 1964 p. 805; for Eketorp see Borg 1976 p. 170; for the Norwegian rural sites see Hagen 1955 (1956) p. 57 and Martens 1972 p. 92.
173. For Århus see Andersen, Crabb, and Madsen 1971 p. 49; for Lund see Nilsson 1976 pp. 41-59; for Sigtuna see Floderus 1930 p. 102; for Trondheim see Long 1975 p. 12; for Borgund see Herteig 1975 p. 30; for the Swedish rural sites see Strömberg 1961 vol. 1 pp. 32-3.
174. House V on the PKbanken site. See Nilsson 1976 p. 55 and the photograph p. 56.

175. E.g. at Lund, House I on the PKbanken site. See Nilsson 1976 p. 46.
176. See Long 1975 p. 11 fn. 35 concerning the use of the term "laft".
177. For Lund see Blomqvist and Mårtensson 1963 pp. 116-8; for Eketorp see Stenberger 1973 p. 14 but see also Borg 1976 p. 170 who did not believe Öland had sufficient resources of wood for laft construction and instead would see these houses as either palisade timbering or a box frame construction. Laft buildings in Norway are found in early levels of Trondheim (see Long 1975 pp. 11-2), and Oslo (see Høeg et al. 1977 pp. 56, 58), and perhaps Hovden (see Martens 1972 p. 92).
178. Martens 1972 p. 92.
179. A turf building constructed on stone foundations was associated with the house at Hovden but few finds were recovered and its function is unknown. See ibid. p. 94.
180. Brøndsted 1965 pp. 235-7.
181. Cameron 1961 p. 75.
182. Rahtz 1976 pp. 73, 79.
183. ibid. p. 81.
184. ibid. pp. 84-5.
185. Byrtferth's Manual pp. 142-3.
186. Addyman 1964 p. 43.
187. Whitelock 1979 p. 917.
188. Colyer and Jones 1979 p. 58.
189. Rice 1952 pp. 52-3. Examples of laft construction are known from the Tamworth mill (see Rahtz 1976 p. 89) and some crudely constructed buildings in York (see Addyman 1978 p. 3).
190. Rahtz 1976 p. 86.
191. Huggins 1976 p. 83.
192. ibid. p. 85ff. See also his plan on p. 84.
193. ibid. pp. 88-9.
194. ibid. pp. 89, 115, 118-9, 129-30.
195. ibid. pp. 91-2.
196. Rahtz 1976 pp. 85-6. A possible aisled structure from the tenth or eleventh century was found at Maldon in Essex (see Webster and Cherry 1973 pp. 140-1).

197. Wade-Martins 1969 p. 392.
198. Huggins 1976 p. 85.
199. ibid. p. 91.
200. Bascombe 1976 pp. 75-8.
201. Rahtz 1976 p. 88; Holdsworth 1976 p. 37-8.
202. Wade-Martins 1970 pp. 55-6.
203. Hope-Taylor 1977 p. 373; Holdsworth 1976 p. 39; Wilson and Hurst 1962-3 p. 368; for Durham see Carver 1979 pp. 10-1, 68 who noted they may be bow-ended rather than bow-sided.
204. Schmidt 1973 p. 60.
205. Hope-Taylor 1977 p. 273; Rahtz 1976 p. 88; Wade-Martins 1970 p. 56.
206. Addyman 1972 p. 300.
207. Lobbedey 1977 p. 145; Addyman 1964 p. 43; Hauglid 1978 p. 39.
208. Hohler 1975 p. 151.
209. Bugge and Norberg-Schulz 1969 p. 7.
210. ibid. p. 11. Grieg 1942 pp. 176-8 noted that corner jointing was known in migration period Norway as evidenced by the grave chamber from Sætrang. He argued that the Norwegian houses with evidence of sills were laft built since he felt stave construction would not have been warm enough. The technology he saw as coming from the area south of the Baltic via Sweden, presumably at an early date.
211. Olsen, O. 1966 pp. 224, 275. Dyggve 1954 pp. 226-7 felt the earliest remains at Jelling were a pre Christian temple but Olsen 1966 p. 232 showed they could just as plausibly, and more probably, be interpreted as the earliest church remains on the site.
212. Randsborg 1980 p. 72.
213. Hauglid 1972 p. 19.
214. Cherry 1976 pp. 181, 189; Rigold 1962-3 p. 103; Rice 1952 p. 52; Christie, Olsen, O., and Taylor 1979 p. 107.
215. Adam of Bremen ii 70 (68).
216. ibid. ii 81 (77), iii 3-4.
217. Mårtensson 1962-3 p. 220.
218. Bartholin 1978a p. 276.
219. Mårtensson 1962-3 pp. 220-1.

220. Floderus 1930 p. 104.
221. Adam of Bremen i 26 (28), ii 58 (56).
222. Long 1975 pp. 8, 14.
223. Christie 1966 p. 57-8.
224. Hauglid 1978 pp. 38-9.
225. ibid. pp. 45-6.
226. ibid. pp. 50, 60. Others have dated this church as early as 1060 but Hauglid convincingly argued for the later date.
227. Christie, Olsen, O., and Taylor 1979 p. 107; Wilson and Moorhouse 1971 p. 130.
228. Christie, Olsen, O., and Taylor 1979 pp. 92-3.
229. E.g. by Hauglid 1978 pp. 39, 43.
230. ibid. p. 43; Christie, Olsen, O., and Taylor 1979 pp. 104-5.
231. Christie, Olsen, O., and Taylor 1979 pp. 104, 106.
232. Hauglid 1978 p. 39.
233. ibid. p. 38, but see also Christie, Olsen, O., and Taylor 1979 p. 105-6.
234. E.g. as shown at Lincoln (see Colyer and Jones 1979 p. 58), York (see Addyman 1978 p. 4), and elsewhere (see Rahtz 1976 p. 85).
235. Christie, Olsen, O., and Taylor 1979 pp. 105-6,
236. ibid. p. 106.
237. For Hedeby see Jankuhn 1972 pp. 120-1; for Århus see Andersen, Crabb, and Madsen 1971 p. 49; for Trarbjerg see Jørgensen and Skov 1978 pp. 20-1; for Lindholm Høje see Ramskou 1953 p. 196; for Fyrkat see Olsen, O. and Schmidt 1977 pp. 119-20; for Lund see Blomqvist and Mårtensson 1963 pp. 118-21.
238. Hauglid 1978 pp. 45-7.

Chapter 7: Objects in hoards

A large number of hoards dating to the late tenth and eleventh centuries have been found throughout Scandinavia. These are characterized by quantities of coins, ingots, bits of silver, and complete or fragmentary silver objects of various kinds; occasionally objects of gold were also included. The range of objects is quite diverse, and displays different techniques and ornamentation, most of which are not in the conventional stylistic groupings. The majority of objects occur in hoards with coins, thereby providing a means to date the objects, if only on a terminus ante quem basis. As a result, hoards dating to the second half of the eleventh century are also relevant to this study since the objects may well belong to the first half of the century. The picture of the objects and contacts present in this period as revealed by the hoards is by no means comprehensive, however, because of the nature of the hoards, a point which will be returned to later. Nevertheless, the sheer number of objects in hoards combined with the dating potential allow a useful analysis of some of the influences and places of production in the eleventh century.

Recent works dealing with the Scandinavian hoards have attempted to define their nature more clearly. Most have been written in German, and as a result, much of the discussion of definitions depends upon the German terms.¹ Several authors have expressed dissatisfaction with the use of the term Schatzfund since it suggests resources deposited with the intention of collection, but other deposits, such as offering finds are not included in this term. As a result, the term Depotfund has been put forward since it includes all deposits, regardless of the intention of the owner.² In recent works the distinction is beginning to be questioned in

English where "hoard" has many of the connotations of Schatzfund and does not apply to offering finds either.

Offering finds constitute coins and objects placed in one spot over a long period as religious offerings. They therefore do not permit close dating but do allow analysis of contacts, whether direct or indirect, at some period before the latest coin. In addition, some coins from offering places are unknown elsewhere and hence of value for numismatic studies.³ Nevertheless, since this study deals with objects and coins in relation to the connections they display over a finite time period, the evidence from offering places, all of which date past the eleventh century, cannot be used. As a result, only closed deposits, i.e. artefacts placed at one period in the ground, will be dealt with, thus justifying the retention of the word "hoard". The minimum number of coins within a hoard is also an important dating factor; the more coins present, the greater the certainty of date. However, the minimum number of coins necessary to be considered a hoard is a subjective question. For the purposes of this study, ten coins or parts thereof have been used as the minimum number, although it is fully recognized that this is an arbitrary figure.⁴

The dating of the hoards is crucial if one is to use them in building up a chronology of objects. Fortunately in the late tenth and early eleventh centuries a large number of German and Anglo-Saxon coins were imported into Scandinavia. The chronology of Anglo-Saxon coins has been determined within relatively fine limits, and is aided by the fact that only kings minted coins in England. In Germany, however, not only the kings minted, but also clergy and nobles in many places throughout the vast German empire. The identification and chronology of this large body of evidence is a daunting task, and only in recent years has there been much work in sorting through the Scandinavian material. The value of this work

is only beginning to be realized. Hatz's comprehensive study of the German coins in Sweden has necessitated the redating of a number of hoards, including some of the key hoards used in stylistic chronology.⁵ Unfortunately, similar studies have not yet been undertaken for Denmark and Norway apart from some regional studies.⁶

Clearly the latest minted coin can only provide a terminus post quem dating for the hoard. Many theories have been advanced on how long an interval existed between the latest coin and the deposition of the hoard. It must first be emphasized, however, that a large number of hoards, especially those found before this century, were poorly recorded and preserved. In these cases the surviving coin evidence is only a fraction of those that were found, and these hoards cannot be dated with any certainty. As a result, Hatz dated the hoards he analysed on a terminus post quem basis without any attempt to suggest a more finite date of deposition; this method clearly is to be preferred when looking at the hoard evidence as a whole.

Nevertheless, enough hoards are preserved which contain most of the coins found, and allow some general observations concerning the interval of time between the latest coin and deposition. Most scholars have felt the interval was small, but exactly how small has been much debated.⁷ A recent study of hoards from southern Sweden (the former Danish provinces in Sweden) revealed a number of interesting points. The view that hoards containing coins all minted in a short period of time are able to be dated very soon after the latest coin, cannot be confirmed, since the margin in the coin dates within a hoard seems dependent upon the total number collected and deposited.⁸ Nevertheless, in hoards with coins from a number of countries, which is the characteristic type of hoard from the late tenth and first half of the eleventh

centuries, the latest coin from each country agrees quite well in date, usually within ten years. This does suggest the hoards were deposited relatively soon after the latest coin, probably in most cases within ten years, and moreover indicates that coins reached Scandinavia fairly quickly.⁹

The nature of the hoard itself has implications in its interpretation. Much discussion has occurred concerning the reasons for collecting and depositing a hoard,¹⁰ an important point not only for analysing the chronology and nature of the hoards but also their value as a historical source. Early works emphasized the religious nature of the deposit where a treasure was buried to benefit the deceased.¹¹ This theory is no longer thought adequate. In the first place, hoards are rarely found with graves; moreover, they continue well into the Christian period. Only when hoards are found in graves or groups of coins in offering places does there seem any validity to this argument.

Later authors have tended to emphasize the economic and political motives for deposition. Bolin's theory in 1926 revolutionized the study of hoards when he maintained they were deposited as a result of wars or local disturbances.¹² Until recently this has been the prevalent view concerning hoards. Skovmand, for example, in his study of Danish hoards, attempted to attribute them to known political unrest.¹³ The lack of contemporary sources in Scandinavia hinder such exact identifications; moreover, the situation appears to have been so volatile on both an international and local level that it seems impossible to obtain such finite attributions in all cases. Nevertheless, common sense alone suggests unrest was clearly a factor in the deposition of a hoard. As a result, groups of hoards with a similar terminus post quem date

probably do suggest turbulent conditions in a locality, while intervals without hoards may be the result of peaceful times. Other less large scale factors may also account for the deposition in certain cases although they clearly are difficult to ascertain.

The reasons for deposition do not, however, shed light upon the motives for collecting the contents of a hoard. Clearly the reasons for objects and coins arriving to Scandinavia are many: trade, mercenary payments, booty, weregild payments, or even gifts could all account for the wealth of even a fairly ordinary man.¹⁴ The hoard itself may represent the total wealth of this man including inherited valuables and heirlooms, or it might represent the current metal stock the owner had at a given time. Hatz analysed the nature of hoards from Scandinavia and elsewhere in northern Europe, and concluded economic reasons must be considered the prime motive for collecting a hoard, with unrest as the major reason for deposition.¹⁵ Hårdh's study of the southern Swedish hoards supports this view. The fact that the coins reached Scandinavia from different areas very quickly indicates economic channels; in addition, it suggests that the coins can probably be viewed as a cross section of the coin stock in circulation.¹⁶ It is also significant that the objects in hoards are often of different types than those found in graves or settlements.

As a result, it is necessary to view the objects contained in hoards in an economic perspective, where most had value not primarily in themselves but as metal.¹⁷ This presents problems in the interpretation of such objects. Some, it appears, were designed primarily for payment while others seem to have originally been used as jewelry and only later viewed as payment metal.¹⁸ The distinction between the two attitudes is often difficult to

determine, and the time lag between the change in function almost impossible to gauge. Those hoards containing complete objects may well be of a different nature than ones with cut up objects, the first representing the valuables both monetary and jewelry, the second the total monetary resources at a given time. The hacksilver may, however, be a fashionable piece cut up out of necessity or an outmoded style useful then only for its weight; it may even have arrived through economic transactions in a fragmentary state. Only by comparing all the objects of a given type in the hoards throughout Scandinavia and elsewhere is it possible to gain some idea of when objects were valued for aesthetic reasons and when they merely had metal value; clearly the exact parameters cannot be ascertained but an attempt will be made to show general trends.

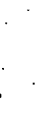
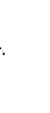
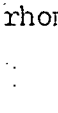
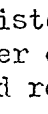
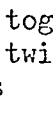
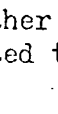
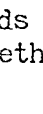
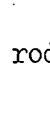
In addition to indicating a partial idea of those objects current in the first half of the eleventh century, the hoards can shed light on cultural influences both within Scandinavia and with other countries. As a result, it is necessary to determine the origin of objects and, if possible, places of production. Here again the nature of the evidence presents problems. It is difficult to compare the Scandinavian hoards with those from countries such as England or Germany where a coined money economy was firmly established, resulting in few foreign coins, much less objects, used in economic transactions. In Britain, some hoards from the first half of the eleventh century contained objects, albeit far fewer than in Scandinavian hoards, but few of these survive and the records are usually extremely vague. Most of these hoards are from Scotland and the Northern Isles, and may reflect the Scandinavian population maintaining its use of payment metal to some extent.¹⁹

The determination of the place of origin necessitates a large body of evidence with objects of discreet geographical and chronological range. Unfortunately, many objects are found over a wide area and are useless for study unless regional variations can be ascertained. Similarly, some objects occur throughout the Viking Age and are of little value unless they show variations in style or technique, or in relation to geographical areas. There is at present no comprehensive analysis of Viking Age objects from hoards in all of Scandinavia, not surprisingly since the localized studies have emphasized the number of regional variations that occurred. Even in the regional studies different classification schemes are used, based on very different criteria, and none of which encompasses all the material.²⁰ Moreover, the body of evidence is poorly published as a whole, especially in regard to illustrations.²¹ Similarly, it is difficult to find well illustrated accounts of hoards from other countries with which to compare the Scandinavian material.²² Without well illustrated accounts, or more importantly, first hand knowledge of all the artefacts, it is impossible to create a more comprehensive classification system, and one must attempt to synthesize the existing approaches. This chapter will therefore summarize those objects found in eleventh century Scandinavian hoards in order to view the range current at that time, as well as their places of origin and production whenever possible.

One of the most common objects found in Viking Age Scandinavia as well as the Slavic regions is the neckring (halsring),²³ defined as a ring with a diameter of at least 10 cm., of at least two wires twisted or braided together, or both, and fastened with a clasp. This definition encompasses all Scandinavian finds with the exception of two gold rings from the ninth century Hon hoard

in Norway which do not open. In addition, it includes neckrings from the British Isles, Poland, northern Germany and the Baltic regions; it does not, however, apply to a group of neckrings from areas east of the Baltic and Russia.²⁴ Various theories have been proposed concerning the origins of the Scandinavian neckrings. Since they appear in the north from the beginning of the tenth century, some scholars have felt they originated in the east, either from Arabic regions or the area of the Volga, arriving with the Arabic coins.²⁵ Recent studies, however, have indicated that although the original source may have been to the east, the Scandinavian examples are by and large of native workmanship.²⁶

Stenberger in his analysis of neckrings from Gotland felt it to be impossible to differentiate places of production within Scandinavia.²⁷ However, a more recent study by Hårdh examined 83 complete neckrings and 101 fragments from Norway, present day Denmark (without Bornholm), Skåne, and Gotland, and found regional differences in all four areas, suggesting different places of manufacture within Scandinavia. She placed all neckrings and fragments with preserved ends into six categories based on the type of closing;²⁸ in a later work she slightly modified this system and correlated it with the type of cross section of the ring itself (see Figure 7.1).²⁹ From this analysis Hårdh concluded that the prevalent type of closing was quite different in Norway from most of Scandinavia, and was closer to that found on neckrings from the British Isles and the Swedish mainland just north of the Danish provinces in Sweden.³⁰ Gotland had relatively few finds of neckrings compared to the total number and range of objects found in hoards,³¹ and most of the finds were of Hårdh's Types 1 and 2. These types were also common in most of Sweden, and in Denmark and Skåne.³² Although Type 6 also occurred in

NECKRINGS								
I ○	A	1	2	3	4	5	6	
	B							
	C							
	D							
II □ ◇	A							
	B							
	C							

Key:

I. Rod of round section

II. Rod of square or rhombic section

A. One rod

B. Two twisted together rods

C. A number of twisted together rods

D. Plaited rods

1. Oval plate

2. Rhombic plate

3. Triangular plate

4. Plate with parallel sides

5. Plate with converging sides towards end.

6. End of the ring in rods with round or square section

(after Hårdh. 1976a)

FIGURE 7.1

these areas, it was especially common in present day Denmark.³³

The methods of clasping the neckrings showed further geographical differences. Three possible types of closing were identified: (1) with two hooks, (2) with a hook fitting into a hole, and (3) with a hook and eye. Norway and the British Isles were again distinct, with an overwhelming preference for the first type. The Swedish mainland and Gotland also used this first type but in addition adopted the third type of closing. Southern Sweden, however, was quite different, preferring the hook set into the hole; in the Slavic areas this is also the prevalent form of closing.³⁴

Hårdh did not deal with the Danish method of clasping neckrings, nor is it possible to determine from the few illustrations and without examination of the body of evidence. It should be noted, however, that of all the regions in Scandinavia, Denmark revealed the most variety in the form of closing, both in complete and fragmentary examples;³⁵ this variety may well hold true for the manner in which they linked together.

An analysis of the weights of complete neckrings also confirmed regional differences. Norwegian rings were by and large much heavier than elsewhere in Scandinavia while Danish rings were much lighter. Gotland and Skåne were between the two extremes.³⁶

Unfortunately there has not been much work done on neckrings elsewhere with which to compare these weights; Hårdh merely noted that the southern Swedish examples roughly correspond to the few weights known of rings from the southern Baltic area.³⁷

Hårdh's analysis clearly shows regional differences and thus probably indicates regional production centers. It is far more difficult, however, to place these variations in a chronological perspective, although all neckrings seem in general to belong to the tenth and eleventh centuries. The Norwegian finds, unfortunately,

are not usually associated with coins. Moreover, they are more often found complete than in fragments, suggesting their primary use was not as payment metal. Nevertheless, a few indications suggest the heavier rings were earlier than the somewhat lighter examples.³⁸

In Gotland the neckring is not as common and when found is usually fragmentary. Stenberger therefore felt they were not part of the native dress but more probably tied in with trade.³⁹ Of the examples known, a chronological trend may perhaps be evident in the types of end plates, where earlier examples are small and relatively short, but as time went on, gradually became larger and broader, sometimes into a rhombic form.⁴⁰ The situation in mainland Sweden is much the same. No gravefinds from this period contain neckrings, suggesting again an economic function. In addition, the examples known have many of the characteristics of the Gotlandic examples.⁴¹

In Denmark the first appearance of neckrings dates after 950 with the greatest number in hoards from 950 to 1000, although examples are also known from the eleventh century.⁴² Unfortunately it is difficult to determine chronological variation in types.⁴³ The Danish provinces of Sweden are more easily separated where hoards deposited before 980 tend to have oval endplates while those after 1000 more often have rhombic endplates.⁴⁴ In general, these southern Swedish examples occupy a middle position between Denmark and Gotland. The end forms are closer to Gotlandic examples but the weights are closer to Danish neckrings. Interestingly, however, the best parallels to the southern Swedish neckrings are found in the area of the southern Baltic.⁴⁵ This contact with the Baltic region is also reflected in other objects from Scandinavian hoards which will be discussed below.

In general, therefore, the neckring appears to be a predominantly west Scandinavian form, with regional differences throughout Scandinavia. The relatively small number of examples from Gotland may be due to the greater popularity there of armrings which, in fact, are the most characteristic objects from Gotlandic hoards. Many armrings are of similar construction to the neckrings with twisted and braided wires, usually permanently closed; the similarities in technique suggest the same workshops turned out both neckrings and armrings. A number of other forms of armrings are known, and present problems in classification. Stenberger divided the material into three categories: Armringe of one or more wires fastened together, Armbänder of a small band of gold or silver, also fastened together, and Armbügel of a strong rod or massive broad silver band which was permanently open; this latter type constitutes the most common object in Gotlandic hoards.⁴⁶

Hårdh disagreed with this system, however, since it did not cover a number of armrings. Instead she defined an armring as any ring, open or closed, with a diameter of 5 to 9 cm.; these in turn were subdivided based upon the shape of the cross section of the metal as well as the type of closing.⁴⁷ Although her system is also not fully comprehensive, it allows greater possibilities in the comparison of armrings from different areas; moreover, Stenberger's system can be incorporated as finer distinctions within different categories (see Figure 7.2).

Hårdh's Type I, generally with closings 101 to 102, is the most common form of armring in southern Scandinavia where its greatest concentration is in Denmark and Bornholm. Southern Sweden is also well represented, and a large number of finds in relation to the number of deposits known also occurs from the rest of Sweden, especially Småland, Öland, and the Mälars region.

ARRMRINGS						
		101	102	103	104	105
I	A					
	B					
	C					
	D					
II	A					
	B					
III						
IV						
V						
VI	EII					
	F()					
	G()					
VII						

Key:

- I. Rod of round section
- II. Rod of square or rhombic section
- III. Rod of triangular section
- IV. Rod of profiled section
- V. Rod with one side rounded or dome-shaped, and one side sometimes inward curving
- VI. Rod of rectangular section, and a width at least $1\frac{1}{2}$ times the thickness
- VII. Rod of many-sided section

- A. One rod
- B. Two twisted together rods
- C. A number of twisted together rods
- D. Plaited rods
- E. As pictured above
- F. As pictured above
- G. As pictured above

101. Ends twisted together
102. Ends in spiral knot
103. Ends in rhombic or elliptical plate
104. Ends in a facetted casing
105. Ends fastened together in a different way than 101 to 104
106. Open ring

Note to Figure 7.2:

Although it is impossible to correlate other classification schemes for armrings into Hårdh's without examination of the actual pieces, a rough idea can be obtained of their relationship. Hårdh's Type I armrings seem to encompass Stenberger's Armringe category (see Stenberger 1958 pp. 96-104). His type Ar 1 seems to correspond to Hårdh's type I. A101 while his Ar 2 is probably Hårdh's Type I. A102. Similarly, his Ar 3 and Ar 4 appear to correspond to Hårdh's Type I. B101 and I. B-C102 respectively. Of the variations Stenberger described, the one from Mannegårda, lye sn. (SHM 11991) with a quadrilateral section and knot (p. 98) would probably be Hårdh's Type II. A101. Another type with the ends closed in a facetted case (pp. 100-1) would probably correlate with Type I. C104. This type appears almost exclusively in Gotlandic hoards and graves, and probably represents a local type dating to the eleventh century. Stenberger's other variations (pp. 101-3) are often unique examples, and in general would probably be classified as I. C106; the ends, however, are very different and suggest the closing form 106 should be further subdivided. Other correlations between Hårdh and Stenberger are mentioned in the text.

In Skovmand 1942 (dealing with Danish hoards), his Type SM 644 probably corresponds to Hårdh's Type I. A101 and perhaps I. A102. Skovmand's other main classification is what he calls snoede Armringe, and probably relates to Types I. B-D101 and I. B-D102. See Skovmand 1942 pp. 143, 172, 231-2, 251-2, Table 19 on pp. 244-5, and Table 20 on pp. 246-7.

In their works on Norwegian objects, Petersen 1928 and Grieg 1929 usually compared their finds with illustrations in Rygh 1885. Rygh 712 corresponds to Hårdh's Type I. A102, while Rygh 707 seems to be Type II. A102. Rygh 714 appears to be I. B-C101. His variation 714b is closest to Hårdh's I. B-C103 while the other variation has a closing not represented in Hårdh, suggesting that a further category should be introduced.

This is in contrast to Gotland where such armrings are relatively few in proportion to the number of finds; in addition, the Gotlandic examples display a regional characteristic of a distinctive broad, simple knotted closing. Norwegian armrings of this type also have distinctive variations. Type I armrings, however, are rare in the British Isles or the southern Baltic.⁴⁸

Like the neckrings, the Type I armrings have a long history in Scandinavia, and similarly ^{appear} later in Gotland. The Gotlandic examples occur in hoards dating from the last quarter of the tenth through the eleventh centuries, but it is impossible to see any chronological differences between the plain type and those of twisted wires.⁴⁹ However, in southern Sweden a trend can be

discerned where twisted armrings were the preferred type until c. 1000 but after this time simple rings became more popular.⁵⁰ A similar situation probably occurred in Sweden where the twisted armrings are found more often in conjunction with eastern coins.⁵¹ In Denmark, the twisted armrings are more common, but few complete examples are known from eleventh century hoards. However, the twisted armring fragments continue to far outnumber the smooth types;⁵² hence the situation of the eleventh century in present day Denmark appears directly opposite to the Danish provinces in Sweden. The most common armrings in Norwegian hoards seem to be Hårdh's Type I. B101 closely followed by I. A102,⁵³ both of which occur in the eleventh century, but at present it is not possible to differentiate further.

Like the neckrings, the armrings of Type I therefore suggest a number of production centers in Scandinavia, each producing local variations.⁵⁴ It is significant that silver rings of this type rarely appear in grave finds, nor are base metal examples found much outside Gotland where they still constitute only a

minority of the Type I examples.⁵⁵ In Norway a clear distinction occurs between the types of armrings found in hoards and those found in graves.⁵⁶ As a result, the Type I armring has often been thought to constitute a kind of payment ring, although it has proved difficult to associate the rings with any weight standard.⁵⁷

Another prevalent type of Scandinavian armring is Hårdh's Type VI, consisting of a smooth rectangular-sectioned band, often decorated with common Viking Age stamped ornament. As a whole the group encompasses a large number of variations but appears in two main forms, either closed or open. The closed version corresponds to Stenberger's Armbänder, usually with fastenings like Hårdh's forms 101 or 102.⁵⁸ The distribution of these armrings is generally in southern Scandinavia, although few are known from Jylland. They appear mainly in the rest of Denmark, the Danish provinces of Sweden, and the rest of the Swedish mainland, especially in the southern and eastern parts. Some also are known from Norway and a number of fragmentary pieces from northern German hoards but relatively few have been found from Gotland.⁵⁹ In general, the hoards containing such armrings date to the late tenth and eleventh centuries, but the nearest parallels are with ninth century Norwegian and Danish examples.⁶⁰ Thus although it cannot be proven, it seems likely that the closed Type VI armrings in these hoards represent a Scandinavian development of a native type, with the tenth and eleventh century examples produced in a number of Scandinavian centers, especially in the south.

The open versions of Type VI encompass a large number of armrings with a wide geographical and chronological range. As with Type I, various distinct regional groups can be discerned, though many seem to date by and large before the eleventh century.⁶¹

The examples from southern Sweden, however, date primarily to

the late tenth and eleventh centuries, occurring in a number of variations.⁶² In Gotland, a distinctive form with a strong band ornamented with deeply punched parallel rows of -shaped stamps (Plate 6 no. 11) dates to the eleventh century. It does not, however, appear much outside Gotland and seems to constitute a local type.⁶³

Another Gotlandic type is best discussed in relation to Type VI. It consists of a massive silver band, flat on the inner side but convex on the outer, ornamented with deeply incised zig-zags, with a distinct middle part composed of parallel lines crossing the width of the band. Its section does not completely correspond to any in Hårdh's classification; perhaps it would best be viewed as Type VI with an additional subdivision "H" for a section "(| " (see Figure 7.2). Stenberger labelled it Armbügel Type Ab 3. This form appears in the mid-tenth century and occurs in finds until the end of the eleventh century, but very few examples are found outside Gotland, even in fragments. Other related variations in gold, silver, and bronze can be traced throughout the Viking period in Scandinavia, and it therefore seems best to see it as a Scandinavian form, of which Ab 3 is a late tenth, eleventh century Gotlandic variation.⁶⁴

The most common type of Gotlandic armring, however, is one with an open or closed ring of many sided section, usually with stamped ornamentation. Hårdh classified it as Type VII while Stenberger discussed a major variation under Armbügel Types Ab 1 and Ab 2. They both appear in such great numbers in Gotland that others found in the rest of Scandinavia must be viewed as Gotlandic imports. Stenberger's Ab 1 seems to date to the tenth century while Ab 2 (Plate 6 no. 10), the most common type in all Gotlandic

hoards, first occurs in the second half of the tenth century, and is probably a development from Ab 1. Examples of Ab 2 armrings are known into the twelfth century but its major period of use seems to be from the mid-tenth to the mid-eleventh centuries. It gradually spread westwards, but is usually found in fragments, suggesting its use as payment metal.⁶⁵ The origin of Type Ab 1 and therefore ultimately Type Ab 2 is difficult to determine. Stenberger believed it lay to the east, although no good parallels exist from there. Hårdh, on the other hand, felt the parallels in the southern Swedish examples suggested it was a Scandinavian form.⁶⁶

Other types of armrings also appear in Scandinavian hoards but with a far more limited distribution, and the above mentioned types are the most important for the eleventh century. In summary, armrings are most prevalent in Gotland where a number of forms occurred throughout the Viking Age. In the eleventh century Gotlandic hoards, Type VII predominates with the last remnants of Ab 1 and more commonly Ab 2. Type VI appears primarily in the open version, with a number of examples, notably Stenberger's Ab 3 and Ab 5, dating to the eleventh century. Type I also occurs in a local form, but they were clearly not as popular as other kinds of armrings.

This is quite different from the situation in southern Scandinavia. In Denmark Type I dominates, especially Type I. B. Although these mainly flourished in the second half of the tenth century, examples and a number of fragments continue into the eleventh century. Next in popularity were a number of closed Type VI armrings with similar dating to Type I examples. The Danish provinces in Sweden were basically similar to the rest of Denmark but with a preference for Type I. A and the open version of Type VI; moreover, some other local forms are also known. Type I is also fairly common in eleventh century finds from the

rest of Sweden, and like Denmark, a number of closed Type VI armrings occur from this time.

Norway, however, is in many ways distinct from the rest of Scandinavia. While the most common rings found in hoards are Type I, especially Type I. B101 followed by Type I. A102, and to a lesser extent Type VI, they display regional details. The early armrings had marked parallels with finds from the British Isles⁶⁷ and it seems quite possible these continued to some extent in the eleventh century.

Many fingerrings are clearly related in techniques to neckrings and armrings, and again suggest local production in workshops throughout Scandinavia. The most common types, like armrings, consist of twisted round wires or an ornamented flat band, but other types have also been found (see Plate 5 nos. 4-9).⁶⁸ They vary considerably in quality, from a simple thin wire twisted together to elaborate examples in gold and silver. Nevertheless, the total number of fingerrings found in hoards is relatively small. Their function in the hoards is also difficult to gauge. It is possible that simple rings in hacksilver hoards simply served a weight value purpose, however small, whereas the more elaborate examples found with complete objects are more likely to have been deposited as objects in themselves. In Norway, however, finger-rings rarely occur in hoards, and when they do, they are almost always simple smooth rings with the ends twisted together.⁶⁹ A number of gold fingerrings dating from the tenth and eleventh centuries are also known in graves and hoards throughout Scandinavia, the British Isles, northern Germany and eastern Europe.⁷⁰

One last type of ring must be briefly mentioned. Spiral rings occur throughout Scandinavia but especially from Gotland. When complete they are usually long enough to be worn as neckrings

although most are found coiled up so that they could have been worn as armrings. Stenberger divided his material into three types, based primarily on the ends, but he also felt his Type Sa 2 was of weaker material than Sa 1.⁷¹ However, he did not measure the thickness of the wire, and further studies by Lundström revealed little difference between these two groups.⁷² Type Sa 1 (also known as permische Ringe) are quite widespread, but have their roots in the east. The greatest number of examples are known from Gotland but fragments have been found in the rest of Scandinavia as well as the British Isles, northern Germany, Finland, and the Slavic regions south of the Baltic. Stenberger viewed them as Russian imports, probably arriving with the Arabic coins;⁷³ the complete examples are all early but fragments occur into the eleventh century.⁷⁴

Type Sa 2 has a hook or small S-shaped closing unlike the Sa 1 examples which have a faceted knob and small spiral. Although similar in date to Sa 1, the Sa 2 rings are less widespread, lacking in Norway and Finland and far less numerous elsewhere. Skovmand thought they were made in Scandinavia, but Stenberger argued these too were imported from Russia.⁷⁵ However, there are no parallels for such rings in Russia, and they are more probably to be viewed as Scandinavian imitations to Sa 1.⁷⁶ Like Sa 1, fragments occur in hoards of the eleventh century.

The third type of spiral ring, Sa 3, was made of two or three strong wires twisted together with the ends often forming a loop (Plate 14 nos. 18, 19). They are much later than the first two types, common in Gotlandic hoards from the second half of the tenth through the first half of the eleventh century. Stenberger felt its origins lay in the southern Baltic lands, and he saw the Sa 3 spiral ring as a Gotlandic variation to this widespread type.⁷⁷ Although the spiral rings as a whole may have been worn

as jewelry, they also seem to have functioned as ring money. In addition, fragments seem to have been used in an attempt to normalize weight units.⁷⁸

Another common object in Scandinavian hoards is the brooch, found in a variety of forms, both complete and fragmentary. In the case of the fragments, it is often difficult to determine whether the object is a brooch or pendant, especially since the techniques are often identical. In addition, ornamented silver sheets (Blech) cut into various shapes may represent brooches, pendants or mounts. As a result, the discussion of these three kinds of objects is often interrelated, and must depend to some degree upon the analysis of techniques.

The simplest type of brooch is that in which a coin or imitation of a coin was converted to jewelry, often with the addition of an imitation filigree border (Plate 6 no. 2 and Plate 13b no. 3). A number of eleventh century examples where the actual coin was used are known from Gotlandic hoards, although such bracteates are not as common elsewhere in Scandinavia.⁷⁹ The eleventh century Gotlandic examples were thought by Stenberger to have used coins arriving with the massive German imports of the eleventh century, but to have been converted to jewelry in a Scandinavian workshop, perhaps in Hedeby.⁸⁰ Imitation coin brooches from Skåne have in the past been considered to be based upon Byzantine coins⁸¹ but recent work has suggested they too were inspired by German coins, more specifically, Frisian imitations of Carolingian coins.⁸²

Related to these coin brooches are the brooches of engraved arched silver plate, also with imitation filigree borders (Plate 11b nos. 1, 2). They seem to have a southern and eastern Scandinavian distribution with examples known from Gotland, eastern

Sweden, Skåne, and Denmark, as well as a number from northern Germany.⁸³ The ornamentation varies, and includes the triquetra, geometric flower-like patterns, and depictions of animals.⁸⁴ In general the hoards in which such brooches occur date from the eleventh century, although some of the northern German examples are from the second half of the tenth century. As a result, the Scandinavian brooches, like the coin brooches, are probably related to the stream of German coins into Scandinavia at that time. It is difficult to determine whether the Scandinavian examples are native imitations of continental models, but the imitation filigree borders were probably added in Scandinavia, suggesting a southern Scandinavian workshop could well have produced the entire brooch.⁸⁵

Round silver plate objects with similar engraved ornamentation are also known from Scandinavian hoards of similar date, but in most cases it is difficult to determine the function of these objects (Plate 12 no. 2). The largest number occur in Gotland while a few examples are known from the rest of Scandinavia.⁸⁶ Most of these Scandinavian objects are fragmentary, and it is impossible to judge their functions or origins; it seems reasonable, however, to associate them with similar production places as engraved brooches, although they do not possess the imitation filigree border.

A number of round objects, whether brooches, pendants, or otherwise are decorated with punched ornamentation, often composed of a series of small dashes used to create geometric shapes (Plate 6 no. 1, Plate 13 no. 8). One type has a cross motif which may be derived from Anglo-Saxon Long Cross coins. Many eastern parallels are known for this type, especially from Finland and Estonia.⁸⁷ Another type has bosses along with the punched ornament (Plate 9b no. 2). The nearest parallels for these are

found in England in the late Saxon disc brooches. However, the Scandinavian examples are far cruder and of much thinner silver plate. As a result, they can probably be viewed as Scandinavian imitations of brooches which arrived with the stream of Anglo-Saxon coins⁸⁸ or as personal objects brought back from England.

A third type (the so-called schildförmige Anhänger) consists of a round plate, usually a pendant, with punched dots or short dashes spiralling out from a center point (Plate 10 no. 13).

They are quite common in Denmark and Sweden, while some occur in Gotland and isolated examples in Norway and the southern and eastern Baltic. The motif is quite old in Scandinavia although these pendants date from the second half of the tenth through the eleventh centuries;⁸⁹ in Gotland the examples are all from the eleventh century.⁹⁰ In general these pendants have been seen as religious amulets, and of Scandinavian origin, although no special place of manufacture can be determined.⁹¹

The above mentioned brooches, pendants, or mounts with engraved or punched ornamentation are by and large quite crude pieces. Objects made with filigree and granulation, however, show much more careful and skillful construction. Filigree and granulation appear commonly on a number of late Viking Age objects of various types. Again, Stenberger and Hårdh approached these objects quite differently. Stenberger divided his material into the kinds of objects, and then subdivided these, based upon their ornamentation. Hårdh, on the other hand, concentrated on the technique, looking at the kinds of filigree and granulation used, and then at the characteristic patterns formed with each kind. She found the material sorted itself into distinct groups which revealed chronological differences as well.⁹²

Hårdh's approach is more useful for the analysis of the con-

tacts these artefacts show, since the same combinations of techniques appear on a range of objects; as a result, the techniques themselves are probably the significant influence to be discerned. Unfortunately Hårdh's groupings are not totally comprehensive, and do not encompass all the Gotlandic examples. These anomalous objects are usually viewed as imports and may, in fact, derive from the Russian tradition of filigree and granulation.⁹³ Nevertheless, Hårdh's system will be followed, keeping in mind some exceptions; especially for the Gotlandic material, exist.

The first filigree and granulation group Hårdh identified consists of wires placed on a flat silver plate, using only simple filigree. Spirals, usually a double spiral in a S-shape or in a volute-shape, and granules forming a small ring or placed in the center of a spiral were the chief motifs. In addition, links were often made between spirals or both parts of a double spiral. The wires are at least 0.6 mm. thick, the granules about 1.1 mm. in diameter, and the plates 0.4 mm. or thicker.⁹⁴

The most common objects of this group consist of equal armed brooches, beads, and round brooches, all of which display a western bias with a number of examples in Denmark, Norway, the British Isles, and northwestern Europe. In general they are quite early in date, and only fragments are found in eleventh century hoards. It is difficult to determine whether they were imports or of Scandinavian workmanship; Hårdh felt they were most probably west European imports.⁹⁵

Hårdh's second group also seems by and large related to the period before the eleventh century, although a few complete and fragmentary objects are found into the eleventh century. In this group the filigree occurs on a pressed silver plate (Pressblech). The most common motifs consisted of running knots, simple knots, and animals depicted by a number of parallel and different types

of wire. Simple and complicated filigree occur, with the wires generally 0.3 to 1.0 mm. thick. The plate is generally 0.3 to 0.5 mm. thick; granule sizes vary. The most common objects in this group are rectangular brooches, Thor's hammers, cross-shaped pendants (the so-called Hiddensee type), and round objects, especially brooches.⁹⁶

The round brooches include two very common types which Stenberger labelled Sp 1 and Sp 2, and Skovmand referred to as SM 660 and Terslev-type respectively. Type Sp 2 is a fairly small brooch with symmetrical interlacing ornament (Plate 15 no. 5). It has a fairly wide distribution, concentrated in Denmark and Sweden but other examples are known from Gotland, northern Germany and the Baltic regions. Most date from the tenth century, although eleventh century examples, usually fragmentary, are also known.⁹⁷ The filigree technique for these brooches, and Hårdh's second group in general, probably derived from the Carolingian world, but it seems clear that these brooches are of northern manufacture. Denmark appears to be a likely center since matrices are known from Hedeby and elsewhere in Denmark.⁹⁸ Although most brooches of this type are found in hoards, some imitations which were converted into pendants are found almost exclusively in graves, especially from southern Scandinavia.⁹⁹

The Sp 1 brooch is usually larger, with interlacing animal figures (Plate 12 no. 1). Like the Sp 2 type, it is widespread, with a number of examples from Denmark, Sweden, Gotland, northern Germany, Poland, and a few in Norway. Again, similar to Sp 2, the Danish examples are usually complete and date from the second half of the tenth century. Examples from Sweden also occur in the tenth century but continue into eleventh century hoards. Finds elsewhere are usually fragmentary and tend to be in hoards from the first half of the eleventh century.¹⁰⁰ Most authors

agree these brooches are of Scandinavian manufacture, and probably southern Scandinavia based upon the distribution and dating. Paulsen felt they were made in Denmark¹⁰¹ and certainly a large number must have been produced there. Nevertheless, three matrices are known from Sweden and some must have been made there, although perhaps later than the Danish examples.¹⁰²

The cross pendants of the Hiddensee type (Plate 12 nos. 4-8, Plate 14 no. 2) also reflect this southern Scandinavian bias.

A number, usually complete, are known from Denmark while hoards from Gotland contain mainly fragmentary pieces in later contexts. Like the brooches, the distribution extends eastwards with examples in Germany, Poland and even Russia; Hiddensee in northern Germany contained ten complete gold pendants. Isolated examples have been found in Sweden and to the west in York and Iceland, although none are known from Norway. As with the brooches, the pendants in Danish hoards date mainly to the late tenth century while elsewhere hoards are generally from the eleventh century.¹⁰³ The distribution, dating and technique suggest Scandinavian manufacture, probably Danish,¹⁰⁴ but the unusual form of the pendant is probably not indigenous to Scandinavia. Skovmand thought the origins lay in the eastern European or Byzantine world.¹⁰⁵ Stenberger agreed the form derived from the east, but differentiated between two major forms of this pendant. The first, represented by the examples from Hiddensee and Tolstrup (Plate 12 no. 5), he felt was closer to the original models while the second, represented by Lackalånga, Skåne and Hemånge, Gotland (Plate 14 no. 2), he suggested was perhaps a southern Swedish development of the first type.¹⁰⁶

In general these objects from Hårdh's Group B seem to reflect a southern Scandinavian bias, probably since the impulses from the south reached this area first. Other Scandinavian areas may have

manufactured such objects but the hoards suggest this occurred later.¹⁰⁷ By the eleventh century many of the objects are fragmentary, suggesting their use only as payment silver.

Hårdh's third group is characterized by circles or spirals of smooth or twisted wires. Motifs are never constructed of parallel lines nor do the spirals contain granules in the center. The filigree in some cases is associated with soldered-on bosses. In general the wires are much finer than in Group A or B, ranging from 0.2 to 0.5 mm. while the plate is never thicker than 0.3 mm. The most common objects in this group include beads, earrings, and capsule-shaped beads/pendants (Kapselberlocken). They appear primarily in the eleventh century and constitute west Slavic imports.¹⁰⁸ Hardh's Group D consists of similar west Slavic imports of beads and earrings, and also includes crescent-shaped pendants (halbmondförmige Anhänger). This group, however, differs from Group C by its use of granulation to form geometric patterns or lines. It contrasts with the flat granulation in Group B, nor is it used on Pressblech. Like Group C, soldered-on bosses are common. The material is also quite fine with granules almost always less than 1 mm. in diameter with most between 0.4 and 0.6 mm.; the plate is usually 0.3 to 0.4 mm. thick.¹⁰⁹

A number of beads are known from eleventh century Scandinavian hoards, generally in silver although other materials were also used. Some of the beads may be of Scandinavian workmanship, such as the round silver type with filigree spiral decoration which in distribution and date resembles Group B¹¹⁰ (Plate 12 nos. 13, 14). Other types are less easy to correlate with Hårdh's system without detailed analysis of the objects themselves. In general, however, a large number of the silver beads appear to be eastern imports, including those of Hårdh's Group C (Plate 10

nos. 28-32) and Group D (Plate 5 no. 71, Plate 10 nos. 19-21, 23) from the west Slavic region, and others perhaps from Russia as well.¹¹¹

The small capsule-shaped rectangular beads/pendants (Plate 10 no. 27) with a small tube attached for a string or chain (Kapselberlocken) have a limited distribution in Scandinavia. Examples are known from ten Danish hoards situated mainly near the Baltic which date from the second half of the tenth to the early eleventh century. In Sweden they are rare, and in Norway and Finland unknown. Fragmentary examples also occur from twelve Gotlandic hoards, dating generally from the first half of the eleventh century. The distribution of Kapselberlocken in Scandinavia appears clearly related to the southern Baltic trade, especially the west Slavic region where a number occur in hoards. It is doubtful whether they ever functioned as jewelry in Scandinavia since none are known from graves.¹¹²

Earrings, usually fragmentary, appear in a number of different forms in Scandinavian hoards. One type consists of a simple wire with a bead on either end (Plate 10 nos. 28, 29); as a result, many of the beads in Scandinavian hoards could originally have been part of earrings. Almost all types (Plate 9b nos. 10, 11, Plate 10 no. 37, Plate 12, no. 9) can be paralleled in Slavic hoards, and their origins are undoubtedly from this region, although some Gotlandic types may derive from Russia, either directly or via the Slavic region. Like the Kapselberlocken, the earrings appear in hoards with a southern and eastern Scandinavian distribution, again reflecting the Baltic trade. Although a few fragments occur in late tenth century Danish hoards, most of the Scandinavian examples date to the eleventh century.¹¹³

A few other objects reflect this Slavic connection. A number of fragmentary pointed oval closings with stamped ornamentation have been found in Scandinavian hoards (Plate 8 no. 6, Plate

10 no. 17, Plate 13a nos. 11, 12). Traditionally they have been called Gürtelschliesse (belt closings) but both Stenberger and Hårdh questioned this term since many of the objects are far too delicate to have functioned as belt clasps.¹¹⁴ In Scandinavia they also appear in hoards with a southern and eastern distribution, with again the Danish examples slightly earlier than the rest of Scandinavia. They are quite common in the west Slavic region from where the Scandinavian examples must derive.¹¹⁵ Since all the known Scandinavian examples are fragmentary, it seems probable that they were imported for their value as metal, and may have reached Scandinavia already broken. Less common Slavic imports include fragments of the so-called Schläfenringe,¹¹⁶ pins with broad triangular heads (baltische Nadeln),¹¹⁷ and isolated examples of Slavic type pendants and other objects.¹¹⁸

The crescent-shaped pendant (halbmondförmige Anhänger) (Plate 15 nos. 2, 3, Plate 11b no. 3) which belongs to Hårdh's Group D was one of the most popular objects in eastern Europe. Many Slavic examples are known but it occurs in Russia, Finland, and even as far south as Hungary.¹¹⁹ Scandinavian hoards containing such pendants have a definite eastern distribution. Unlike many other Slavic imports, however, it is unknown from the Danish mainland, and has only been found in one find from Bornholm and three hoards from Skåne. Five hoards from Sweden, all on the east coast, and ten hoards from Gotland also contain examples. These hoards range in date from the last half of the tenth century but the majority date to the first half of the eleventh century.¹²⁰ The origin of this pendant is not clear. Many authors have argued a southern Russian origin, although others have felt it ultimately derives from Syrian culture.¹²¹ It clearly had

reached the Slavic regions by the tenth century where it was extremely popular.¹²² Whether the Scandinavian examples came from Russia or via the Slavic region is impossible to determine;¹²³ nevertheless it seems significant that the type of filigree and granulation ties in with other west Slavic objects.

One type of object which did not fit into Hårdh's filigree and granulation system is a group of mask pendants from the Förlhagen hoard in Gotland (Plate 9a). These are unique in Scandinavia but have three parallels in the eastern Baltic. Stenberger argued these pendants have their origin in southern Russia,¹²⁴ and in fact, he felt a number of objects from eleventh century Gotlandic hoards were of Russian manufacture.¹²⁵ Many of these objects appear only in Gotlandic hoards, suggesting a direct connection with Russia, by-passing the southern Baltic Slavic region.

A common object from Gotland but with a wider distribution is the penannular brooch. Again problems arise in the classification of the range of objects included in this category. Stenberger divided his material into two types: Ringspangen where the pin protrudes only a little way over the ring body (Plate 16 nos. 3-5), and Ringnadeln where the pin extends a third or more of its length past the ring body (Plate 16 nos. 1, 2).¹²⁶ Hårdh considered this classification too vague since much of the material is fragmentary. As a result, she approached the objects much as she did armrings and neckrings, examining the section of the rods, the form of the ends, and the shape of the pin head.¹²⁷ This approach has the most potential for the evaluation of the total corpus of material. Unfortunately, the southern Swedish examples with which Hårdh was concerned are fragmentary and not very numerous. As a result, Hårdh's analysis is in many ways inadequate, with far too general categories which, even so, do not cover a number of brooches. A more comprehensive scheme cannot be developed until the sections

of ring bodies have been examined for the types which do not appear in southern Sweden; only then will it be possible to merge Stenberger's classifications, which are of limited use when viewing the entire Scandinavian material.

Within Scandinavia these brooches have a definite bias towards Sweden and Gotland in the eleventh century, appearing in both hoards and graves. Danish examples from hoards, with the exception of two finds from Skåne, are all fragmentary and rarely date into the eleventh century.¹²⁸ Similarly few Norwegian examples are known this late in hoards. Hårdh's first group, defined as a ring of round section with spheres on the ends of the rings and the pin head, corresponds to a popular tenth century Norwegian and British variety of silver or bronze which was found in hoard and graves.¹²⁹ Outside of Norway and Britain few examples occur, but those known from Gotland are rather later, from the late tenth and early eleventh centuries.¹³⁰

Hårdh's second group comprises rings of round or rhombic section with club-shaped thickened ends and a broad pin head (Plate 16 nos. 1, 2). This corresponds to Stenberger's Ringnadeln series.¹³¹ Stenberger's Rn 1 is not very common and generally dates to the tenth century.¹³² His types Rn 2 and Rn 3 are quite similar, with Rn 3 probably a later development; as a result, if only fragments survive, it is often difficult to differentiate between the two. Type Rn 2 seems basically to date from the late tenth century, and regional differences exist for both Gotlandic and Swedish examples.¹³³ Type Rn 3, a large, elaborate form of brooch (Plate 16 nos. 1, 2), does appear to belong to the eleventh century and is found almost exclusively in Gotland. Unlike so many of the penannular brooches, it appears only in silver, and represents a rich local form.¹³⁴

Hårdh's third group is defined as a ring of round, rectangular, profiled, or oval section with rolled-up ends (Plate 16 no. 5). This definition is extremely broad but nonetheless misses out a late Viking Age type with triangular section (Plate 14 no. 7); in general it corresponds to variations of Stenberger's Ringspangen.¹³⁵ As a whole these brooches are rare in Scandinavian hoards, although more commonly found in bronze or iron in Swedish and Gotlandic graves. Their greatest concentration, however, occurs in the eastern Baltic, eastern Europe, and Finland.¹³⁶ The type is extremely long-lived but the few Scandinavian hoard examples generally date from the late tenth or eleventh century.¹³⁷ The large number of base metal examples from graves suggests its common use as a functional brooch for the average man. Only occasionally was it produced in silver, and these pieces were the more likely to be kept, cut up and hoarded.

Two other types of penannular brooches are not covered in Hårdh's classification, and represent local Gotlandic forms which Stenberger discussed under Ringspangen. The first type, Rs 1, has a rhombic section with a narrowing ring body ending in square faceted knobs (Plate 16 no. 4). The second type, Rs 2, is similar but the ring is round or oval in section, and contains a bulge in the middle (Plate 16 no. 3). Both types often occur together, usually in eleventh century hoards. Moreover, unlike so many of the silver objects of this time, they are usually complete, and often scarcely worn. They are associated with hoards containing little hacksilver; as a result, they perhaps represent objects of contemporary use when they appear.¹³⁸ These types are known only from Gotland in Scandinavia, again suggesting they did not circulate as payment metal. However, other examples are known to the east, especially from Finland and the Baltic regions where they are often in bronze. Gotland has generally been viewed as

the source region, although some of the eastern examples are probably of local manufacture.¹³⁹

A number of religious amulets are known from the eleventh century hoard finds. The round silver plate with punched lines spiralling outwards (schildförmige Anhänger) has already been mentioned.¹⁴⁰ In addition, fire-steel pendants (German Feuerstahlanhänger or Danish ildstaal), Thor's hammers, and crosses occur quite often. They are usually complete but often in hack-silver hoards. As a result, Stenberger felt they were deposited not with any religious motives but rather for their metal along with the other pieces.¹⁴¹

The fire-steel pendant (Plate 10 no. 10) is a Scandinavian form found in Viking Age hoards and graves; in the grave finds it occurs often in base metals, mainly in Sweden, rarely in Norway and Denmark, and not at all in Gotland and southern Sweden. Elsewhere they seldom appear, with only one example in Germany and a few in Russia.¹⁴² In general the hoard examples are made of silver plate, either plain or with simple decoration, usually of punched dots. The largest number have been found in Sweden where they date from the mid-tenth or early eleventh century. Four hoards from Denmark contain examples, three of which date to c. 1000 while the fourth is later, c. 1050. In Gotland, the four finds have similar dates to the Danish examples. Five pendants from Norway occur in two hoards and three grave finds dating, like the Swedish pieces, primarily to the second half of the tenth century.¹⁴³ These objects have traditionally been interpreted as symbols for fire and thus thought to have ^{had} magical connotations.¹⁴⁴

Far more common in Scandinavia are Thor's hammers (Plate 8 no. 1, Plate 13b no. 2), with a few examples in England, the southern Baltic, and Russia as well. Pendants of differing quality and

ornamentation are known in iron, bronze, silver, and amber while the symbol also occurs on some runestones.¹⁴⁵ There is no doubt that the pendants are a Scandinavian form of native manufacture; several molds are known, especially from Denmark.¹⁴⁶ The examples from Danish hoards date from the mid-tenth to the first half of the eleventh century, but mainly around 1000. Norwegian finds are similar in date while the Swedish examples seem a bit later. In Gotland, where none are known from graves, fewer Thor's hammers occur and they are much later, from the mid-eleventh century or later.¹⁴⁷ Even the grave finds elsewhere in Scandinavia appear to belong to the late Viking Age, suggesting the pendants were produced as a heathen symbol to compete against the Christian cross.¹⁴⁸

Cross pendants, like the Thor's hammers, occur in graves and hoards throughout Scandinavia. They also differ widely in quality (Plate 3c, Plate 5 no. 15, Plate 11b no. 5) and display various origins; in general the finest ones are often seen as imports while some cruder examples must be native imitations. Of the foreign imports, many are thought to be Byzantine or Byzantine-influenced Russian objects¹⁴⁹ while some examples suggest Slavic origins (Plate 11b no. 5).¹⁵⁰ By and large, however, the crosses found in Scandinavia are probably of native manufacture ranging from very simple cut shapes to very ornate pieces, with varying success in the imitation of the foreign models. While some occur in tenth century finds, in general the more elaborate versions date to the eleventh century.¹⁵¹ It is interesting that some of the crucifix type depict a bound Christ (e.g. Plate 3c), a tradition probably already present in Scandinavia in the late tenth century, as shown by the Jelling stone.¹⁵²

Although other types of jewelry occur in eleventh century hoards, the kinds discussed above constitute the major objects

found and indicate the general ties the hoards suggest. A few finds also contained weighing bowls and/or weights of various metals (Plate 9b nos. 63-71),¹⁵³ further reflecting the economic nature of many hoards. Silver containers of varying types have also been found in some hoards. Few complete examples are known although a fair number of fragments appear, especially from Denmark, Sweden, and Gotland. In most cases the origins are difficult to determine. Many have eastern parallels but it cannot be ascertained whether they were imported in a complete state, imported and then ornamented in Scandinavia, or of entirely Scandinavian production.¹⁵⁴ In general, however, it appears that many of the Gotlandic and Swedish examples stem from the east, while Danish containers seem either native ^{objects} or west European imports.¹⁵⁵

While some hoards may have been placed directly in the ground, many were held in a variety of containers, although a complete picture is impossible to obtain due to poor preservation and recording. The majority of these were probably placed in ceramic vessels which, if they survive, are usually in a fragmentary state. Of the known vessels found from Gotlandic hoards, most seem to be a native Swedish ceramic type.¹⁵⁶ The vessels from elsewhere in Scandinavia are less easy to attribute. Many must have been of local production but some, particularly in southern Sweden, may have been of a Slavic or Slavic-influenced type.¹⁵⁷

Other hoards in Scandinavia were buried in wooden containers, leather pouches, or cloth bags, all usually found in a decayed state, or in oxhorns; in Norway soapstone bowls were also used.¹⁵⁸ Other containers such as the copper and bronze vessels found in Gotlandic and a few other Scandinavian finds as well, are more probably imported objects. Most of these Stenberger attributed to the east, perhaps arriving with the Arabic coins.¹⁵⁹ A group

of round and oval small copper boxes were used to hold a number of eleventh century Gotlandic hoards. Their appearance is so sudden and uniform that Stenberger felt they may well have reached Gotland at the same time, perhaps in a single shipment.¹⁶⁰

The range of objects found in eleventh century hoards is quite large, revealing a high technical level in Scandinavia, as well as a wide network of imports. Even the objects of Scandinavian origin and manufacture can often be localized and movements within Scandinavia traced. The dating of the hoards allows these trends to be followed through time, indicating when and where such objects were common in a complete state or in fragments. As shown above, objects made in one region of Scandinavia often appear only as fragments elsewhere at a later date, suggesting a flourishing trading network within Scandinavia.

Some objects such as neckrings appear to have been produced throughout Scandinavia. Hårdh's study of neckrings indicated some centers of local production, but the number of ways they could vary — in the shapes of the closings, in the form of the closings, in the ring body, and in weight — render it difficult to make firm attributions on places of production. The fragmentary nature of many of the neckrings suggests, however, a fair degree of circulation. In this case, Norway is clearly different, with more complete objects, smaller degree of fragmentation, and heavier weights.¹⁶¹ Moreover, the prevalence of closings of Types 3 and 4 suggests when found elsewhere they may be imports; Denmark, on the other hand, also has a fair number of such closings,¹⁶² the result either of intensive trade or local production. The amount of regionalization which occurred can be seen in the differences between the former Danish provinces of Skåne, Blekinge, and Halland in southern Sweden and the rest of Denmark. While the neckrings, as in fact other objects, show

a greater cultural affinity to Denmark rather than Sweden, nevertheless regional differences can be seen. As a result, the probability is that local workshops throughout Scandinavia produced a number of different forms; as more work is done on neckrings throughout Scandinavia it may be possible to pinpoint production centers of types more finely.

Armings were also produced throughout Scandinavia, especially those of the same techniques as neckrings. Nevertheless, the hoard evidence clearly shows the popularity of armings in Gotland, to such an extent that it is possible to trace contacts with some varieties. For example, armings of Stenberger's Type Ab 2 (a major variation of Hårdh's Type VII) appear in such great numbers in Gotland that their appearance elsewhere must be regarded as imports. In Danish and Swedish hoards they date to the late tenth and eleventh century; in Denmark especially they are almost always fragmentary. Fragments of these armings even appear in hoards from the first half of the eleventh century in the western Slavic area, yet none are known from Norway.¹⁶³

The other half of this connection, objects of Danish origin travelling to Gotland can also be traced in the hoard evidence. Those objects, outside of local forms of neckrings and armings, which can be identified from hoards and other finds as of Danish origin include examples in Hårdh's filigree and granulation Group B. In some cases, such as brooches of Stenberger's Type Sp 1, the finds of molds show production also occurred in Sweden, but the hoard examples are somewhat later¹⁶⁴ suggesting the idea may have derived from Denmark. The examples of these brooches and other objects of Group B found in Gotland are generally later and more fragmentary than the Danish examples, suggesting they were circulated for a time, probably some arriving via Sweden.

Interestingly, few of these are found in Norway either.

In fact, there is little evidence from the objects in hoards of contact between Norway and Denmark in this period, nor with other Scandinavian countries. The objects of Danish or Swedish production are rarely found in Norwegian hoards despite the fact that the hoards contain a certain amount of hacksilver. Moreover, the finds of steatite in Danish settlements combined with the fact that Norway and Denmark were politically united for a number of years during the first half of the eleventh century suggests a trading relationship must have occurred which should be reflected in the hoard evidence. Although some of the trade may have been in perishables, the finds of weights in eleventh century graves¹⁶⁵ show the continued use of a weight money economy in this period. The heavier and less fragmented neckrings indicate, however, a somewhat different state of affairs from elsewhere in Scandinavia; perhaps silver circulated less, but this would not explain the scarcity of objects and hacksilver from elsewhere in Scandinavia and abroad. It is also possible the Norwegians preferred coin to non-numismatic silver, but since hacksilver does occur it would be difficult to explain the scarcity of hacksilver of foreign origin this way. As a result, the scarcity of these foreign objects and fragments from elsewhere in Scandinavia and even abroad remains somewhat puzzling.

The objects of foreign origin in Scandinavian hoards not only show external contacts but can shed further light upon the movement and redistribution of these foreign objects and hacksilver within Scandinavia. The most prevalent foreign objects in Danish hoards from this period are from the western Slavic regions, a connection little reflected in the documentary sources. Nevertheless

a range of Slavic objects including various beads and earrings, Kapselberlocken, pointed oval closings, and some pendants, including probably crescent-shaped pendants, appear generally in a fragmentary form in a number of Danish hoards. The former Danish provinces in southern Sweden especially had close ties as shown not only by the number of fragments but also by the similarities in neckring forms and weights and settlement finds;¹⁶⁶ Bornholm as well has a fair number of Slavic finds.

The Slavic hoards also indicate this contact, containing a number of fragmentary Scandinavian objects, primarily it appears of Danish origin.¹⁶⁷ In both areas, however, the foreign objects are subservient to local forms of hacksilver, and in fact the hoards in each area are characterized by a separate assemblage of objects.¹⁶⁸ This fact, combined with the fragmentary nature of the objects plus the fact that few imitations occur either way¹⁶⁹ suggest these ties must be seen as the result of trade, which from the number of examples found must have boomed in the late tenth and eleventh centuries. The close connections of Skåne and also Bornholm are probably the result of their geographical positions which allowed them to benefit most from this network.

Nowhere else in Scandinavia is the concentration of Slavic objects so marked, nor in fact as early in date.¹⁷⁰ While the appearance of these Slavic objects elsewhere in Scandinavia may to some degree indicate direct contact, it more likely suggests redistribution from Danish centers. The evidence from Gotland is particularly striking where Slavic objects are usually later than those found in Denmark. Moreover, Slavic objects are not as common in the rest of Sweden or Norway¹⁷¹ suggesting again much of the contact was indirect.

In addition to links with the Slavic region, the Danish hoards also show contacts with the south. However, these are not as great as one would expect from the political and religious ties. An overwhelming number of German coins appear in Scandinavian hoards but relatively few objects. Nevertheless, since the hoards primarily represent economic contacts, it is logical that Germany would use its own economic medium in the trade, in this case coins and not objects. Of the objects found in Scandinavian hoards, it is often difficult to determine whether they are imports or imitations. Hardh's study of filigree and granulation revealed the transition, where Group A was composed of imports, and the slightly later Group B was mainly southern Scandinavian workmanship based upon the southern models and techniques.¹⁷² Similarly, the coin brooches and round engraved silver plate objects with imitation filigree borders probably display a comparable development where objects arrived but were soon copied.¹⁷³

A similar situation exists for the interpretation of Anglo-Saxon objects in Scandinavian hoards. Coins were also extensively imported but even fewer objects than from Germany. A very small number of hoards contain isolated examples of what must be directly imported objects which did not, however, result in native imitations.¹⁷⁴ One exception is brooches with punched lines and bosses which appear to derive from the late Saxon disc brooches.¹⁷⁵ In fact, Norway alone seems to have had close contacts with the British Isles with closer similarities in neck-rings, armrings and penannular brooches, although there is less evidence to compare the Norwegian examples with in the eleventh century.¹⁷⁶ It is also noteworthy that fewer German coins are

found in Norway than in the rest of Scandinavia, and in many districts of Norway the Anglo-Saxon coins even outnumber the German.¹⁷⁷

Gotland in many respects was also a place apart. It clearly was flourishing in the eleventh century as shown by the number and richness of the hoards. As a result, foreign imported objects from a wide variety of areas are known, but primarily from the east, not surprising considering its geographical position. Although some of these eastern links are with the west Slavic regions, as mentioned previously, they often date later than the Danish examples and may have arrived via Denmark. On the other hand, Gotland appears to have had direct relations with Finland and Russia¹⁷⁸ and may have redistributed these objects to Denmark and the rest of Scandinavia. In addition, imitations and variations of imports and other forms show the presence of skillful workshops.

Sweden on the other hand seems to have held a middle position between Gotland and Denmark, receiving impulses from both areas and, as a result, a mixture of finds. Not surprisingly, the objects from areas on the east coast and Öland often resemble Gotlandic ones while central Swedish finds are often closer to Danish objects.¹⁷⁹ It is difficult to determine, however, how much is a result of direct importation and how much redistribution from elsewhere in Scandinavia. As more work is done on the Swedish hoards, hopefully a better idea will emerge of local forms and foreign contacts.

The contacts the objects from hoards reveal present only a limited picture, however. As a result of their economic nature, the hoards primarily included silver objects, often not used or

valued in themselves but rather simply for their metal weight. It is significant that many of these objects are elsewhere known in Scandinavia only in baser metals; nevertheless hoards provide in many cases the only dating criteria despite the time lag that may have occurred. The economic nature of the hoards also means that the evidence is biased towards the east. The massive coin import from Germany and England, however, shows major contacts to the west, and this economic evidence will be looked at separately in the next chapter.

Chapter 7: Footnotes

1. In the discussion of objects in this chapter, whenever a foreign term is referred to, it is German unless otherwise stated.
2. Hårdh 1976b p. 7.
3. Malmer 1961 pp. 245-7.
4. See Lundström, L. 1973 p. 13.
5. See Table 1.
6. For example, Jammer 1952 pp. 49-52 has examined coins from Saxon mints found in all of Scandinavia, while Albrecht 1959 pp. 22-37 has made a similar study on coins minted in the lower Lorraine and Frisia. Neither appears to have been based upon thorough re-examination of the material since inconsistencies exist between the studies.
7. See Hårdh 1976b p. 33ff. for a review of the various theories concerning this interval.
8. ibid. p. 35.
9. ibid. p. 37.
10. For a review of the literature concerning the reason for deposition of hoards see Hatz 1974 p. 143ff. and Hårdh 1976b p. 8ff.
11. See Hårdh 1976b p. 9.
12. Bolin 1926 p. 209; Hårdh 1976b p. 10.
13. Skovmand 1942 p. 183ff.
14. Grierson 1959 p. 133ff.
15. Hatz 1974 p. 143ff.
16. Hårdh 1976b p. 37.
17. See above Chapter 8 p. 265ff.
18. There is no adequate English word which defines metal, both objects and coins, which were weighted, nor in fact the economic system they relate to. The German Gewichtsgeldwirtschaft is translated as "weight money economy" by Hårdh 1977-8 p. 164, and although awkward, is probably the best term. It is less easy to define the components of this system. The hacksilver or objects have been defined as "non-monetary hacksilver" and "noncoined material" by Hårdh 1975-6 p. 31 but neither is entirely satisfactory; "non-monetary" implies it is not economic, while "non-numismatic" is more generally found than "non-coined". There is no term which adequately describes both coins and non-numismatic material. The term "bullion" is inadequate since it has connotations of only raw material. As a result "payment metal" is used in this study, since it covers coins, non-numismatic silver,

and raw metal; when used here it will also imply that the metal is weighed.

19. Graham-Campbell 1975-6 p. 123. See also Appendix II for a list of eleventh century hoards with non-numismatic material in Britain and Ireland.
20. For example, the two most comprehensive studies of objects in hoards approach the material quite differently. Stenberger 1958 based his classification primarily upon differences in ornamentation while Hårdh 1976b used technical features of the objects.
21. The hoards from Gotland are fully published and illustrated in Stenberger 1947 with analysis in Stenberger 1958. The southern Swedish (Skåne, Halland, and Blekinge) hoards have also been fully illustrated in Hårdh 1976a with analysis in Hårdh 1976b. The Danish hoards were described but not completely illustrated in Skovmand 1942. Similarly, the Norwegian hoards were described but rarely illustrated in Grieg 1929. The Swedish hoards have not been comprehensively published, but various regional studies, again not well illustrated can be found in Forsberg 1967-8, Hellman 1947, Linder 1935 and 1936, and Norberg 1943 and 1945. Individual hoards are described in a number of articles, most of which are referenced in the above works. For articles dealing with hoards found later than these works see references in Hatz 1974 (for Sweden, including Gotland), Skaare 1976 (for Norway), Galster 1964 (for Denmark in general) Galster 1977-8 (for Bornholm), and the relevant sections in Nordic Archaeological Abstracts and the Swedish Archaeological Bibliography.
22. For hoards from Britain with non-numismatic material see Appendix II; for further coin hoards from this period see Dolley 1966 pp. 52-4. Hatz 1974 p. 129ff listed German hoards from this period and the further literature. The Finnish hoards are mentioned but not well illustrated in Nordman 1942, Salmo 1948, and Talvio 1978. The west Slavic hoards which relate to Scandinavian hoards are dealt with in Zak 1963, 1967, 1970, and 1975 (1977). See also Paulsen 1936, Knorr 1936 and 1940, and Seger 1928 and 1931 for Slavic hoards. There is no accessible compilation of Russian hoards, but see Dejevsky 1977 pp. 25-7 for a summary, with literature, of Russian numismatics. Jakimowicz 1931 has an overview of these regions as well as others in Europe.
23. In this study the English translation of the Danish and German word Halsring will be "neckring" as opposed to "necklace" because the objects functioned as a firm ring encircling the neck, and not dangling further, as can be the case with the necklace.
24. Hårdh 1976b p. 47.
25. See Stenberger 1958 pp. 89-90 and Hårdh 1973-4 p. 291.

26. Skovmand 1942 p. 251; Stenberger 1958 p. 89.
27. Stenberger 1958 p. 85.
28. Hårdh 1973-4 p. 293.
29. Hårdh 1976a p. 9 or Hårdh 1976b p. 48.
30. Hårdh 1973-4 p. 297; Hårdh 1976b p. 50.
31. Stenberger 1958 p. 83.
32. Hårdh 1973-4 pp. 297-8; Hårdh 1976b p. 50.
33. Hårdh 1973-4 pp. 297-8.
34. Hårdh 1976b pp. 51, 53.
35. See Tables 1 and 2 in Hårdh 1973-4 p. 297.
36. ibid. pp. 301-2.
37. Hårdh 1976b p. 52.
38. Hårdh 1973-4 pp. 302, 304.
39. Stenberger 1958 p. 83.
40. ibid. p. 86.
41. ibid. p. 83; Hårdh 1976b pp. 50-1.
42. Skovmand 1942 p. 246.
43. ibid. pp. 251-2; Hårdh 1973-4 p. 305.
44. Hårdh 1973-4 p. 304.
45. Hårdh 1976b pp. 52-4.
46. Stenberger 1958 pp. 96, 122, and 104 respectively.
47. Hårdh 1976b pp. 54-6.
48. ibid. pp. 56-8.
49. Stenberger 1958 p. 103; Hårdh 1976b pp. 57-8.
50. Hårdh 1976b pp. 57-8.
51. ibid. p. 58.
52. Skovmand 1942 p. 246.
53. Petersen 1928 pp. 158-9.
54. Hårdh 1976b p. 58; Stenberger 1958 pp. 100-1.

55. Stenberger 1958 p. 99.
56. Petersen 1928 p. 158.
57. Skovmand 1942 p. 145; Stenberger 1958 p. 98. See also the discussion of objects used as an economic medium in Chapter 8 p. 263ff.
58. Stenberger 1958 p. 122; Hårdh 1976b p. 60.
59. Skovmand 1942 pp. 51, 83; Stenberger 1958 pp. 122-3.
60. Hårdh 1976b p. 60.
61. Ibid. pp. 60-1.
62. ibid. p. 61.
63. ibid. p. 61; Stenberger 1958 pp. 115-7. Stenberger discussed this type under Armbügel and called it Ab 5.
64. Stenberger 1958 pp. 109-10, 113.
65. ibid. pp. 105-8.
66. Ibid. p. 107; Hårdh 1976b p. 62.
67. Hårdh 1976b p. 61; Graham-Campbell 1976 pp. 51-2.
68. Skovmand 1942 p. 252; Stenberger 1958 pp. 134-5.
69. Petersen 1928 p. 162.
70. Stenberger 1958 pp. 137-8.
71. ibid. pp. 123, 128.
72. Lundström, L. 1973 p. 74ff.
73. Stenberger 1958 pp. 124-5.
74. Hårdh 1976b p. 92.
75. Skovmand 1942 p. 43; Stenberger 1958 pp. 129-30.
76. Hårdh 1976b p. 92.
77. Stenberger 1958 pp. 130-1.
78. Lundström, L. 1973 p. 85.
79. Stenberger 1958 pp. 53, 56.
80. ibid. p. 61.
81. Thun 1967 p. 21.
82. Hårdh 1976b p. 96.

83. ibid. pp. 71-2; Stenberger 1958 p. 48.
84. Hårdh 1976b p. 72; Stenberger 1958 pp. 49-50.
85. Hårdh 1976b pp. 72-3; Stenberger 1958 p. 49.
86. No complete analysis of these objects exists. For Gotland see Stenberger 1958 pp. 205-6, 235. Examples in Denmark are described in Skovmand 1942 no. 36 pp. 163-4, no. 57 pp. 122-6; Galster 1929 Fig. 6; Hårdh 1976a no. 2 p. 17 and possibly no. 131 p. 71. Examples in Norway are noted in Petersen 1928 p. 149 (illus. 180-2), and Greig 1929 no. 17 pp. 213-6. For Sweden see, e.g. Hellman 1947 pp. 32, 35; the lack of any comprehensive study on Swedish hoards prevents any attempt at a complete listing.
87. Hårdh 1976b p. 74.
88. ibid. pp. 73-4.
89. Skovmand 1942 p. 89.
90. Stenberger 1958 p. 159.
91. Hårdh 1976b p. 74.
92. ibid. pp. 77-82.
93. ibid. pp. 90-1.
94. ibid. p. 82.
95. ibid. pp. 82-4.
96. ibid. p. 84.
97. Skovmand 1942 p. 57.
98. ibid. pp. 56-7, 219; Stenberger 1958 p. 42.
99. Capelle 1968 p. 80. See also his Karte 31.
100. Paulsen 1936 pp. 85-7; Skovmand 1942 p. 52; Stenberger 1958 pp. 33-4.
101. Paulsen 1936 p. 49.
102. Skovmand 1942 p. 220; Stenberger 1958 p. 35.
103. Skovmand 1942 p. 53.
104. ibid. p. 220.
105. ibid. p. 54.
106. Stenberger 1958 p. 175.
107. Hårdh 1976b p. 90.
108. ibid. pp. 88-9.

109. ibid. p. 89.
110. Skovmand 1942 p. 253; Stenberger 1958 pp. 216-8.
111. See Stenberger 1958 p. 209ff. for a discussion of various types of beads. See also Skovmand 1942 pp. 173, 237.
112. Skovmand 1942 p. 81; Stenberger 1958 pp. 181-2.
113. For a discussion of the various types of earrings and theories concerning their origins see Stenberger 1958 pp. 142-9. See also Skovmand 1942 pp. 50-1, 107, 125-6, 144, 217, 247.
114. Stenberger 1958 pp. 206-7; Hårdh 1976b p. 75.
115. Skovmand 1942 pp. 120-1; Stenberger 1958 pp. 206-7; Hårdh 1976b p. 75.
116. See Stenberger 1958 pp. 149-54.
117. See Hårdh 1976b p. 71.
118. See e.g. Skovmand 1942 p. 83, Hårdh 1976b p. 95.
119. Stenberger 1958 pp. 161-3
120. ibid., Skovmand 1942 p. 166.
121. See Stenberger 1958 pp. 163-4 for a discussion of the origins. See also zur Mühlen 1975 p. 26.
122. Skovmand 1942 p. 237 noted it occurs in a quarter of the west Slavic finds.
123. See ibid. p. 166, Stenberger 1958 pp. 163, 245.
124. Stenberger 1958 pp. 196-8. See also Hårdh 1976b p. 90.
125. Stenberger 1958 pp. 244-5.
126. ibid. p. 64.
127. Hårdh 1976b pp. 64-5.
128. ibid. pp. 66-8; Skovmand 1942 p. 47.
129. Hårdh 1976b p. 65; Petersen 1928 p. 174ff.
130. Stenberger 1958 pp. 81-2; Hårdh 1976b p. 66.
131. Hårdh 1976b pp. 65-6; Stenberger 1958 p. 74ff.
132. Stenberger 1958 p. 76.
133. ibid. pp. 76-7.
134. ibid. pp. 76, 78.

135. Hårdh 1976b p. 65; Stenberger 1958 pp. 67-8. See also Salmo 1956 pp. 17-25, 72-4.
136. Stenberger 1958 pp. 68-9.
137. ibid. p. 68; Hårdh 1976b pp. 67-8.
138. Stenberger 1958 pp. 65-6.
139. Ibid. p. 66; Salmo 1956 pp. 59-62, 65-72.
140. See above p. 234.
141. Stenberger 1958 pp. 176-7.
142. Hårdh 1976b p. 93; Skovmand 1942 pp. 88-9. Hårdh maintained no examples have been found in Danish graves, but at least four have been found. An iron one from Hesselbjerg, south of Århus was on a ring with a Thor's hammer and miniature scythe (see Andersen 1971 pp. 4-6). Another was found in a cremation burial from Vesterberg, Isle of Föhr while another unprovenanced cremation grave, also on the Isle of Föhr produced two examples (see Ramskou 1950 pp. 169-72). For Russia see Kochkurkina 1973 Table 10 column 18 and Table 11 column 20.
143. Stenberger 1958 pp. 165-6; Skovmand 1942 pp. 88-9; Petersen 1928 pp. 144-5.
144. Skovmand 1942 p. 253; Stenberger 1958 p. 165.
145. Skovmand 1942 p. 64.
146. Hårdh 1976b pp. 93-4.
147. Paulsen 1956 pp. 205-6; Skovmand 1942 p. 220; Stenberger 1958 pp. 168-9.
148. Lindqvist 1915 pp. 121-2. But see also Dejevsky 1977 p. 30 for a possible earlier dating.
149. See Stenberger 1958 p. 180.
150. E.g. Villie, Skåne (which may, however, be an earring and not a pendant). See Skovmand 1942 p. 170.
151. ibid. p. 120; Stenberger 1958 pp. 176-81; Hårdh 1976b p. 94.
152. E.g. Allmänige, Gästrikland, Sweden (illustrated in Stenberger 1958 Abb. 51), Lilla Klintegårda, Väskekinde sn., Gotland (illustrated in Stenberger 1947 p. 232), Hårr, Rogaland, Norway (Grieg 1929 pp. 219-20), and Trondheim (Plate 3c). See also Graham-Campbell 1980 p. 152.
153. E.g. Sturko, Blekinge (Plate 9b nos. 63-71) and Borgeby, Skåne (see Strömberg 1961 vol. 2 p. 61 and Hårdh 1976a p. 37).
154. Stenberger 1958 pp. 223-5; Skovmand 1942 pp. 231, 254.
155. Hårdh 1976b p. 76; Graham-Campbell 1980 p. 101.

156. Stenberger 1958 p. 239. This type corresponds to Selling's Type IV (Selling 1955 p. 156ff.)
157. E.g. Glemminge, Skåne is of Selling's Type AII:3a1 (Selling 1955 p. 91).
158. Stenberger 1958 p. 239. There has been no general survey of the containers hoards were deposited in, not surprisingly, since often the accounts of the finds do not mention any container; even if it is mentioned, often the container has not survived or gone to the museum with the finds. This is especially true for the more perishable materials such as wood, cloth, or leather.
159. Stenberger 1958 pp. 239-41.
160. ibid. p. 241.
161. Hårdh 1973-4 p. 303.
162. ibid. pp. 297-8.
163. Skovmand 1942 p. 58; Stenberger 1958 p. 109.
164. Skovmand 1942 p. 52.
165. Skaare 1976 pp. 144-5.
166. See above Chapter 6 pp. 165, 169, 172, 174.
167. Zak 1967 vol. II pp. 396-8.
168. Jakimowicz 1931 pp. 257-9.
169. Zak 1967 vol. II p. 398.
170. See above pp. 238-41.
171. Zak 1970 pp. 30-1.
172. Hårdh 1976b p. 90.
173. ibid. pp. 96-7.
174. See Wilson 1964 p. 7.
175. Hårdh 1976b p. 97.
176. See Appendix II.
177. For example, Rogaland
178. Stenberger 1958 pp. 244-5.
179. Skovmand 1942 p. 232.

Chapter 8: Economic systems and routes

Towards the end of the tenth century a shift in economic links occurred in Scandinavia. Up until this time Arabic coins had been the major coin imports into Scandinavia. However, this changed in the second half of the tenth century, partly due to a silver crisis in the Arabic world and partly due to an interruption in the Volga route to the Baltic. At the same time the Harz mountains in Germany began to be exploited, and Scandinavia turned to Germany and England for its silver supplies.¹

This shift in coinage supplies had widespread consequences. With the close of the Volga, the western Slavic coast and rivers became extremely important. The decline of Hedeby in the late tenth or early eleventh century may very well be due to this change as new redistribution centers such as Wolin and Alt-Lübeck arose to corner their share of the market.² This new network also saw the increased importance of places like Bornholm and Skåne which had been somewhat bypassed in the earlier trading system.³ The west Slavic centers tied in with river routes to inland trading centers such as Magdeburg as well as overland east-west routes. Wolin especially was well situated to benefit from these land and sea routes. The great land route between Kiev and Regensburg was intersected by the upper course of the Oder at whose mouth Wolin lay. In addition, another land route linked it with Hamburg and places along the Elbe.⁴ Adam of Bremen described Wolin as the largest city in Europe, with an international trading population and far-flung contacts.⁵

This shift in coin sources also had a profound affect on the Scandinavian economic system. Although, as previously mentioned, coins began to be sporadically minted in Scandinavia at the beginning

of the eleventh century,⁶ the majority of coins were imported in the first half of the eleventh century. As a result, economic transactions were not based upon a fixed valued coin as in England at this time, but either upon a weight value or other barter equivalents. Balances and weights have been widely found throughout Scandinavia. A number are known from Sweden, some of which occur with eleventh century coins. Norway similarly has a number of finds, although most appear to date to the tenth century. Far fewer in general are known from Denmark although Skåne has a distinct concentration.⁷ Many of these finds occur in graves, however, and as a result the fewer weights and balances in eleventh century Denmark and Norway are probably due to Christian influence, discouraging the use of grave goods; the large number of weights and balances from Skåne would thus appear quite significant, and a further indication of its importance in this period. Finland and the southern Baltic also have a fair number of balances and weights while very few are known in the entire Viking Age from Germany or England.⁸

The difficulty arises in determining the late Viking Age weight system they were used for. Recent studies have emphasized the precision the Viking Age balances were capable of,⁹ suggesting it should be possible to determine the weight units themselves. However, it is first difficult to know whether only one system was at work or if a number operated, perhaps dependent upon specific goods. It has been argued that the major commodity in an area would have influenced the development of local, regional, and urban weight systems, and would have tended to travel with the ware itself. For example, in medieval Lüneburg, merchants concurrently used the Köln pound for pearls, silver, silver thread etc., the Troy pound for figs or raisins, and the Lüneburg pound for local commodities.¹⁰

In addition, recent work has tended to emphasize the local variations even when it appears that the same material, such as hacksilver, was being measured. The cause of this difference may very well relate to the shift in economic standards, away from the old one based upon Arabic coins to a new western European system.¹¹

Written sources suggest the standard unit of the mark was divided into eight øre which in turn were subdivided into three örtugar each. The first written source in Scandinavia concerning the mark is an inscription on the Stora Ek runestone from Sweden which by its inscription and ornamentation probably dates to the eleventh century.¹² Nevertheless, English sources mention the use of the mark and half mark as far back as the ninth century, although pounds, shillings, and pence are more commonly mentioned.¹³ The division into örtugar is not recorded until the twelfth century but analysis of some of the weights and hacksilver fragments suggests it probably functioned in the Viking Age.¹⁴

Various attempts have been made to relate these divisions to finds of Viking Age weights but all have produced different results and deviations.¹⁵ Many of the problems arise from the experiments themselves where corrosion of the weights has not been taken into account. In addition, some of the earlier studies, notably those by Arne, were far too imprecise. His measurements were taken by different people on different balances over a range of time, with the results stated in varying degrees of precision.¹⁶ In most studies the samples were taken from diverse geographical regions. Significantly, Lundström's analysis of only the Swedish material produced the smallest deviation for the unit of the örtug; yet this sample itself may be too large since it includes the former Danish provinces in southern Sweden, and may require further subdivision.¹⁷

As a result, until more work has been done on the regional material of both weights and bars with methods designed to compensate for corrosion, it will only be possible to obtain a rough idea of the weight standard.

The approximations obtained so far do, however, seem to be on the right track. Lundström has studied various complete objects, hacksilver fragments and beaten pieces of silver. A large number of these objects and fragments correspond quite closely to the presumed weight standards. In addition, the fragments often appear to have been used in an attempt to normalize weights.¹⁸ Variations can also be seen between different regions, for example Gotland and Sweden, where in Sweden the same types of objects are much lighter and more fragmented. Lundström felt this was a result of the switch in the late tenth century to a new weight system based upon the western European coinage. Sweden, it would appear, adopted this system earlier than Gotland, with the Danish province of Skåne probably earlier than Sweden.¹⁹

The exact nature of the new system is difficult to determine from the weights and hacksilver. Anglo-Saxon coins varied to some degree in weight both within and between issues but there appears to have been an attempt to regularize weights.²⁰ Germany, however, had numerous mints producing coins of widely differing weight.²¹ Further work on hacksilver and origins of coins, again on a regional basis, will hopefully yield more information of the relationships of weight standards through time.

The problems of determining just how the weighed silver quantities related to actual transactions is almost insurmountable. Written sources are all late and do not distinguish between regional fluctuations. A mid-twelfth century price list from Poland gives

prices for arms and other military equipment where 200 grams, the approximate equivalent of a mark, would buy a sword or a pair of stirrups. However, both the time and distance are too great to suggest these prices were valid a century earlier in Scandinavia. The oldest preserved Norse law book is the Icelandic Grágás from the twelfth century, which lists various weregild payments, but again too removed to relate to eleventh century Scandinavia. Moreover, all indications suggest the value of silver fluctuated in the tenth and eleventh centuries, probably dependent upon supply and demand.²² As a result, the switch in the sources of silver at the end of the tenth century must have had great effect on the value of silver until regular supplies were stabilized.

This change can be seen in the amount of hacksilver that appears at the end of the tenth century, although the exact significance of the hoard finds to the economic situation has been debated. Much work has been done on this matter with Polish hoards which are characterized by a large amount of very broken up hacksilver, few complete objects, and a large coin import, especially from Germany.²³ The two main lines of interpretation are represented by Kiernowski and Tabaczynski who analysed finds from Pommerania and Poland respectively. Both found that the hoards deposited up to c.950/c. 970 were characterized mainly by complete Arabic coins, and probably reflect exclusively foreign trade. From c. 950/c. 970 to c.1040/c.1070 the finds consisted of mixed eastern and western coins, some objects, and a great deal of finely fragmented hacksilver. After c. 1040/c.1070 the objects and hacksilver gradually disappeared and the finds were generally characterized by native coins.²⁴

The increased fragmentation appears, as Suchodolski argued, to suggest its more frequent use in economic transactions where the smaller and lighter the pieces, the faster the circulation.²⁵

Kiersnowski felt these findings showed a switch from the use of silver purely for external trade, and that in the period after c. 950, the use of finely cut up objects shows its use in internal trade as well, and by a large number of people. Tabaczynski, however, argued that the cut up silver still reflected foreign trade, but of a far greater level. Only after c. 1070 when the finds generally consist of native coins did he feel that silver had become a medium in local trade.²⁶

Parallels to these Polish finds can be seen in Scandinavia. There too the fragmented hacksilver probably reflects the intensity of circulation.²⁷ It is, however, more difficult to determine whether the increased activity was, as Tabaczynski argued, merely increased foreign trade or, as Kiernowski felt, indicative of internal trade as well. Hårdh in her analysis of the southern Swedish material felt both systems were in operation. Although the economy was probably still based upon self production and use, the new market towns in all likelihood used silver more and more as payment, along with perhaps other media of exchange.²⁸ The distribution of the coin hoards in southern Sweden with a tpq date of 970 to 1040 seems to correlate well with runestones and good agricultural land, suggesting wealth was in the hands of prosperous farmers who may, of course, have also participated in trade. But, as in Poland, the greatest evidence of silver's general use appears later with the establishment of national coinages; only in this period do the finds show a marked inland concentration in southern Sweden.²⁹

The relationship of the hacksilver to coined silver has also been analysed in depth for both Gotland and Sweden, providing some interesting results (see Figure 8.1). In the period up to c. 975 the coins in hoards in both areas were almost exclusively Arabic, although by far the largest numbers have been found in Gotland.

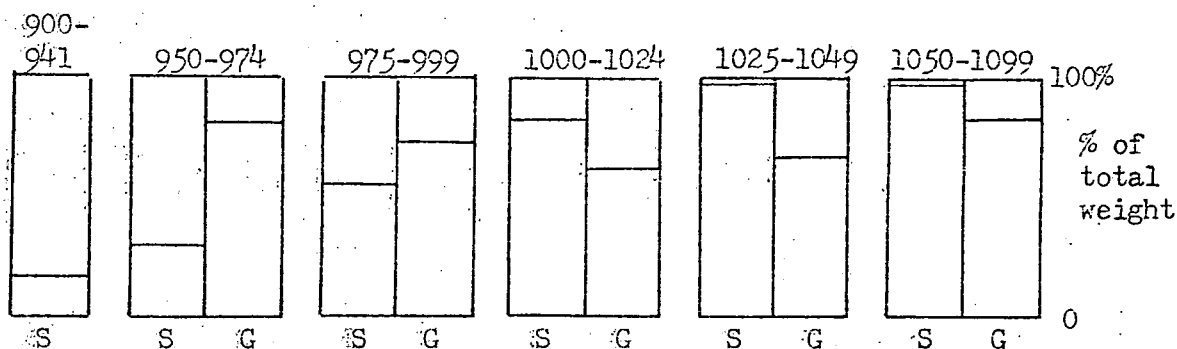


Figure 8.1 Percentages of minted to non-numismatic silver in southern Swedish and Gotlandic hoards. (after Hårdh 1976b p. 130)
(S= southern Sweden, G= Gotland)

Even more significantly, in hoards with a tpq of 950 to 974, 83% of the total weight of silver in Gotlandic hoards was composed of coins while in southern Sweden only 30%. Southern Sweden, however, had a great deal of non-numismatic silver, generally in a very fragmentary condition. In hoards with a tpq of 975 to 999 the Gotlandic percentage dropped to 74% while in southern Sweden it rose to 55%, suggesting that Gotland was then also beginning to have a coined silver shortage due to the decline of the Arabic imports. The period of 1000 to 1024 shows interesting results as well. Now southern Sweden had the greater percentage with 83% of the silver composed of coins, while Gotland had fallen to 64%. Hårdh felt this rise in southern Sweden reflected the influx of German and Anglo-Saxon imports. Gotland as well had a large number of these coins but also widespread use of hacksilver. The period from 1025 to 1049 further accentuated this trend. In this period 99% of the southern Swedish material was in coin while Gotland had remained almost the same with 65%. The southern Swedish material must relate to the beginning of systematic coinage under Knútr and Sveinn Úlfsson; Gotland and the more peripheral areas of southern Sweden such as Blekinge, continued to be supplied with mixed hacksilver and coinage. In the next fifty years Gotland's

percentage rose into the eighties while southern Sweden remained at 99%.³⁰

These figures, however, seem to be based upon all hoards, and not just those where most of the coins and hacksilver analysed were also originally found. This may provide a major source of distortion. In addition, the samples are far less numerous in southern Sweden and hence more sensitive to individual fluctuations. Norwegian hoards have not been subjected to similar study but would appear to be more similar to southern Sweden, with a higher percentage of coins in the eleventh century.³¹ This probably reflects the closer ties with western Europe, especially England where coin, not hacksilver, was the trading medium. Similarly, hoards from the rest of Viking Age Denmark have not been analysed in this manner but presumably reflect the same impulses which affected southern Sweden, particularly with the beginning of coinages by Knútr and the later Danish kings. Sweden in its hacksilver content received impulses from Gotland and Denmark as well as influences from the western Slavic regions either direct or indirect.³² As a result, one would assume its relation of coinage to non-numismatic silver would be intermediate between Gotland and southern Sweden; the fact that a stable national coinage was a late feature would suggest a position more similar to Gotland. However, until similar analysis has been done on Norwegian, Danish, and Swedish hoards as well as a closer examination of the hoards where most if not all of the extant remains appear to constitute the original hoard findings, these comparisons must be treated cautiously.

The coins themselves provide some indications of the important connections of Scandinavia. The analysis depends upon the existing hoards showing a representative sample of the coin imports at the

time. This is a difficult question since the coins surviving for study are only a part of those that were found, which clearly are only a part of those coins concealed or lost. And those coins deposited are, of course, only a part of the coins originally minted. It is, in fact, difficult to know how many coins were minted, both from individual mints or in toto.³³ Various studies have attempted to estimate the output of mints³⁴ but these are obviously hypothetical. However, the number of hoards from this period is so large, it allows general trends to be ascertained, which recent finds have tended to confirm rather than disprove. As a result, one can probably assume the deposition sample is by and large representative.³⁵

In the first half of the eleventh century German and English coins were overwhelmingly the largest groups being imported. Others such as Polish, Bohemian, Hungarian, and Byzantine coins also appeared but in small numbers.³⁶ In some cases they may represent direct contacts, but some of the distant examples were probably the result of redistribution, perhaps via the Slavic regions. Some Arabic coins appear at this late date but relatively few, and they were generally much older than the date of the hoard.³⁷ The German and English coins began to appear in some numbers in the late tenth century but each had its maximum flourishing in the first half of the eleventh century.³⁸ The sheer numbers involved clearly point to important contacts with these countries. However, different patterns of import can be discerned from the English and German coins, both between various regions in Scandinavia and through time.

The greatest number of Anglo-Saxon coins to be imported in the Viking Age are from the reigns of Æthelred and Knútr,³⁹ not surprisingly given the danegeld payments and the later political situation which must have facilitated trade. In raw numbers, the greatest number of Anglo-Saxon coins have been found in Gotland, although for the later period Denmark is a close second (see Table 2). The Danish figures

	ARABIC		GERMAN		ENGLISH		DANISH
	total	$\frac{tpq}{991}$	total	$\frac{tpq}{991}$	total	$\frac{tpq}{991}$	$\frac{tpq}{991}$
Denmark (without Bornholm or S. Sweden)	3300	350	6200	4500	4050	3400	2200
Southern Sweden	1150	130	17000	12600	9200	6600	2400
Bornholm	250	70	3600	3500	525	500	150
total Denmark	4700	550	26800	20600	13775	10500	4750
Sweden (without S. Sweden or Gotland)	10700	12400	11000	7400	4400	3700	500
Gotland	40500	5700	50000	40000	21000	14700	1200
Norway	450	100	3300	3200	3300	3250	300

Table 2: Approximate totals of Arabic, German, English, and Danish coins found in Scandinavia

Note to Table 2: It first must be emphasized that the numbers here are approximate, and can only give a very general idea of imports. The figures are drawn from a number of sources (see Chapter 8 fn. 36), some of which include examples from churches, graves, offering places or single finds. The Danish coins refer to those minted by Sveinn Haraldsson and subsequent kings.

are also interesting in that the southern Swedish provinces of Skåne, Blekinge, and Halland contain almost twice as many as the rest of Denmark. Hatz attributed this concentration of Anglo-Saxon coins to the danegeld payments.⁴⁰

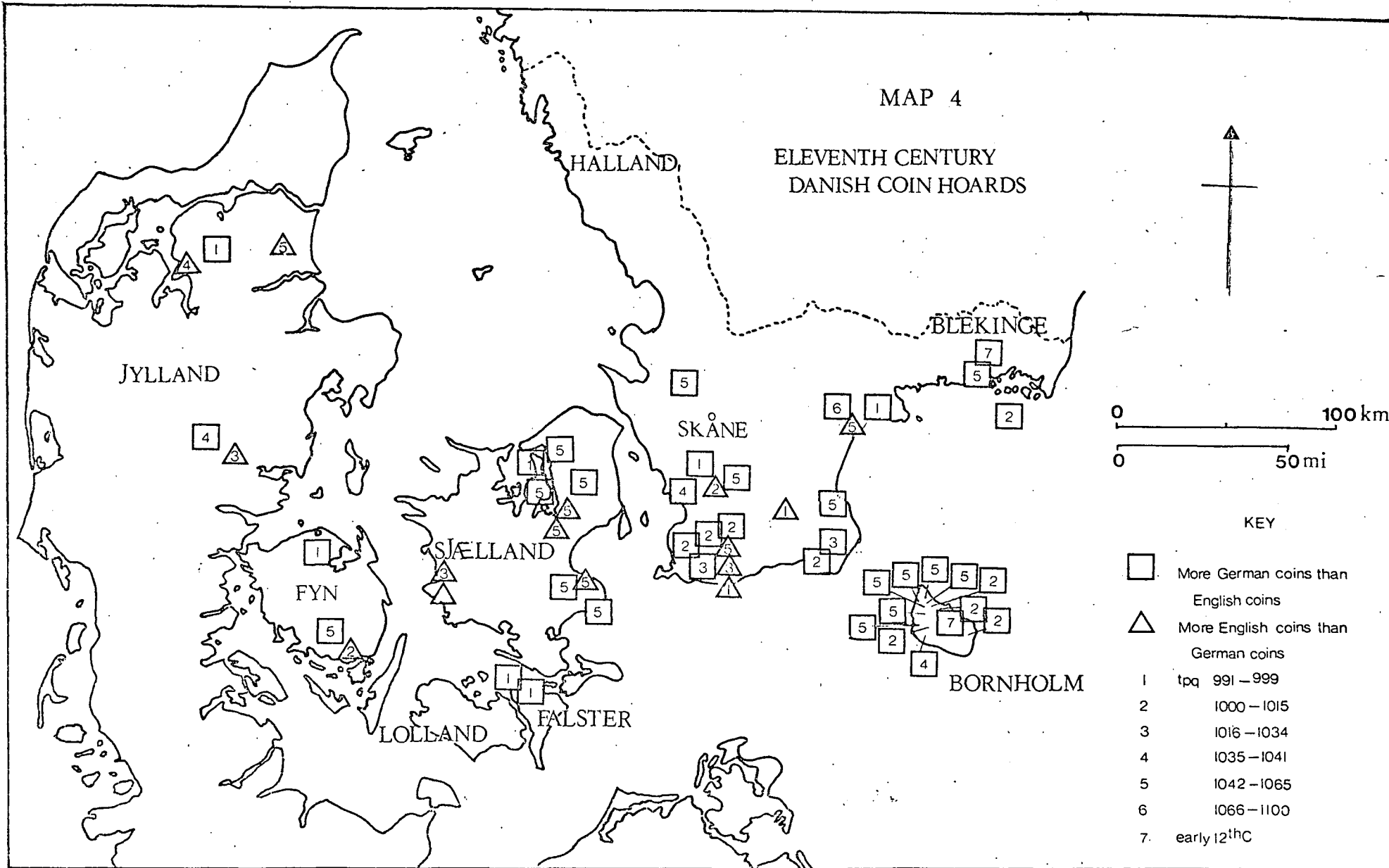
While the vast sums named in the Anglo-Saxon Chronicle, even if exaggerated, suggest some of the concentrations of English coins in Scandinavia resulted from danegeld payments, a closer look at the hoards suggests this cannot have been the only factor. In the first place, in all of Scandinavia there are very few hoards with a tpq date of 991 or later which are composed solely of English coins.⁴¹ In Denmark from the Viking Age as a whole, there is only one such hoard, a small one from Bornholm composed solely of thirty-four coins from Athelred's reign.⁴² Yet the only hoard with exclusively English coins from Sweden, from Länns, Ångermanland, was deposited much later.⁴³ Even in Norway where the hoards contain a high percentage of English coins, none from this period contain only English coins.⁴⁴

A closer look at all hoards where the English coins outnumbered the German also revealed some interesting trends. In general those hoards with a tpq of 1016 or earlier tended to have exclusively coins from Athelred's reign, often in significantly greater numbers than any other kinds of coins.⁴⁵ It must also be noted, however, that even in this period a number of hoards contain an overwhelming number of German coins.⁴⁶ If the bulk of English coins had arrived as danegeld payments, one would expect strong concentrations of Athelred's coins even later than 1016. This does not usually occur, however. Instead the hoards often contain a mixture of coins from a number of reigns, where the largest number often belong to the latest English king.⁴⁷ This mixing of coins from a number of English reigns is also found in hoards where the German coins outnumber the English.

In addition, the composition of the hoards with a tpq of 991

MAP 4

ELEVENTH CENTURY
DANISH COIN HOARDS

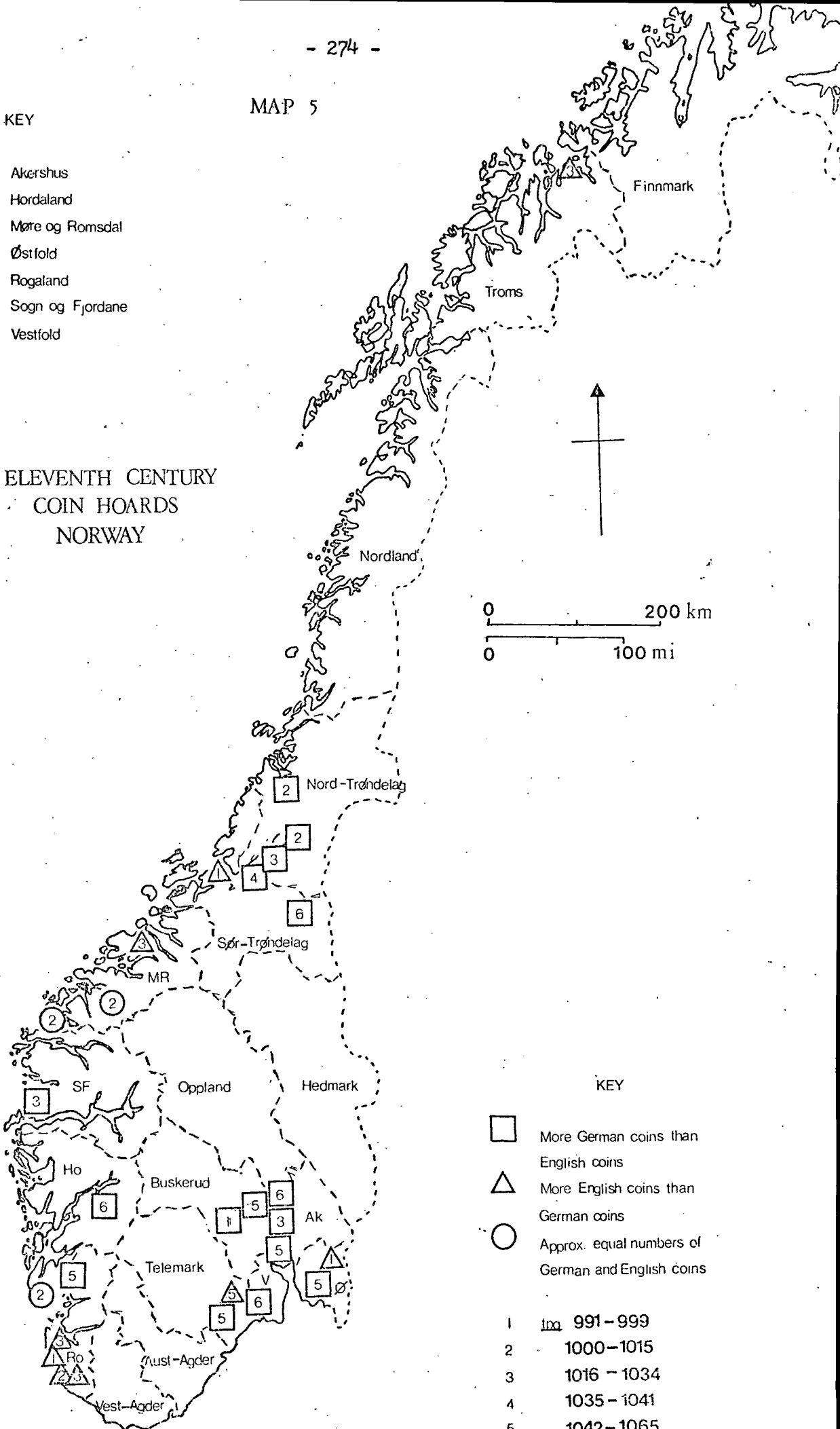


MAP 5

KEY

- Ak Akershus
- Ho Hordaland
- MR Møre og Romsdal
- Ø Østfold
- Ro Rogaland
- SF Sogn og Fjordane
- V Vestfold

ELEVENTH CENTURY COIN HOARDS NORWAY



KEY

- More German coins than English coins
- △ More English coins than German coins
- Approx. equal numbers of German and English coins

- 1 991-999
- 2 1000-1015
- 3 1016-1034
- 4 1035-1041
- 5 1042-1065
- 6 1066-1100

or later is almost always mixed, and often the hacksilver shows further contacts; for example, many of the Danish hoards, even those with a greater number of English than German coins, contain hacksilver of Slavic origin.⁴⁸ As a result, economic factors must account a great deal for the composition of the hoards in this period. Even in hoards with a tpq of 1016 or earlier, they almost always contain coins or objects from other countries suggesting either the English coins had already been in circulation in Scandinavia or they had been mixed with other types current. It is, of course, possible that the danegeld payments also included non-English coins; presumably in trading contacts a fair amount of silver arrived to England, especially from Germany,⁴⁹ and instead of being melted down, these may have been passed on in payments to the Vikings. Such a situation cannot, however, be proven.

In general the importance of trade in the movement of these coins has been somewhat underestimated. In Denmark the largest rise in the number of English and Irish coins appeared in the period from c. 1020 to c. 1050.⁵⁰ While troop payments are a possibility for the arrival of some of these coins,⁵¹ an equally probable explanation would be increased trading resulting from the political connections of England and Denmark. Skåne's greater share in this trade may to a great degree be the result of its geographical position which allowed it to merge the English trade with the Baltic trade, especially contacts with the Slavic regions and Gotland.

Anglo-Saxon coins in Sweden suggest a similar picture to that of Denmark although on a lesser scale. While the invading armies were also composed of Swedes as well as Danes, as the runestones show,⁵² few hoards suggest purely danegeld payments.⁵³ Moreover, the concentration of the finds, as in Denmark, occurs around coastal

areas and waterways, suggesting some trading links.⁵⁴ While many of these areas certainly reflect settlement areas based on good agricultural land, others seem to suggest trading places or sites where resources were quarried.⁵⁵ Unfortunately at present it is not possible to determine the routes these Anglo-Saxon coins took to Sweden but Hatz felt they travelled via trade within Scandinavia from Denmark or Norway.⁵⁶

The large concentration of Anglo-Saxon coins in Gotland is strong evidence for the circulation of coins within Scandinavia.⁵⁷ Whether Gotland traded directly to England and vice versa is impossible to determine from the evidence. However, it is interesting to note that even in hoards where the English coins outnumber the German ones, in many cases the English coins are much older, and it is the Danish coins which are closer to the time of deposit.⁵⁸ This fact, combined with the concentration of Anglo-Saxon coins in southern Sweden and the hoard evidence of contacts between Skåne and Gotland,⁵⁹ suggests at least some of these coins arrived via Skåne or elsewhere in Denmark.

Unlike the rest of Scandinavia, Norway had almost equal numbers of English and German coins, and in some areas, especially southwestern Norway, far more English coins have been found (see Map 5). The distribution and composition suggested to Holst that German and English coins were in general not mixed in another center, for example in Sweden or Denmark, but rather came to Norway via separate routes.⁶⁰ The concentration of Anglo-Saxon coins from hoards dating to the first half of the eleventh century from the western coast, especially Rogaland,⁶¹ is quite striking but just what it signifies is unclear (see Map 5). The German coins of this period are concentrated in Nord-Trøndelag and the inland areas of the Oslo fjord area,⁶² and as a result may be related to trading centers in Trondheim and Oslo. Coins from the Rhineland, Frisia, Saxony, and Franconia pre-

dominate,⁶³ again suggesting a direct import rather than a redistribution from the Baltic regions.

Elsewhere in Scandinavia the German coins are found in by far the greatest numbers (see Table 2). The German empire at this time was very widespread with mints from a large area. Unlike in England, minting rights were not solely confined to the king, but clergy and nobles as well produced coins of differing weights and types. This granting of minting rights occurred widely already in Otto I's time, multiplying in the reigns of succeeding kings. At times, in fact, both a royal issue and an ecclesiastical issue would occur from the same place. Later kings such as Conrad II and Henry III attempted to curtail the number of mints but with little success.⁶⁴ The large number of coins from diverse mints often provides narrow dating parameters and evidence of contacts. Hatz's study of the Swedish material showed the importance of the identification of the German coins in Scandinavia where quite often the German coins provide the tpq for the hoard; as a result, a number of hoards have been redated, although this information is still only gradually filtering into the literature.

It is also noteworthy that far more foreign hoards contain German coins than hoards from Germany itself. In fact, those German hoards with native coins generally have relatively few coins and predominantly of local issues.⁶⁵ As a result, Hatz felt the coins were minted for the long distance trade but within Germany agrarian products sufficed for local trade. He did not accept the view that a similar number were minted and in wide circulation in Germany although not reflected in the record, arguing instead that there had been enough times of stress and other situations which would have led to their deposition and later discovery.⁶⁶ Others hints suggest coined money was used primarily for external trade. For example, Albert of Metz described an attack on Tiel in 1006 where the inhabitants fled, leaving their ^{belongings,}

"praeter pecuniam, quia mercatores erant,"⁶⁷ As a result, Hatz felt that coined money was concentrated in the hands of merchants and nobles, both clergy and laymen, designed for long distance export.⁶⁸

Thus some of the trade routes from Germany to other areas should be discernible in the archaeological record. If each area in Germany exported directly to different places in Scandinavia, one would expect distinct concentrations of coins from separate provinces. However, in general this does not appear to be the case. Certain areas show general trends, as the above mentioned finds in Norway, but there also appears to be a great deal of mixing of German coins, especially in Gotland and Sweden. As a result, Hatz felt they advanced gradually through Germany to centers on the southern Baltic, such as Wolin, where they were accumulated and then re-exported northwards in mixed groups.⁶⁹ Such analysis depends of course upon the mint output since places which produced more coins are more likely to be better represented in northern finds.⁷⁰

Nevertheless, some general trends can be seen when looking at the origin of the German coins found in Scandinavia and the Baltic region. Such study is now possible for Gotland and Sweden as a result of Hatz's in depth study and re-examination of the material; to a lesser extent trends can also be seen in Denmark and Norway. In Denmark the greatest concentration of German coins appeared in 1000 to 1050 when they comprise about 60% of all coins found. The period 1050 to 1066 saw the beginning of the decline, where they fell to 46% (as compared to the Anglo-Saxon and Irish coins which declined to 23% of the total number of coins) and a sharp decrease occurred thereafter with the increase of Danish coins.⁷¹ Skåne and Bornholm especially are rich in German coins suggesting an import via the Baltic sea area. Sjælland as well has a fair number of German coins but, as Map 4 shows, most of these occur in hoards

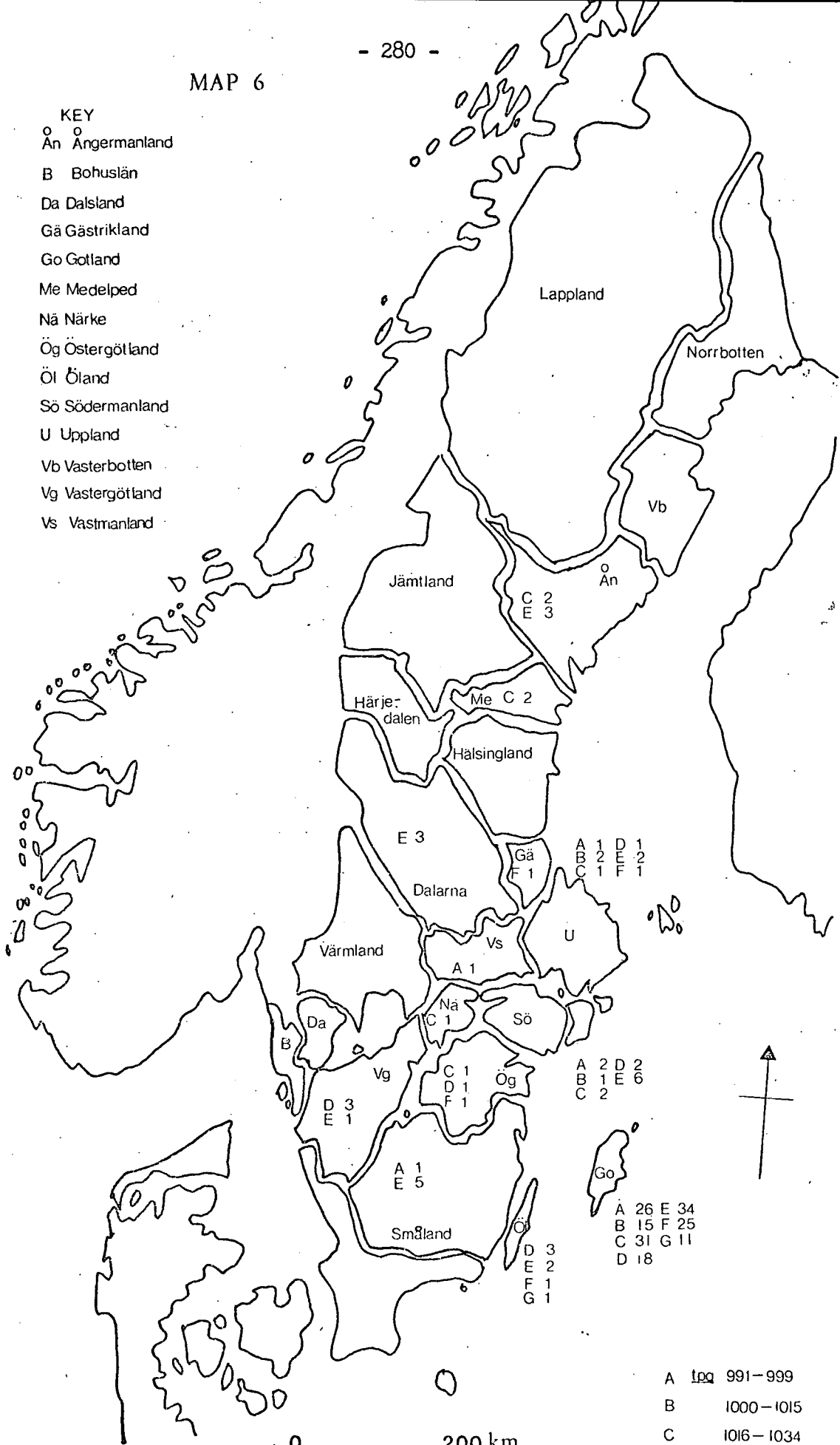
from 1042 to 1066. Far fewer occur in Jylland, especially the northern and middle areas,⁷² but, as Map 4 also shows, far fewer hoards are known from this period in general.

Skovmand noted that eastern German mints are strongly represented in the Danish finds, as well as coins from the Dutch and Lorraine mints. As a result, he saw two major routes to Denmark, one along the Trave and Oder rivers and then across the Baltic, while the other from the Rhine region or Frisia via Sleswig or Ribe. This latter route would account for the prevalence of Köln coins⁷³ although it must be noted that coins from Köln are extremely common throughout Scandinavia;⁷⁴ moreover, Köln had a prolific mint from an early time, and many of the coins found in Scandinavian hoards from there were quite old at the time of deposition, suggesting a long period of circulation.⁷⁵ It is also interesting that relatively few Frisian coins have been found in Denmark despite the use of this route.⁷⁶ In fact, Frisian coins as a whole are found primarily in Russia while only coins from Deventer, Tiel, and Utrecht are strongly represented in Scandinavia and Poland.⁷⁷ As a result, coins from these western German mints may have also arrived from redistribution in the Baltic towns; it is noteworthy that eastern Jylland has no hoards at all from this period, although one might expect some if coins had travelled via Ribe.

The German coins in Sweden intensified at about the same time but in contrast to both Denmark and Norway, continued to dominate finds through the eleventh century.⁷⁸ Their distribution (see Map 6) is decidedly towards the eastern provinces of Sweden, and as remarked earlier, generally associated with either coastal regions or inland waterways.⁷⁹ The lack of hoards in the western areas as well as the eastern province of Hälsingland is puzzling; perhaps the economy was based on perishables or geographical features may have resulted

MAP 6

- KEY
- o Ån Ångermanland
 - B Bohuslän
 - Da Dalsland
 - Gä Gästrikland
 - Go Gotland
 - Me Medelpad
 - Nä Närke
 - Ög Östergötland
 - Öl Öland
 - Sö Södermanland
 - U Uppland
 - Vb Västernorrland
 - Vg Västergötland
 - Vs Västmanland



0 200 km
0 100 mi

- A 991-999
- B 1000-1015
- C 1016-1034
- D 1035-1041
- E 1042-1065
- F 1066-1100
- G early 12th C

in few trade routes through the areas. It may also be due to inadequate preservation since rich hoards are known from tenth century Hålsingland (see Plate 15). The distribution of hoards does, however, emphasize the eastern nature of the trading relationship with the Baltic region. Gotland is by far the most important participant in Sweden and Scandinavia as a whole with an overwhelming number of finds and total number of coins.⁸⁰

In general, the hoards from present day Sweden show a large degree of mixing of coins from various German regions. In terms of absolute numbers of coins, those from Saxony are most common, appearing in 86.6% of the finds but closely followed by coins from the lower Lorraine in 82.7% of the finds. Frankish coins appear in 72.5% of the finds, Swabian coins in 59.2%, and Bavarian in 55.5%.⁸¹ These can be seen to vary over time as well. In the last quarter of the tenth century when German coins began to appear in large numbers in Sweden as a whole, coins from Saxony dominated the finds. In the first quarter of the eleventh century, imports from other German regions remained at about the same number of finds, and the finds with Saxon coins also dropped to that level. The second quarter of the eleventh century saw another massive increase in finds in which the lower Lorraine now dominated, followed by finds with coins from Saxony, Franconia, the upper Lorraine, Swabia, and Bavaria respectively. The third quarter of the eleventh century shows a decline in finds, probably partly the result of fewer foreign coins in Skåne, but the basic hierarchy is almost identical. The last quarter of the eleventh and first quarter of the twelfth century exhibit a further decline with coins from various regions in basically equal numbers of finds, again showing a large degree of mixing.⁸²

When imports from various regions of Germany are compared in the different Scandinavian countries, they often exhibit different peaks through the period. For example, a large number of finds with

coins from Saxony occurred in Gotland around 990 to 1010 with lesser peaks around 1030, 1060, and 1100. The rest of Sweden deviates from Gotland, with its greatest number of Saxon coins around 1030 to 1040, and with smaller peaks around 1000 and 1070. Denmark had the largest number of Saxon coins around 1010 to 1020 with a smaller rise around 1060. Bornholm as well had a large number around 1010 but its other peaks were around 1050 to 1070. Norway had approximately the same number of finds as Denmark around 1010 but steadily declined until it peaked again with Denmark and Sweden in 1070.⁸³

Similar studies of imported coins from the lower Lorraine and Frisian also show differences between the Scandinavian countries.⁸⁴ Many of the peaks are the same, however, suggesting such analysis merely shows the times when most hoards were deposited (compare, for example, the peaks with the hoards divided chronologically on Maps 4-6); in the other periods the coins may have been in use but conditions peaceful with the result that few hoards were deposited. Nevertheless, in some cases, particularly Gotland, differences can be seen between finds with imported Saxon coins and those with imports from the lower Lorraine and Frisia. The fact that many of the Scandinavian hoards do not have all the coins originally found may also produce some distortion in such analysis.

German coins were also massively imported into the Slavic lands; one estimate suggests c. 50,000 German coins from the eleventh and twelfth centuries.⁸⁵ The so-called Sachsenpfennige minted in the eastern German towns was quite common and probably minted expressly for trade, especially in slaves, in the southern Baltic; it appears far less commonly in Scandinavian finds. Coins from Regensburg are also more common in this region, and must have travelled via inland routes as well as along the Baltic.⁸⁶ German coins have also been found east of the Elbe down to Bohemia suggesting further trading

routes;⁸⁷ significantly the number of Bohemian and Hungarian coins, although still relatively small in relation to German coins, is far greater in the Slavic regions than in Scandinavia.⁸⁸

Russian and Finnish finds also contain a number of German coins. The composition of the western Russian hoards resembles closest those from the Slavic areas, suggesting they arrived primarily along this route, picking up Anglo-Saxon coins in Slavic trading areas.⁸⁹ The Finnish hoards with western coins date primarily to the eleventh century and are mainly situated in Karelien (now part of the USSR) and southwestern provinces; this is in contrast to earlier imports, generally of Arabic coins, which were found primarily in Åland.⁹⁰ German coins comprise the largest influx of foreign coins, of which the Saxon and Franconian mints are most represented but coins from the Rhineland and Frisia also appear, the latter especially towards the end of the eleventh century.⁹¹ Goods from Gotland are the most common imported objects, suggesting some of the German coins may have arrived via Gotland.⁹²

The amount of hacksilver and foreign coin in Scandinavia declined towards the mid-eleventh century although the switch to national coinages occurred in different areas at different times. The point where only native coins appear indicates a fundamental change in the economy. It necessitates a strong royal control, with centralization and authority over mints and standards. This process is tied to the formation of towns, and results in much of the trading activities becoming concentrated in towns; for example, most of the hoards and single coins from the second half of the eleventh century in Skåne have been found in towns.⁹³

Such a process was gradual, even within a single country. In Denmark, although Knútr's coinage in Lund may have been used without weighing,⁹⁴ the first real steps to a national coinage appear to have

begun in the latter part of Sveinn Ulfsson's reign; peripheral areas such as Bornholm and Blekinge, however, appear to have taken much longer to adopt the national coinages.⁹⁵ In Norway the change seems to have begun in Haraldr Harthrathi's reign.⁹⁶ Sweden and Gotland, however, continued to import a considerable number of coins and objects throughout the eleventh century.⁹⁷ Poland's national coinage also became established in the second half of the eleventh century.⁹⁸ As a result, at the end of the eleventh century, the only European countries importing coins and thereby providing evidence of contacts in the coins found were the peripheral areas of Denmark, Sweden, Gotland, Finland, Russia, and the Slavic countries with the exception of Poland;⁹⁹ in western Europe, Iceland, Greenland and the Northern Isles were also dependent on foreign coins.¹⁰⁰

Altogether the circulation of coins and hacksilver within Scandinavia and the Baltic shows a lively economic network at work in the first half of the eleventh century. The picture is to some degree biased towards the east since these areas had similar economies based on the weight of payment metal. As a result they tolerated foreign coins and objects which allow one to trace the contacts. The sheer numbers of Anglo-Saxon and German coins suggest trading relations to the west as well, but since hacksilver and foreign coin were generally not accepted in the economy, and the objects in trade were to a great degree intangible or perishable in the archaeological record, the evidence is far less comprehensive for these movements.

Chapter 8: Footnotes

1. Sawyer 1971 pp. 116-7.
2. Hatz 1974 p. 166.
3. Hårdh 1976b p. 157.
4. Hatz 1974 p. 164.
5. Adam of Bremen ii 22 (19).
6. See above Chapter 3 p. 77.
7. Hatz 1974 pp. 115-6.
8. ibid. pp. 107, 115-6.
9. Kyhlberg 1975 pp. 156-7.
10. ibid. p. 160.
11. Lundström, L. 1973 pp. 35, 83.
12. Rasmusson 1966 col. 421.
13. ibid. cols 420-1. The mark and half mark are mentioned in the treaty between Alfred and Guthrum (see Whitelock 1979 p. 416) but significantly Alfred's laws used pounds and shillings (see Whitelock 1979 pp. 407-16).
14. Lundström, L. 1973 p. 82.
15. See Stenberger 1958 p. 229ff, Rasmusson 1966 col. 422, Jankuhn 1972 p. 219, Lundström, L. 1973 pp. 40, 82-3, Hatz 1974 pp. 119-20, Kyhlberg 1975 p. 162, and Hårdh 1975-6 p. 36.
16. Kyhlberg 1975 p. 161.
17. ibid. p. 162; Lundström, L. 1973 p. 82.
18. Lundström, L. 1973 pp. 82-3. See also Graham-Campbell 1975-6 pp. 125-6 and Warner 1975-6 pp. 136-41 for a discussion of ring money and its correlation with weight units.
19. Lundström, L. 1973 pp. 83, 85.
20. Butler 1961 pp. 195, 211-4.
21. Hatz 1974 p. 120.
22. Hårdh 1975-6 p. 37.
23. Jakimowicz 1931 pp. 257-8; Suchodolski 1971 pp. 23-4.
24. Summarized in Lundström, L. 1973 p. 9ff., Hårdh 1976b pp. 17-8, and Hårdh 1977-8 p. 163.
25. Suchodolski 1971 p. 24.
26. See references as in footnote 24.

27. Hårdh 1977-8 p. 171.
28. ibid.
29. Hårdh 1976b pp. 157-8. See also her distribution map of the hoards divided chronologically on p. 163.
30. ibid. pp. 130-2.
31. Skovmand 1942 p. 227.
32. ibid. p. 232.
33. Hatz 1974 pp. 181-2.
34. See e.g. Suchodolski 1971 p. 33.
35. Hårdh 1976b p. 27.
36. For listings of approximate totals of coins found throughout the Viking period see Table 2. For more detail see Skovmand 1942 p. 205 for Denmark in general; Hårdh 1976b p. 32 for southern Sweden; Stenberger 1958 p. 247 for Gotland; Stenberger 1958 pp. 248-9 for Sweden; and Skaare 1976 p. 19 for Norway. See also Hatz 1974 pp. 61-2 for more up-to-date figures on German coins in present day Sweden. For Byzantine coins in Scandinavia see Rasmusson, Holst, and Rosenstock 1957 cols. 429-31. For Hungarian coins in Scandinavia see Huszár 1967 pp. 199-200 and map p. 178. For Bohemian and Polish coins see Zak 1970 pp. 30-1.
37. Rasmusson 1961 p. 4; Skaare 1976 pp. 52-3.
38. Rasmusson 1961 p. 4.
39. ibid. pp. 4-5.
40. Hatz 1974 p. 66.
41. See Appendix III.
42. Skovmand 1942 pp. 19, 213.
43. See Appendix III.
44. Skaare 1976 pp. 22-3.
45. See Appendix III where the tpq is 991 to 1016.
46. See Maps 4-6; for Denmark see table in Skovmand 1942 p. 22.
47. See Appendix for Denmark and southern Sweden. Such exact figures on the composition of English coins were not available for all other Scandinavian hoards.
48. See ibid.
49. Sawyer 1965 pp. 159-60.
50. Skovmand 1942 p. 213.
51. Sawyer 1971 pp. 96-7.

52. Jansson, S. 1965 (1966) p. 11ff.
53. See Appendix III for Sweden.
54. Hårdh 1976b pp. 146, 149, 153.
55. ibid. p. 149ff.; Hatz 1974 pp. 178-9.
56. Hatz 1974 pp. 183-4.
57. Stenberger 1958 p. 261.
58. See Appendix III for Gotland.
59. See above Chapter 7 pp. 248, 250, 252.
60. Holst 1946-7 p. 18.
61. See Appendix III.
62. Hatz 1974 p. 64.
63. ibid.
64. Suhle 1964 pp. 54-5, 57-9, 62-5.
65. Hatz 1974 pp. 135-6.
66. ibid. p. 174.
67. See ibid. p. 173.
68. ibid. p. 174.
69. ibid. pp. 167-8.
70. Compare, for example, the tables in ibid. pp. 43-5.
71. Skovmand 1942 pp. 210, 213.
72. Hatz 1974 p. 64.
73. Skovmand 1942 p. 211.
74. Hatz 1974 p. 43.
75. Suhle 1964 pp. 48, 56; Hatz 1974 p. 45. See also the charts in Hatz of hoards with tpg in the first half of the eleventh century for the wide range of Köln coins in hoards.
76. Skovmand 1942 p. 211.
77. Slicher van Bath 1965 p. 122.
78. Hatz 1974 p. 55. Hatz's figure, however, are for all of Sweden, thus including Gotland and the southern Swedish provinces formerly belonging to Denmark. A breakdown of the number of finds (but not the percentages of German coins found) from the various provinces in the different periods can be found on p. 60. Absolute numbers of coins and the percentages of

German coins for the whole period are shown on pp. 61-2 and p. 63 respectively. His figures also include 15 single finds, 23 gravefinds, 3 offering place finds, and 3 church finds (p. 39), whose distribution through the periods can be seen on p. 76.

79. Hårdh 1976b p. 146; Hatz 1974 p. 59.
80. Hatz 1974 p. 62.
81. ibid. p. 136. Note, however, these figures are again for all of modern Sweden.
82. ibid. p. 42. Again, his figures are for all of modern Sweden.
83. Jamner 1952 pp. 49-50. See also her chart p. 51.
84. See Albrecht 1959 pp. 22-37.
85. Hatz 1974 p. 64.
86. Stenberger 1958 pp. 258-60.
87. Hatz 1974 p. 65.
88. Stenberger 1958 p. 258.
89. ibid. p. 259.
90. Nordman 1942 pp. 273-4.
91. Hatz 1974 p. 64.
92. Nordman 1942 p. 286.
93. Hårdh 1977-8 p. 169.
94. Malmer 1972 (1974) p. 21.
95. Rasmusson 1961 p. 5; Haastrup 1969 p. 131.
96. Skaare 1976 p. 112.
97. Rasmusson 1961 p. 5.
98. Suchodolski 1971 pp. 36-7.
99. Rasmusson 1961 p. 5.
100. See Dolley 1976 pp. 52-4; Skaare 1976 pp. 177-8; Appendix II.

Chapter 9: Archaeological evidence of Scandinavians abroad

While foreign coins and objects found in Scandinavia can show connections, the obverse situation of Scandinavian coins and objects found in foreign contexts is also important. In some cases the evidence shows reciprocal exchanges but at other times it is one-sided. Moreover, as shall be seen, in some cases where written sources show contacts to have existed, the archaeological evidence does little to support this knowledge, while elsewhere where no written sources exist it shows a situation of lively contacts. In some cases the connections can be narrowed down to only Denmark but elsewhere it is only possible to identify contacts with Scandinavia in general. As a result, the evidence of Scandinavian presence from the archaeological record will be examined in this chapter, with specific attention to Denmark whenever possible.

The determination of Scandinavian contacts in foreign countries, especially those without written records, depends to a large degree upon distinctive objects or those which display Scandinavian influence in some way. The nature of these contacts is more difficult to determine, especially from the archaeological material alone. As mentioned earlier, not only trade but also theft, military payments, gifts, ransoms, fines, dowries, or the movements of exiles all resulted in the distribution of goods.¹ However, it does not necessarily follow that the greater the contact between two areas, the more it will be reflected in the archaeological record. Indirect contacts can also distort the perspective when relatively few objects are known. As a result, the culture in which the Scandinavian artefacts appear must be analysed before any tentative conclusions can be made concerning the nature of the Scandinavian presence.

The limitations of the archaeological evidence are clearly illustrated by the lack of finds in Germany. The documentary sources show important diplomatic and religious ties² in the first half of the eleventh century between Denmark and Germany, while the massive importation of German coins reveals a strong economic relationship with all of Scandinavia, yet the reciprocal influences are barely reflected in the archaeological record. This scarcity of Scandinavian objects in Germany is partly to be explained by Christianity which discouraged grave goods and partly by the economic system which did not allow foreign coin and objects, and most probably dealt to a great degree in perishables. A major problem also exists in the range of objects to be compared. Few objects outside of the economic and religious sphere can be seen as distinctly Scandinavian and capable of a dating to the first half of the eleventh century. As a result, the major kinds of evidence available are weapons of types in Petersen's typologies and objects decorated in Scandinavian art styles.

Unfortunately few such objects are known from Germany. Few weapons have been found, and many may have been made in this area, especially those with the Ulfberht or Ingelrîi signatures on the blades.³ The number of objects ornamented in Scandinavian art styles of this period is very small as well. The Bamberg casket, however, would seem to reflect the diplomatic ties of the period. Although generally ascribed to the Mammen style and hence the late tenth century, the quality of the workmanship suggests it would have been valued in the eleventh century; in fact, popular tradition associates it with Knútr's daughter who married Henry III in 1036.⁴

The archaeological evidence is also distorted concerning

England where few Scandinavian finds are known despite the fact the written sources leave no doubt England was profoundly affected by the Danish conquest. The same factors affecting Germany apply to England, also limiting the range of objects available for comparison; in England, however, because of the more intensive involvement, Norse runic inscriptions are also found as evidence of contact. Even though the evidence in total is not that great, it is significantly more than has been found in Germany, an important point since the same economic and religious limitations apply to both places.

Despite the fact that some of the Scandinavians who arrived with the armies must have been pagan, no burials with grave goods are known in England, either because they converted quite quickly or made no effort to see that their fellow pagans were given heathen burials, due perhaps to legal or social reasons.⁵ Stones from London and Winchester with Norse runic inscriptions and ornamentation in Scandinavian styles were almost certainly grave markers for Scandinavians, but both seem associated with Christian cemeteries.⁶ Moreover, the number of such stones is very small, again suggesting that the new Scandinavians adapted to English burial practices quite quickly.

The weapons which one would have expected to find in pagan graves are instead single finds and often from rivers. Their concentration, as remarked earlier,⁷ is mainly to the south, especially London and East Anglia, both of which figured in the battles leading up to the Danish conquests as well as settlements later.⁸ The number of weapons found in rivers is too large to be explained satisfactorily as items lost in battle or accidentally dropped. Many of the examples found are valuable weapons with expensive silver inlays, and, as Wilson noted, could have been

recovered if lost by a competent swimmer. As a result, he argued that these weapons represent "offerings", whether pagan or superstitious, much as pilgrim badges were later dropped into rivers.⁹ It is likely that many of these weapons belonged to Scandinavian men, although it is possible some were traded or given to Englishmen.

The other main indication of a Scandinavian presence in this period is in objects decorated in the Ringerike art style. The number is not overwhelmingly large (see Map 3) but enough have been found to confirm a fair amount of artistic contact. The objects ornamented in such styles, however, are usually of a valuable nature and consequently are little indication of the nature of contact between Scandinavians and English. Some may reflect trade items while others are objects of Scandinavian craftsmen, and some perhaps the work of native artists trying something new. However, in almost all cases there is no way to determine for whom the objects were made, and as a result, the social system they represent. Only the St. Paul's stone, carved in classic Ringerike style upon English stone, and with a Norse runic inscription¹⁰ (Plate 4) suggests a Scandinavian craftsman working in England for a Scandinavian patron. This object alone is corroborative archaeological evidence of the profound social change which must have resulted from the Danish takeover.

Even in Winchester where Knutr appears to have lived¹¹ there is little evidence of a Scandinavian presence at this time. In general the evidence that survives reflects the upper strata of society but even so is not particularly numerous. A stone, perhaps from a frieze in the Old Minster, has been interpreted as representing a scene from the Norse Völsunga Saga, although the stone

is fragmentary and could represent something else. The dating of its context is somewhat vague, but if one accepts the interpretation of a Norse scene, the political probability places it in Knutr's reign.¹² A stone, possibly from the New Minster cemetery, is without any ornamentation but with Danish runes, suggesting a Scandinavian burial in the first half of the eleventh century; unfortunately the stone is fragmentary and the inscription indecipherable.¹³ A hogback found to the east of the Old Minster has also been seen in conjunction with the Scandinavian reigns, but is not as convincing. The hogback has an Old English inscription commemorating Gunni, either Eorl's or the earl's companion.¹⁴ Although both names are Old Norse, the use of Old English does not suggest a thoroughly Scandinavian milieu. Moreover, the context was rather vague, and as a result has been dated both to the tenth¹⁵ or the first half of the eleventh century.¹⁶ Elsewhere in Winchester a metal plate ornamented in Ringerike style was found, perhaps from a casket though often said to be a vane.¹⁷

In excavations in the city only bonework suggests some contact with a Scandinavian area. Fourteen combs and one case of tenth or eleventh century date show similarities with finds from York, Lund, Århus and Hedeby. The fact that only a small amount of waste has been found in Winchester suggests that the combs were imported rather than manufactured there.¹⁸ However, combs in this period suggest widespread manufacturing areas throughout Europe.¹⁹ As a result, there is no way to determine where the Winchester combs were made; the Danelaw has been suggested as one possible source.²⁰

Portable Ringerike decorated objects have been most commonly found in London but elsewhere the examples are mainly found in southern England (see Map 3), suggesting this was the most affected

area. The one possible Ringerike decorated object from York²¹ is little reflection upon the trading connections which continued with Scandinavia. An anonymous Life of St. Oswald dating to around 1000 described York as "'filled with the treasures of merchants, chiefly of the Danish race.'"²² Like York, Dublin also had extensive trading connections in the first half of the eleventh century as shown by archaeological finds.²³ Ringerike objects have also been found in eleventh century contexts, some of which, such as motif pieces, suggest Scandinavian craftsmanship in Dublin itself.²⁴

The Scandinavian objects dating to the eleventh century found further north are also most probably the result of trade, and in most cases probably to people of Scandinavian origin or ancestry. The archaeological finds combined with place-name studies and later written accounts leave no doubt that parts of Scotland, the Northern Isles, and the Isle of Man were settled by Scandinavians who appear to have maintained some contact with the homeland throughout the Viking Age and into the Middle Ages.²⁵ The economy in these areas resembled that in Scandinavia as the hoards with foreign coins and objects show. However, the number of such hoards is not that great in the first half of the eleventh century.²⁶ As a result, it appears that overseas trade was not as important to the economy,²⁷ at least to areas which used coins or weighed silver in exchange. Just how much trade occurred in barter, especially with perishables, is impossible to determine, as is the number of the finds which are the result of self production.

The eleventh century objects from Iceland and Greenland similarly present few surprises. In both cases there is no question of the identification of the cultures as Scandinavian derived; in Iceland, settlement was imposed on virtually virgin

land while in Greenland the only other population consisted of Eskimos.²⁸ As a result, any objects of an eleventh century date are part of the same Scandinavian tradition, although often another regional manifestation. The wooden panels from Mödrufell and Flataungu in Iceland show the mainstream art styles reaching Iceland, although the time lag, if any, is impossible to estimate.²⁹ The many saga references show trading expeditions linking Scandinavia with Iceland and Greenland; even though the sagas are much later, there is no doubt that such journeys frequently occurred in the first half of the eleventh century.³⁰ Similarly, the finds at L'Anse-aux-Meadows in Newfoundland confirm the saga accounts of Norse discovery and settlement of some form in Vinland. The finds are not particularly distinctive for dating but the c-14 dating suggests the settlement could date to the first half of the eleventh century.³¹

The interpretation of eleventh century Scandinavian finds to the east is less straightforward, primarily because of the rarity of written sources. On the other hand, the archaeological material is more comprehensive. In most areas a tradition of burial with gravegoods existed comparable in the eleventh century to Sweden and Gotland. In some cases objects of Scandinavian origin have been found in eastern graves, and their interpretation has been quite a problem. The difficulty lies in determining the ethnicity of a grave, whether it belongs to a Scandinavian who died in a foreign country or to a native who had acquired Scandinavian objects by trade or other means. The form of the burial itself is little indication. As has been mentioned, burial customs varied widely in Scandinavia and almost all are paralleled to the east, often with similar diversity.³² Only in cases of boat burials can a Scandinavian origin be argued,³³ although in

some cases the local population may have adopted the form;³⁴ in any case, none of the eastern boat burials appear to date to the eleventh century.

As a result, the nationality of the burial depends to a great degree upon the objects included with the corpse. All, however, were portable and could have been items of trade. Women's graves with oval brooches are often thought to have a fairly good probability of being Scandinavian, but other areas, notably Finland, had a similar custom.³⁵ Similarly, the inclusion of amulets such as Thor's hammers would suggest a Scandinavian but it is possible these too were adopted by people elsewhere.³⁶ Those graves with mixed finds could either represent a Scandinavian assimilating with the local culture, or a native who had acquired a few foreign objects; this latter interpretation is taken for granted concerning the eastern finds in Scandinavian graves. Hence each grave must be looked at in relationship to the range of contemporary burials in the area in order to attempt any guess of the nationality.

Economic similarities also existed between Scandinavia and many of the eastern areas where coins and objects or fragments were weighed in exchange. As in Scandinavia, balances and weights are known from many eastern areas.³⁷ In many places coins, objects, or fragments thereof have been found in hoards dating to this period. As a result, no one would doubt trading relations existed with countries along the Baltic and to Russia, as indeed is evident from finds from these areas in Scandinavian contexts.³⁸ However, whereas the foreign objects in Scandinavian finds are interpreted as trade items, the Scandinavian objects in some of the eastern finds have often been interpreted to suggest more than simply trading relations, but political control of some sort as well.

The Danish relations with the west Slavic region are a case in point. Danish interest in the area existed throughout the Viking Age. Frankish sources mentioned an attack upon the Wendish Obodrites in 808 by the Danes who destroyed the town of Reric and forcibly resettled its merchants in Hedeby. Other continental sources also suggest continued raiding between Denmark and the Baltic areas throughout the Viking Age³⁹ but the political results of these conflicts is unclear. In the late tenth century the western Baltic area was of some importance to Denmark as shown by the marriages of Haraldr Blätónn and his son Sveinn to Slavic women.⁴⁰ Later traditions such as the Jómsvíkinga Saga, however, suggest the Danes held great political sway in the area, where a military stronghold was founded from Denmark and to all intents and purposes ruled the area.⁴¹ Although many of the features in the Jómsvíkinga Saga have been shown to be fictitious, many scholars have been loathe to give up the idea of a Scandinavian founded outpost of some sort controlling the area.⁴²

The archaeological evidence does not suggest such a dominant position, however. While the example of England clearly shows political conquest could occur and be little reflected in the archaeological record, the Slavic countries are a different case. There the tradition of burial with grave goods and the use of objects in hoards existed, suggesting if the Scandinavian presence was of any magnitude, it should be reflected in the record. In fact, in the period from 800 to 1100 very few graves have any Scandinavian element at all. A couple contain hacksilver derived from Scandinavian objects and similar to those found in hoards.⁴³ These are probably to be viewed as the economic resources of a native in the area. On the other hand, the other grave finds known consist of a few boat-shaped stone settings from a cemetery near

Menzlin. These burials which by their type almost certainly belonged to Scandinavians, are an integral part of the cemetery, suggesting they belonged to inhabitants of the area. Nevertheless, they are in the minority compared to the Slavic burials. Nearby to the cemetery was one of the Baltic trading towns which contained much evidence of trade and craftsmanship. As a result these graves have also been interpreted as belonging to settled Scandinavian merchants in the town;⁴⁴ if, on the other hand, they do indicate a migration of people, the grave evidence shows it was very small and quickly merged into the population.⁴⁵

The number of Scandinavian objects in the western Baltic rose dramatically in the second half of the tenth and the eleventh centuries, as did the number of Slavic imports into Scandinavia. But the nature of the objects, usually fragmented pieces of hacksilver in hoards, combined with the fact that little imitation occurred, again suggest the primary explanation of the contact must be seen as trade.⁴⁶ Excavations have shown the importance of Wolin as an international trading town on the scale of Hedeby. By the end of the ninth century it was already thriving with buildings of laft construction, a number of imports, evidence of craft production, and relationships with the hinterland. The tenth and eleventh centuries saw an even greater development in trade, with the formation of satellite settlements, more substantial buildings, and a wide range of imports;⁴⁷ in short, Wolin was a thriving Slavic trading town benefitting from the new economic connections after the close of the Volga routes. Adam of Bremen waxed most enthusiastically of Wolin, declaring it to be the largest of all European cities, filled with foreign merchants of all nations;⁴⁸ many of these merchants must have been Scandinavians.

Altogether the finds of Scandinavian hacksilver, eleventh century Danish coins,⁴⁹ Scandinavian imports in Wolin,⁵⁰ and similarities in comb production between Wolin and Lund⁵¹ suggest a strong trading connection between Denmark and the west Slavic area, a connection reflected in Scandinavia by some ceramic finds (whether actual imports or merely influence) and hacksilver.⁵² In no way, however, do they suggest the Scandinavians controlled the area. On the other hand, the economic relationship does not explain the later traditions which evolved concerning the Scandinavian presence in the western Baltic. Both archaeology and tradition agree that the period of the late tenth and early eleventh century was one of increased contact. Moreover, the historical information concerning dynastic marriages between the two areas suggests an importance of this area to the Danes. While trade, as shown above, must account for much of the Scandinavian presence, there is another possible reason which would explain some of the finds and the traditions.

A merchant named Ibrahim ibn Jacob travelled in the Baltic c. 965, and therefore at the time when the contacts began to increase. He recorded that the Polish king had a force of 3,000 men which he supported by a tax in coined money payed monthly to his soldiers, and in addition he provided them with clothes, horses and weapons. As a result he possessed a superior military force; Ibrahim noted that one hundred of them were worth ten thousand others.⁵³ Such a force would have had many uses, not least of which would be the protection of the Baltic trading towns against the everpresent threat of piracy. Although no contemporary source mentions any Scandinavians participating in this Polish force, there is evidence of Scandinavian mercenaries at this time and slightly later taking employment in foreign armies,

notably in Russia,⁵⁴ Byzantium,⁵⁵ and England.⁵⁶ The tradition of the Jomborg Vikings also may possibly be based upon such a situation, although later Scandinavian and Icelandic authors have twisted the situation somewhat and have emphasized a superiority which most probably did not exist.

Scandinavian objects dating to the eleventh century which have been found in the eastern Baltic consist mainly of weapons, many of which are decorated in fine Urnes style. In addition, various rings, buckles, and brooches have been found which can be paralleled in Scandinavian finds.⁵⁷ Although many authors have argued that Swedish colonies had existed in the eastern Baltic in the late Vendel and early Viking periods, by the eleventh century the culture appears entirely Slavic.⁵⁸ As a result, the eleventh century Scandinavian finds are best explained as reflecting increased Baltic trade. In general the ties seem closest to Sweden, especially Gotland, a connection further indicated by the distribution of eastern Baltic objects in Sweden, especially Gotland, Öland and the Mälär region.⁵⁹

Finland also seems to have joined this Baltic trading community in the eleventh century. Hoards with western coins are almost entirely confined to the eleventh century, and with a notably different distribution from earlier hoards.⁶⁰ Like the eastern Baltic, a number of the weapons of Scandinavian type are decorated in Ringerike or Urnes style.⁶¹ More specifically, the Urnes ornamentation often most closely resembles that found on Gotlandic objects.⁶² Other finds also point to close connections with Sweden and especially Gotland leading Nordman to feel that the western coins arrived to Finland via Sweden, and most probably via Gotland.⁶³

Finnish hoards also show contacts with Russia⁶⁴ and it is

possible that some of the Scandinavian objects found in Russia arrived via Finland. As in Finland and the eastern Baltic, the greatest similarities are with Gotlandic objects,⁶⁵ a connection similarly reflected by the large number of objects of Russian origin or influence found in Gotland.⁶⁶

The interpretation of the Scandinavian finds in Russia has, as in the west Slavic region, given rise to much debate. The role of Scandinavians in Russia in the ninth and tenth centuries has been argued for years but most scholars would agree that by the eleventh century whatever influences had existed earlier had become assimilated, and one is dealing with a Russian state and culture.⁶⁷ While the cemetery of Gnezdovo featured prominently in the debate of the significance of the Scandinavian presence, no burials with Scandinavian artefacts are this late, nor does it seem likely that the cemetery dated much into the eleventh century.⁶⁸ At Staraja Ladoga settlement finds suggest a settled Scandinavian presence from an early period, and perhaps into the eleventh century.⁶⁹ Some burials in the general area with western European and Scandinavian artefacts have also been dated to the eleventh century, but the grave evidence does not seem to show a pure Scandinavian element at this late date.⁷⁰ As a result, it is impossible to know whether the goods arrived by trade or represent a continued settled Scandinavian occupation, most probably of a merchant nature. In Novgorod a runic stick, combined with a few other finds, do, however suggest some sort of Scandinavian presence.⁷¹

While the number of finds of Scandinavian origin in eleventh century Russian contexts is not as great as earlier, documentary sources suggest substantial contact in this period. Swedish runestones⁷² and Russian sources both tell of men serving as mercenaries in Russia, especially during the reign of Jaroslav.⁷³

The composition of these troops is not entirely clear, but like the troops accompanying Knútr, presumably was made up of men from all Scandinavian countries. Thietmar mentioned "swift Danes" as among Kiev's inhabitants but this has also been interpreted as referring to the Scandinavian troops in general.⁷⁴ The dynastic marriages and movements of exiles are further indication of extensive ties in the eleventh century.⁷⁵

Presumably trade and mercenaries were again the two main types of contact between Scandinavia and Byzantium but neither is reflected much in the archaeological record. The written sources concerning the Varangian guard suggest Scandinavians had a reputation as skilled soldiers, with a fairly high social standing. In Byzantium, their rise as an organized unit probably dates from the late tenth century where as independent mercenaries their loyalty could be assured for an emperor outside of any internal political and social ties.⁷⁶ The archaeological evidence of their presence is almost non-existent. A name inscribed in Norse runes in Hagia Sophia may possibly date to this period⁷⁷ but otherwise little indication remains, probably for many of the same factors affecting the archaeological record in Germany and England.

Nor is much Byzantine influence evident in Scandinavia from this period. Some crosses appear to be of Byzantine origin or influence while other items of jewelry are also known; in many cases, however, the influence or even the objects may have come via Russia. Much of the influence is of a religious nature, continuing into the Middle Ages.⁷⁸ In addition, while the quantity of Byzantine coins in Scandinavia is not that great, some Scandinavian issues do show some Byzantine influence but few are associated with Haraldr Harthráthi; in fact, the largest number were minted by Sveinn Úlfsson in Denmark.⁷⁹ This use of Byzantine

models may be the result of trade expansion but could be due to other contacts. Grierson felt the issues derived from Haraldr's return to Norway with much treasure,⁸⁰ but the documentary evidence of this treasure is somewhat later.⁸¹ While it is possible the impetus for the Danish coinage derived from coins brought back from Byzantium as wages rather than trade, it need not have derived from Haraldr Harthrathi. A hoard from Gotland, for example, with an unusually high number of Byzantine coins would seem to represent the wages of a returning mercenary.⁸²

Although these are the main areas in which Scandinavian contact can be demonstrated, objects have been found elsewhere, but in such small numbers that without written sources it is difficult to maintain that they represent direct trading contact. Some weapons from Hungary and Czechoslovakia resemble eleventh century types and ornamentation⁸³ but it is possible that these were obtained from the southern Baltic. Contact of a different sort is evidenced by the runic inscription carved upon a classical marble lion, originally in Piraeus, but now in Venice.⁸⁴ It lends further confirmation to the Swedish stones which tell of trips to Greece.⁸⁵

As a result, the archaeological record is extremely uneven in its evidence of Scandinavian contacts abroad. In places where written sources show a settled Scandinavian presence, such as England or Byzantium, the archaeological record reveals little confirmation. It is far more useful for contacts to the east, but as has been shown, cannot readily define its nature. With the wealth of Gotland and parts of Denmark in this period, one would expect most of the contact to result from trade, and in fact most objects are best explained as items of trade. Nevertheless, the hints in documentary sources suggest the mercenaries who found employment in England, Russia, Byzantium, and possibly Poland may also have been an important source of contact.

Chapter 9: Footnotes

1. Grierson 1959 p. 131ff. See also above Chapter 3 p.82.
2. See above Chapter 2 p. 48 and Chapter 3 pp. 66-7, 75-6.
3. See above Chapter 4 p. 99.
4. Wilson and Klindt-Jensen 1966 pp. 124-5.
5. See above Chapter 5 p. 152.
6. For the St. Paul's stone see e.g. Shetelig 1948 pp. 102-3.
For the Winchester stone see Kjølbbye-Biddle and Page 1975 pp. 389, 392.
7. See above Chapter 4 pp. 102-3, 109.
8. See above Chapter 2 p. 45ff. for political background.
Although no settlements as such can be identified in these areas, the documentary evidence of possible pre-Conquest dedications to Scandinavian saints (see Biddle and Hudson 1973 Map 3) combined with hints of Scandinavian merchants in the period (see Stenton 1947 p. 533) suggests Scandinavians living in London. Documentary sources also suggest a settled presence in East Anglia; e.g. when Knútr divided England in 1017, East Anglia was given to Thorkell (ASC 1017), and the later relations between Scandinavian monastic foundations and those in East Anglia suggest pre-Conquest contacts (see Appendix I pp. 326-7.)
9. Wilson 1965 pp. 50-1.
10. Shetelig 1948 p. 103.
11. See Biddle and Keene 1976 pp. 289-90.
12. Biddle 1966 pp. 329-32.
13. Kjølbbye-Biddle and Page 1975 pp. 389,392.
14. ibid. p. 391; Biddle 1966 p. 325.
15. Biddle 1966 p. 325.
16. Kjølbbye-Biddle and Page 1975 pp. 390-1.
17. ibid. p. 392.
18. ibid. p. 390.
19. See, for example, the maps in Cnotliwy 1968.
20. Kjølbbye-Biddle and Page 1975 p. 390.
21. A spear socket found outside the city walls. See Kendrick 1949 pl. LXIX 1.

22. See MacGregor 1978 p. 37.
23. Ó Ríordáin 1976 pp. 139-40.
24. ibid. p. 136.
25. Shetelig 1954 pp. 131, 133, 135.
26. See Dolley 1966 p. 52; Appendix II.
27. Graham-Campbell 1975-6 p. 127.
28. Brøndsted 1965 p. 35.
29. Magerøy 1961 p. 156.
30. Jones 1968 pp. 288, 295-7.
31. Ingstad 1977 pp. 38, 133.
32. Strömberg 1961 vol. 1 pp. 48-9.
33. Sawyer 1971 p. 61.
34. See Dejevsky 1977 pp. 12-4.
35. Klindt-Jensen 1970 p. 42.
36. See discussion following Kirpičnikov 1970 p. 77.
37. Hatz 1974 p. 115.
38. See above Chapter 7 p. 249ff.
39. See Blake 1962 pp. xi-xiii.
40. See above Chapter 2 pp. 37-8.
41. Jomsvíkinga Saga ch. 15. For other traditions see Cross 1930 pp. 118-20 and Campbell 1946-53b pp. 7-8.
42. E.g. Cross 1930 p. 118, Stenton 1947 p. 369, Blake 1962 p. xi.
43. Zak 1975 (1977) p. 49.
44. Herrmann 1980 p. 199.
45. Zak 1975 (1977) pp. 49, 51.
46. ibid. p. 49-50.
47. Filipowiak 1975 p. 197ff.
48. Adam of Bremen ii 22 (19).
49. Zak 1968 pp. 282-5.
50. Filipowiak 1975 p. 199.

51. Blomqvist 1975 p. 134; Wilde 1953 p. 82.
52. Zak 1970 p. 34.
53. See Herrmann 1980 p. 202.
54. Jansson, S. 1962 p. 38.
55. Benedikz 1969 pp. 23-4.
56. Hollister 1962 p. 11ff.
57. Nerman 1929b pp. 63, 120.
58. E.g. see Nerman 1958 p. 181ff.; zur Mühlen 1975 pp. 14-6, 51.
59. Nerman 1929b pp. 146, 156, 160, 180.
60. Hatz 1974 p. 64; Nordman 1942 pp. 273-4.
61. Graham-Campbell 1980 p. 73. See also many of the weapons illustrated in Leppäaho 1964 Tafeln 33-55.
62. Nylén 1973 pp. 166-7.
63. Nordman 1942 pp. 283-4, 286.
64. Nordman 1924 pp. 74ff., 90.
65. Nerman 1929a p. 11ff.
66. Stenberger 1958 pp. 244-5.
67. E.g. Jones 1968 p. 264; Birnbaum 1978 p. 25.
68. For a discussion of recent Soviet literature concerning Gnezdovo, including the dating of the site, see Dejevsky 1977 pp. 8-15. See also Sawyer 1971 pp. 62-3.
69. See Dejevsky 1977 pp. 15-21; Liestøl 1970 pp. 122-3; Davidan 1970 pp. 89-90.
70. See Dejevsky 1977 pp. 20-1. See also Kochkurkina 1973 Table 1 (note the late dating of Petersen's types), Table 3, Table 4, Table 5 (especially columns 39-42), Tables 9-13.
71. See Dejevsky 1977 pp. 22-3.
72. Jansson, S. 1962 p. 38; Liestøl 1970 p. 129.
73. Birnbaum 1978 pp. 18-21.
74. See ibid. p. 23 fn. 36.
75. See above Chapter 2 pp. 43-4, 53.
76. Benedikz 1969 pp. 23-4.

77. Liestøl 1970 p. 126.
78. Andersson, A. and Blindheim 1957 cols. 431-2, 442-3.
79. Skaare 1976 pp. 67-8.
80. Grierson 1959 p. 136.
81. Adam of Bremen Schol. 83 (84) but see on this Skaare 1976 p. 66, also fn. 271.
82. From Oxarve, Hemse sn. See Appendix^{III} under Gotland.
83. Paulsen 1933 pp. 30-1, 36ff., 52ff.; but see also Bakay 1967 p. 171 and Nordhagen 1974 p. 43.
84. Brøndsted 1965 p. 210.
85. Jansson, S. 1962 p. 19.

Conclusions

The sources available for the study of Danish connections in the period from 1000 to 1066 are diverse in nature, each with its own emphasis and limitation. The written sources are almost all from western Europe, especially England; as a result, they only touched on Danish or Scandinavian affairs when they were relevant to the author's main thesis. Consequently, political, religious, and occasionally economic matters were recorded, at least in relation to the west. The archaeological evidence at times confirms these sorts of relations with the west but more generally provides evidence of economic connections. In addition, the archaeological evidence supplies much of the information available concerning connections to the east, again primarily in an economic sphere, but of greater ease in comparison since both Denmark and most of the eastern areas had a weight money economy.

For contacts within Scandinavia, little documentary evidence is of much help. Throughout the first half of the eleventh century Denmark was clearly closer to Norway than Sweden in a political sense. Knútr held Norway briefly with Denmark, while Magnus later appears to have held Denmark with Norway.¹ There is also the runestone from Egå in Denmark raised to Manni who was land steward to Ketill the Norwegian,² thereby showing a Dane could find employment with a Norwegian. The runestones from Norway and Sweden raised to men who had served with Knútr show the opposite side.³

The archaeological evidence adds an interesting perspective to these inter-Scandinavian contacts. The finds of steatite in many Danish settlements show a trading relationship with Norway during this period.⁴ This economic relationship, however, is little reflected in the hoards. Although each country appears to have had a weight

money economy, there is little correspondence in the composition of the hoards. Both contain high percentages of German and English coins but Norway, unlike the rest of Scandinavia, has about equal numbers of English coins, and in some regions, an even greater number. While it is possible these English coins are the result of redistribution, they could just as easily have arrived direct from England.⁵

In fact, the objects from Danish hoards show a participation in the eastern Scandinavian trade to Sweden and Gotland, and on a fairly large scale. The use of Danish objects and some redistributed foreign objects in Gotlandic hoards throughout this period show continued contacts, as in fact do Gotlandic objects and redistributed eastern objects in Danish hoards. From the hoard evidence Sweden appears to have linked into this network, drawing from both.⁶ Sweden's return for this silver may well have been in the form of raw materials such as iron, or some luxury goods such as furs.⁷ The hoard evidence suggests Norway was to some degree outside of this network, or at least dealt in goods which did not leave their mark in the archaeological record.⁸

The foreign contacts of Denmark are in many ways easier to document but the different kinds of evidence show different contacts. In many cases it is impossible to narrow down the evidence to merely Denmark, but whenever Scandinavia in general is suggested, the likelihood is that Denmark was included, either directly or indirectly via another Scandinavian country. Similarly, the foreign connections evidenced may have been direct or via another foreign country, or even a combination of the two. The exact routes of contact are therefore difficult to discern in such a widespread operation. Moreover, as the sources indicate, the situation was not static but shifting with political alliances and affairs, religious tug of wars, and economic supplies.

The Danish takeover of England is just one more cog in the shifting political changes of the time. As Sawyer has pointed out, the wealth of England in the eleventh century must have been an attractive incentive. It provided not only rich trading connections and a supply to plunder, but also well paid opportunities for mercenaries, both in terms of bribes to leave England alone and employment on the English side.⁹ That the contact led to conquest rather than simply trade and peace payments is partly due to cultural affinities based on previous Scandinavian contact and partly on the disintegration of political control which Sveinn and Knútr, two very competent soldiers, seized upon. In fact, had it not been such skillful men as Sveinn and Knútr, it is debatable whether the situation in England would have led to conquest despite the internal difficulties in England.

Although a fair amount of evidence survives, it is ambiguous enough to provoke completely diverging opinions concerning the effect of this political union. Some authors, for example, have argued England was little influenced by the takeover, but nevertheless had a profound influence upon Scandinavia,¹⁰ while others have emphasized the relationship as one of give and take to both countries.¹¹ Much of the problem in interpretation arises from the unevenness of the sources, and too little attention paid to the emphasis and limitations of each. Unfortunately, some types of evidence such as place-name or linguistic studies cannot provide dating parameters narrow enough to be attributed to this phase of Scandinavian influence.¹²

The written sources dealing with this situation are generally English, providing information of political and religious affairs in England and to a lesser degree in Scandinavia. In governmental affairs the Danish kings do not appear to have instigated great changes, but as Stenton pointed out, their influence has probably

been underestimated.¹³ Institutions such as the staller and house-carles were most probably brought over with Sveinn and Knútr while the status of the earl appears to be a Scandinavian reinterpretation of the ealdorman.¹⁴ The political probability suggests various legal terms which show Scandinavian influence perhaps date to this period, although it is impossible to date their introduction into the legal system this finely on linguistic evidence alone.¹⁵

Whether or not the English administrative system had a major impact in Denmark is impossible to determine. The written sources are so late that the evidence could indicate post-Conquest contacts.¹⁶ The English did have a major effect on eleventh century coinages in all of Scandinavia, but the first attempts where the moneyer Godwine minted in Denmark, Norway, and Sweden, date to before the conquest of Sveinn, and thus are a product of a separate motivation.¹⁷ From the evidence, the administrative contacts resulting from the Danish takeover of England were probably a situation of give and take to both countries whereby Knútr took over the English system, adding only the features he felt lacking, and in Denmark adding those features such as an organized minting system, which could be grafted to the existing set up. Although we know little of the Danish administrative system, to change more than a few features would have been difficult, especially trying to implement them from a distance.

There is no doubt that Denmark and the rest of Scandinavia were on the recipient end of religious influence. These religious ties not only provided a coherent church set up but also were important to the administration, contributing some of the administrative officials.¹⁸ Despite the political ties between England and Denmark, the English influence upon the Danish church organization does not appear as great as that exercised by Germany. Although our major source for this, Adam of Bremen, was clearly biased towards the German church, the

lack of references in English sources suggests it is by and large true. Even Knútr was unable to bring the Danish sees under Canterbury's jurisdiction. The English influence, however, must have been felt more on a "grassroots" level; even Adam of Bremen mentioned a number of English missionaries at work throughout Scandinavia.¹⁹ It is true some English influence can be traced in the church and administration in Scandinavia, particularly Norway, but most can be attributed to post-Conquest contacts as well.²⁰

The written sources also hint of other contacts which resulted from the political union. The institution of the housecarles provided employment for Scandinavian mercenaries in England.²¹ The reverse situation can also be seen where English soldiers fought with the Danish troops. For example, the Anglo-Saxon Chronicle recorded the presence of Englishmen fighting alongside the Danes during Knútr's campaigns against the Swedes and Norwegians.²² It is also possible that some Englishmen became members of the Varangian guard in Byzantium before the Norman Conquest, as they did after the Conquest; the Scandinavians with their long history of employment in Russia and Byzantium were most probably responsible at least for the knowledge of such employment opportunities if not the actual contacts.²³

The written sources also hint at the trading activities which must have increased with the political union, but very few references are specific in mention of trade with England in this period.²⁴ As a result, one would expect the archaeological evidence to fill in this gap, but in fact the evidence is quite sparse. The reasons for this scarcity result from the limitations of the evidence itself.²⁵ Since grave goods do not appear, nor objects in the economic system, the range of archaeological objects which can document contacts is severely limited, confined mainly to Norse runic inscriptions, Scandinavian objects capable of typological or stylistic dating, or objects

similar to ones found in Scandinavian settlements but rare enough not to be thought local production. Unfortunately many objects, especially from settlements, have a wide chronological and geographical range, as indeed do architectural features.²⁶ Consequently the amount of evidence which displays contact between England and Denmark or even Scandinavia in general for the period 1000 to 1066 is quite small.²⁷

There is little evidence of English influence in Denmark either. Nevertheless, the large influx of English coin through the whole period shows a trading relationship must have occurred; the scarcity of Danish objects in England suggests much of the return presumably was in perishable items. Danegeld payments and army wages must have accounted for some of these coins as well, but the composition of hoards suggests that the economic factors were most important.²⁸ Few objects found in Scandinavia display English affinities. The ornamented stirrup plates from the grave at Velds are unique to Denmark,²⁹ but the scarcity of burials with grave goods from this period suggests other similar objects may have arrived but not been buried with the corpse any longer.

Similarly the archaeological evidence from settlements may be distorted. The archaeological levels for Hedeby are much disturbed in this period, and Hedeby's status is unclear, especially vis-a-vis Sleswig. Other towns with the exception of Lund either present dating problems or hitherto now have revealed little information.³⁰ Lund has excellent preservation and dating possibilities, but unfortunately the nature of the finds suggests it was not an international trading center; those objects of foreign origin display greater affinities to the east rather than the west, however.³¹ Nevertheless, a few objects such as an ivory strap end suggest English or English influenced manufacture while a collection of objects has been attributed to an

English ecclesiastic.³²

Elsewhere in Skåne a few objects also seem to have been made in England or based on English prototypes. For example, a few round brooches with bosses and engraved lines known from Skåne and Sweden are most similar to late Saxon disc brooches.³³ The brooch from Äspinge (Plate 5 no. 17) has been attributed to England as well,³⁴ but can also be seen as purely Scandinavian work.³⁵ The decoration on a few swords from Skåne has also been traced to English styles.³⁶

Altogether, the number of objects found in Denmark, and in fact Scandinavia as a whole, which display English connections in this period is quite small and little indication of the range of contacts that must have existed. The scarcity of objects in the archaeological record is not that surprising, however. If, as seems most likely, the trade to Denmark was predominantly in coin, the only objects one would expect are insignificant personal objects such as the round brooches with bosses, or ornate objects such as the Lund group which reflect diplomatic and religious exchanges. The prevalence of Skåne in this concentration is probably not significant but rather a reflection of greater archaeological preservation and excavation, as well as the general economic importance of Skåne in this period.

The archaeological evidence also does not reveal the strength of the Danish connections with Germany which from documentary sources are known to have occurred in this period. The written sources, for example, show the diplomatic contacts which Knútr fostered between Denmark and Germany.³⁷ Germany in the first half of the eleventh century was at the height of its power, possessing a widely spread empire with connections throughout Europe.³⁸ In fact, the Scandinavian conquest of England brought closer ties with Germany for England,

ties which continued after the death of Hörthaknútr.³⁹ In Denmark the political alliance of Knútr's daughter to Conrad's son resulted in the border province between Germany and Denmark moving back into Danish hands.⁴⁰

The increased religious and political ties must have resulted in cultural exchanges. For example, the Bamberg casket is best seen as a product of increased diplomatic contact.⁴¹ Some of the new artistic elements appearing in the Mammen and Ringerike styles came to Scandinavia from Ottonian art, merging in Scandinavia, and possibly Denmark, with elements and compositional schemes derived from Anglo-Saxon art.⁴² Similarly the prototype of the portraiture on Danish and English seals may have derived from Germany, but their form with two wax faces was probably either Knútr's own invention or an early Anglo-Saxon form.⁴³ This amalgamation of elements from two areas combined with the native traditions shows the multiple routes of influence which co-existed at this period.

The vast number of German coins found in Denmark and the rest of Scandinavia shows that important economic relations must have existed. As with England, there is little indication of what was traded in return and one must postulate perishable goods such as ivories, furs, raw materials, and even slaves both direct to Germany and via intermediate stations on the Baltic.⁴⁴ The major silver supplies of the time came from the Harz mountains within Germany.⁴⁵ In Scandinavia, silver was necessary not only in economic transactions but also as a raw material for objects and inlays; consequently this German supply was of great importance to Denmark and the rest of Scandinavia.

As a result, it is understandable why most of the objects which indicate contact between Germany and Denmark also consist of coin rather than other forms. A few insignificant objects appear in the hoard record such as imitation coin brooches and round engraved

brooches with beaded borders which suggest German or German influenced manufacture.⁴⁶ Otherwise the major indication of importation is quernstones from the Rhineland region found in many Danish settlement sites;⁴⁷ interestingly, these appear within Scandinavia almost entirely in Denmark.⁴⁸ The blades on many swords, particularly those with the Ulfberht and Ingelrii inscriptions, were probably imported from Germany as well.⁴⁹

Much of this German trade probably arrived via southern Baltic trading centers; it seems that many of the German coins were mixed in these towns and then redistributed northwards.⁵⁰ The importance of the western Slavic areas to Scandinavia, and Denmark in particular, has been a rather underrated connection, partly because it appears almost entirely in the archaeological record. Documentary sources, however, provide a number of hints of the importance of the west Slavic regions in the late tenth and eleventh centuries. Adam of Bremen felt the area important enough to describe in detail; surprisingly he spoke favorably of a number of tribes such as the Sembi or Prussians despite the fact they were still heathen and had earlier martyred Adalbert.⁵¹ In addition, his most lavish praise for any town went to Wolin, again even though Christianity was only tolerated there as long as it remained private.⁵² The flurry of dynastic marriages and military alliances between Scandinavian, especially Danish, rulers and Slavic nobility in the late tenth centuries onwards also suggests the area was of some importance to Scandinavian kings.⁵³

The thriving economic connections between Denmark and the Slavic region are obvious from finds in hoards and settlements. The hacksilver of Scandinavian origin found in hoards from this Slavic region is primarily of Danish origin where national distinctions can be made.⁵⁴ Similarly, in Danish hoards Slavic hacksilver is commonly found,⁵⁵ and often in hoards of earlier date than else-

where in Scandinavia; consequently some of the Slavic hacksilver found in Sweden and Norway may have been redistributed from Danish centers.⁵⁶ The importance of this trade to Denmark is also shown by similarities in comb production,⁵⁷ and the many finds of Slavic and Slavic influenced pottery in Danish settlement sites. Some of this pottery was made in Denmark after Slavic prototypes, but others, as shown by the bottom stamps, must have been imported.⁵⁸

The nature of the Danish and Slavic relations has been the subject of some discussion. Later traditions record a Danish military outpost in the Slavic region with much political influence in Haraldr Blátönn's reign, but no contemporary sources mention such a situation, nor do the archaeological finds support such a view.⁵⁹ In fact, the majority of the archaeological finds from this time are best explained in an economic perspective,⁶⁰ related to the shifting silver supplies in the second half of the tenth century. As the Arabic silver became less available, due in part to the closing of the Volga route,⁶¹ the western Slavic towns provided new routes via their rivers as well as linking into the new silver supplies of the Harz mountains in Germany.⁶² As a result, the Slavic towns were well placed to deal with both the east-west and the north-south trade.

Within Denmark, the two areas best situated to take advantage of this trade were Skåne and Bornholm. The number of rich hoards in both areas shows a large amount of wealth concentrated in these areas. Adam of Bremen described Skåne as well populated, and rich in crops and merchandise,⁶³ a prosperity which excavations and hoards have confirmed.⁶⁴ The character of Bornholm in this period is less clear. In the ninth century when Wulfstan made his trip from Hedeby to Truso, Bornholm had its own king,⁶⁵ but by the eleventh century cultural affinities suggest the island was under Danish rule or at least influence.⁶⁶ Moreover, Adam's account of "Holm"⁶⁷ mentions

an important trading area with the most famous port in Denmark, and ties to the Slavic areas and Greece. Although this has been equated with Gotland, the geographical description would fit Bornholm better;⁶⁸ certainly the number of rich hoards, some of which have a relatively high percentage of Slavic hacksilver⁶⁹ lend weight to such an attribution. Hopefully future excavation will reveal more of Bornholm's character and relations in this period.

Although Adam noted that the Danes also travelled the length of the Baltic, even to Russia,⁷⁰ the runestones and archaeological evidence suggest this relation was exploited primarily by Sweden and Gotland. A large number of Swedish runestones tell of journeys to the east in general, and more specifically to various countries on the Baltic, towns in Russia, and even further south to Greece and the Arabic lands.⁷¹ The archaeological evidence leaves no doubt of the importance of Gotland in this trading relation, with an overwhelming number of silver coins and objects found in hoards, graves, and even settlements. Surprisingly, Adam does not mention Gotland by name, despite the fact Wulfstan's account shows the name was current before the eleventh century.⁷² The large number of eastern Baltic and Russian objects in Gotlandic hoards are often in greater numbers and in hoards of an earlier date than elsewhere in Scandinavia, suggesting Gotland redistributed much of this trade in the first half of the eleventh century.⁷³ Finds from Sigtuna also show eastern connections suggesting that, like its predecessor Birka, it also dealt directly with the eastern Baltic and Russia.⁷⁴

Although finds in Finland, the eastern Baltic, and Russia suggest greater affinities with Gotland and Sweden,⁷⁵ the rest of Scandinavia must have participated in the eastern connections. The Russian and Byzantine sources show the employment of Scandinavian mercenaries, including the Norwegian Haraldr Harthrathi in the Varangian guard.⁷⁶ Thietmar mentioned "swift Danes" in Kiev, although this may refer

to the Scandinavian troops in general.⁷⁷ Further Norwegian ties are indicated by Óláfr Helgi and his son Magnus who spent their years in exile in Russia. Similarly, both the Norwegian and Swedish royal houses made marriage alliances with the Russians.⁷⁸ While Danish diplomatic ties were not as strong per se, the shifting political union between Denmark and Norway, and the intermarriage within Scandinavian royal houses must have resulted in some interaction.⁷⁹ Even if the far eastern contacts with Denmark were indirect, they were nevertheless influential. Some objects from Danish hoards suggest Byzantine imports or prototypes⁸⁰ while some of the coinage of Sveinn Ulfsson was based on Byzantine models.⁸¹

The scope of Danish connections in the period 1000 to 1066 was clearly quite large, drawing upon trade, military travels, church ties, and political interaction. All played their part, bringing different types of influence, and with varying effects. Trade at this time was especially important with the Baltic countries, especially the west Slavic area, and with Germany for silver; the rest of western Europe undoubtedly participated, but is less evident in the archaeological record. The church organization, however, derived primarily from Germany and to a lesser extent with personnel from England. Nevertheless, a strong English connection in both trade and religious ties is evident in the post-Conquest period,⁸² and its roots must be seen back into the first half of the eleventh century. Politically, the ties with England and Germany must be seen as most important although little reflected in the archaeological record.

The Danish contribution to these areas is also difficult to assess from the archaeological record alone. The hoards and settlement finds show that it was an important cog in a vast trading network. By extending its political ties, it also drew England far more

closely into the economic eastern links, providing greater access to the Baltic and from there to Byzantium. In addition, the forging of close ties with Germany benefitted England as well, since England must have been dependent on Germany for its silver supplies.⁸³

As a result, the period from 1000 to 1066 saw a great expansion in Danish connections both east and west, resulting in influences moving in a number of directions, both directly and indirectly. Consequently, it is too simplistic to view, as has been done,⁸⁴ the effect of the Danish invasion of England as resulting in a one-sided exchange; politically and economically England gained by this takeover. In return, the church with its English and German influence aided the Danish monarchy by lending it skilled officials, moral sanction, and a wide communication network throughout Europe. Economically England continued to influence coinage in Denmark, and in fact the rest of Scandinavia. As a result, Denmark in 1066 had been drawn more firmly into the European mainstream, well on the way to a coined money economy. Although this western European connection was undoubtedly important, the eastern ties cannot be downplayed simply because few written sources provide comparable details of these areas. The archaeological evidence here provides an important indication of a significant connection to Denmark in the first half of the eleventh century. Consequently, the position of Denmark was not isolated at all in this period, but through the varied networks operated in a give and take situation over much of Europe.

Conclusions: Footnotes

1. See above Chapter 2 pp. 49, 51.
2. Jacobsen and Moltke 1942 cols. 144-5.
3. Jansson, S. 1965 (1966) p. 14.
4. Skjølsvold 1961 pp. 130-1.
5. See above Chapter 8 p. 276.
6. See above Chapter 7 p. 252.
7. Hatz 1974 pp. 177-8.
8. See above Chapter 7 p. 249.
9. Sawyer 1965 p. 145.
10. E.g. Brøndsted 1965 pp. 320-1.
11. E.g. Barlow 1963 pp. 14-5.
12. Cameron 1961 p. 75; Björkman 1902 vol. 2 p. 280.
13. Stenton 1947 p. 408.
14. See above Chapter 3 pp. 71-5.
15. Olszewska 1928-36 p. 233ff.
16. See above Chapter 3 p. 75.
17. ibid. p. 77.
18. Barlow 1963 pp. 4-5.
19. See above Chapter 3 pp. 66-7.
20. See Appendix I.
21. Hollister 1962 p. 12.
22. ASC 1025 E (F).
23. Fell 1974 p. 179.
24. See above Chapter 3 p. 81 but see also Chapter 9 p. 294.
25. See above Chapter 9 pp. 290-1.
26. See above Chapter 6.
27. See above Chapter 9 pp. 291-4.
28. See above Chapter 8 pp. 272, 275.
29. Brøndsted 1936 pp. 103-4.

30. See above Chapter 6.
31. ibid. pp. 167-70.
32. Blomqvist and Mårtensson 1963 pp. 190-1, 213ff.
33. Hårdh 1976b p. 97.
34. E.g. Holmqvist 1951 p. 49; Hårdh 1976b p. 73 felt it was after an English model.
35. See above Chapter 4 p. 118.
36. Strömberg 1961 vol. 1 pp. 138-40.
37. See above Chapter 2 p. 48.
38. Barlow 1963 p. 16.
39. Stenton 1947 p. 402.
40. ibid.
41. See above Chapter 9 p. 290.
42. Fuglesang 1978 pp. 210-1.
43. Harmer 1946-53 pp. 127, 139-41; Barlow 1963 p. 128.
44. Hatz 1974 pp. 177-9.
45. Sawyer 1965 p. 160.
46. Hårdh 1976b pp. 96-7.
47. See above Chapter 6 pp. 162, 164-5, 172, 173.
48. Graham-Campbell 1980 p. 18.
49. Nordhagen 1972 col. 524.
50. Hatz 1974 p. 167.
51. Adam of Bremen iv 10-3, 17-20.
52. ibid. ii 22 (19).
53. Zak 1975 (1977) p. 52. See also above Chapter 2 pp. 37-8, 54-5.
54. Zak 1967 vol. II pp. 397-8.
55. Zak 1970 p. 30.
56. See above Chapter 7 p. 250.
57. Blomqvist 1975 p. 134.
58. Stenholm 1976c pp. 255-8; Ohlsson 1975-6 pp. 134, 138-9.

59. See above Chapter 9 p. 297.
60. ibid. pp. 297-300; Zak 1967 vol. II. pp. 398, 400.
61. Sawyer 1971 pp. 197-8.
62. Hårdh 1976b p. 157; Hatz 1974 p. 164.
63. Adam of Bremen iv 7.
64. See above Chapter 6 pp. 167-70, 174 and Chapter 7 p. 250.
See also Strömberg 1961 vol. 1 p. 190ff. and Hårdh 1976a.
65. See Sawyer 1971 p. 35.
66. Strömberg 1961 vol. 1 p. 46; Brøndsted 1965 p. 23.
67. Adam of Bremen iv 16.
68. Tschan 1959 p. 197 felt it referred to Gotland, but as Sawyer 1971 p. 233 fn. 13 pointed out, Bornholm is more likely.
69. Skovmand 1942 p. 217; Zak 1970 pp. 30, 34.
70. Adam of Bremen iv 11.
71. Jansson, S. 1962 p. 19ff.
72. See Sawyer 1971 p. 35.
73. See above Chapter 7 p. 252.
74. Floderus 1930 p. 107.
75. See above Chapter 9 pp. 300-1.
76. Obolensky 1970 pp. 162-3.
77. Birnbaum 1978 p. 23 fn. 36.
78. See above Chapter 2 pp. 44, 53.
79. ibid. pp. 38, 49, 51, 53.
80. Skovmand 1942 pp. 51, 54, 152, 153, 161-2, 179, 254.
81. Grierson 1959 p. 136; Skaare 1976 p. 68.
82. See Appendix I.
83. Sawyer 1965 pp. 159-60.
84. E.g. Brøndsted 1965 pp. 320-1.

Appendix I: Scandinavian and English relations in the post-Conquest period.

Although Danish political rule in England ended with the death of Hórrthaknútr, this did not put an end to Scandinavian and English relations in either the pre-Conquest or post-Conquest periods. If anything, they increased in the post-Conquest period with more organized political, religious, and economic contacts. Although it had its ups and downs, this development was gradual but steady. Norway in particular, it will be seen, was closely linked with England, partly because of its geographical position but also due to the pre-Conquest background. Nevertheless, Denmark and to a lesser extent Sweden also established close relations in this later period.

After the death of Hórrthaknútr, the English claims were not forgotten in Scandinavia nor did the possibility of invasion recede from the English minds. Quite the contrary, for the next forty years the possibility of Scandinavian attack was considered a real threat. According to the sagas, Magnus sent an embassy to London around 1043 to stress his claim to England. The sagas maintain that as a result of a treaty he had made with Hórrthaknútr, he considered himself Hórrthaknútr's heir and thus with some claims to England.¹ The English sources make no mention of any Scandinavian attack but the gathering of a large naval force by Eadward in 1044 and 1045 seems to have been in response to this threat.² Sveinn Úlfsson also had a claim to the English throne, although not as good as that of Magnus if there is any validity to the story of Magnus' and Hórrthaknútr's agreement. Sveinn told Adam of Bremen that Eadward the Confessor had agreed to make Sveinn his heir for England, and Sveinn as a result decided not to attack while Eadward ruled.³ It is impossible to know whether Eadward did make such a promise⁴ but in any case Sveinn did not make any attempts upon England until

after the Norman Conquest.

Haraldr Harthrathi succeeded Magnus in Norway in 1047 and with it his claim to England. In 1058 a large fleet arrived from Norway via the Orkneys, Hebrides, and Dublin which, according to the account, was unsuccessful only by God's will.⁵ Another attempt was made by Haraldr in 1066 in conjunction with Tostig. This threat was stopped at Stamford Bridge and resulted in Haraldr's death; nevertheless, by weakening the English army it contributed to the success of William's conquest from Normandy.⁶

William must have realized that Sveinn was still a threat since he sent an embassy to him, probably in an attempt to come to terms.⁷ Nevertheless, in 1069 a huge fleet arrived with three of Sveinn's sons, joined up with an army in Northumbria, and then marched to York where they stormed the city and plundered the area. According to the E text of the Chronicle, Sveinn himself arrived the next year but came to terms with William and merely carried much of the plunder back to Denmark.⁸ In 1075 another fleet under Sveinn's son Knútr came from Denmark, but as before was content with plundering.⁹ The Chronicle records the death of Sveinn in 1076, showing the attentiveness with which England followed Danish affairs.¹⁰ Nevertheless, the fact that the Chronicle's date of Sveinn's death is two years behind the time suggests that some of the channels of communication were not overly effective at this time.

This watchfulness was necessary, however, since Sveinn's death did not end the threat of Scandinavian invasions. His son Knútr organized another fleet in Denmark in the early 1080's, planning an attack in conjunction with help from Flanders. William heard of this, and in 1085 returned from Normandy with a huge force and laid waste the coastal districts. In fact, all these preparations were unnecessary since Knútr was held up in Denmark with internal affairs

and never made it to England.¹¹ Although this was the last major threat, the claims to England may not have been totally forgotten. Whether or not there is any truth in it, Matthew Paris maintained that when Valdemar II of Denmark died in 1241 he had been preparing to invade England according to the "old right".¹²

The origin of much of this English information on Scandinavia must in part be due to the religious ties. Written sources tell of a number of Anglo-Saxon missionaries and bishops in Scandinavia maintaining relations with their old monasteries or retiring back to England during the reign of Eadward the Confessor.¹³ After the Conquest these religious ties were continued and even strengthened by the advent of monasticism in Scandinavia. In Odense King Knútr, son of Sveinn Ulfsson, added to the church a shrine with the relics of St. Alban which had been stolen from England. Knútr himself was killed at the shrine in what appears to have been a popular revolt, yet was canonized within fifteen years. This change in attitude has been attributed to the English clergy at Odense. The earliest account of his death is on a metal plate at Odense which contains a list of men who died defending Knútr; at least four of the Danish names were refashioned according to Anglo-Saxon spellings, suggesting it is the work of an Englishman.¹⁴

The first priory in Denmark was also at Odense, founded by Bishop Hubald who was English by birth. Hubald advised Knútr's brother Eiríkr to apply to Evesham for some monks to serve the new shrine dedicated to St. Alban and St. Knútr. As a result, with William II's permission, twelve monks from Evesham went to Odense in 1095-6. The relationship between the two communities was very close, with many visits and common practices. Evesham was considered the mother house and as a result any election at Odense could occur

either in Odense or Evesham and needed the confirmation of the abbot of Evesham. This arrangement was renewed in the early twelfth century although by 1139 the monks could elect their own abbot. Yet in 1174 the subordinate relationship of Odense was re-established, again gradually declining in the early thirteenth century.¹⁵ The priory in Odense in turn influenced other monasteries which gradually spread throughout Denmark.¹⁶ The first Cistercian monasteries also looked first towards England, although gradually they turned towards France. Saxo's work may well have been written in one of these English influenced monasteries.¹⁷ As a result, many of the common liturgical terms and customs between the English and Danish church may have arrived in the post-Conquest time when England had greater organizational influence upon Danish religious affairs.¹⁸

In Norway the religious connections were even stronger. English clergy were chosen as many of the first bishops. As in Denmark, the first Cistercians arrived from England. In 1146 Bishop Siward of Bergen toured England and visited Fountains Abbey where he requested help in founding a cell in Norway. Thirteen monks went to Norway where they settled at Lyse; the general plan of this monastery resembles those of English Cistercian foundations of the period. Lyse was subordinate to Fountains in fact until 1213. Another Cistercian house was founded on an island in Oslo harbor, this time a daughter house of Kirkstead, Lincolnshire.¹⁹ In the mid twelfth century the Norwegian church was reorganized by an Englishman, Nicholas Breakspeare who created five bishoprics in Norway, two in Iceland, one in Greenland, one in Man, one in the Orkneys, and one in the Faroes. Nicholas was also probably responsible for a number of English artisans working in Norway.²⁰

The close relations between the English and Norwegian churches resulted in a number of clerical journeys, many of which are recorded in documents. For example, in the thirteenth century, bishops of the five dioceses of Norway either went to England in person or sent representatives of the cathedral chapter.²¹ Some English influence is visible at this time. Many of the Norwegian churches of this period show strong connections with England in plans and techniques.²² Similarly, parallels are also visible in church legislature.²³

The evidence is less obvious in Sweden. Paganism was far longer in maintaining a firm hold; it was as late as 1164 that the first archbishop of Uppsala was consecrated. There are no records of any English monastic foundations in Sweden. In the twelfth century French influence became stronger in Denmark, and appears to have been more important in Sweden. Nevertheless, Sweden's first two saints were eleventh century English missionary bishops.²⁴

The recognition of Scandinavian saints in England and vice versa is further indication of the religious ties. The most important Scandinavian saint was undoubtedly St. Óláfr. Although his cult had begun to spread in the pre-Conquest period, it greatly expanded in the years following as well. Churches dedicated to St. Óláfr appear throughout England; London had four certain and two possible dedications.²⁵ Further examples are known from Waterford and Dublin in Ireland, two examples from the Isle of Man, and a number along the east coast of Scotland and the Northern Isles, although in the latter place St. Magnus' cult came to overshadow that of St. Óláfr.²⁶ Many of these churches are in large towns and usually near the sea, suggesting a relationship with trading and seafaring.²⁷ Another Scandinavian saint, St. Clemens, also appears to have had a connection with seafaring or perhaps originally with royal estates;

dedications are found throughout Scandinavia, England, and even the Baltic towns.²⁸

A similar interest in English saints can be seen in Scandinavia. In Denmark, Bede, St. John of Beverley, St. Birinus, St. Alban, St. Thomas of Becket, and St. Botolph were all commemorated.²⁹ St. Thomas of Becket was also very popular in Norway; Archbishop Eystein of Norway had in fact been a friend of Becket's.³⁰ Other churches were dedicated to St. Swithin, St. Alban, and St. Magnus from the Orkneys whose impact was concentrated on western Norway.³¹ A runestone also shows the celebration of mass for St. Botolph.³² The Scandinavian veneration of English saints can be seen in the relic snatching which occurred; the Danish raids in 1069 probably resulted in a number going back to Denmark where they were kept in churches until either stolen back to England or collected by visiting clergy.³³

The religious channels thus provided diplomatic routes as well; in fact the two were often one in the same as clergy often acted as ambassadors.³⁴ Moreover, the interaction of church and state resulted in administrative features to Scandinavia. These are difficult to date, but many do appear to belong to the post-Conquest period. One carryover from the first half of the eleventh century was the use of English mintmasters in Denmark.³⁵ Valdemar I (1157-1182) in particular employed Englishmen in his government, especially in his chancery and exchequer. His son Valdemar II (1212-1241) compiled a Jordebog containing an inventory of wealth in Denmark, modelled on Domesday Book.³⁶

The English influence is even more marked in Norwegian administration. Old Norwegian and Old Icelandic handwriting both derived from Anglo-Saxon styles yet the first examples of many of the characters do not appear until the thirteenth century, probably due to the importation of old manuscripts and books from England at that

time.³⁷ These almost certainly arrived via religious gifts and exchanges.³⁸ The earliest documents also use the vernacular with formulae resembling Anglo-Saxon models. In England these formulae were taken over by the Normans and thus could represent post-Conquest as well as pre-Conquest influence. Harmer felt there was less contact in this later period,³⁹ but the religious evidence on the contrary supports the idea of close relations in this period. In fact, there are reports of a number of exchanges in embassies and personnel. For example, Olafr Kyrre (1066-93) is said to have employed an English clerk. Moreover, in the reign of King John, the Norwegian king even had a fief in England.⁴⁰ This substantial influence on the government, especially the royal chancery, is in contrast to Denmark and Sweden where the first extant documents have greater resemblance to the papal or German chanceries.⁴¹

The trading relations as reflected in documents and the sagas also suggest a special arrangement between England and Norway. Norway especially imported extensively from England, including corn, wheat, cloth and other assorted goods. In return Norway supplied England with fish, probably Icelandic wool, hunting hawks and falcons, and furs.⁴² Just after the Conquest Grimsby in Lincolnshire was foremost in this trade but gradually King's Lynn came to dominate the Norwegian trade. Even when times were bad in England and exports of corn banned from there, an exception was almost always made for the Norwegian trade.⁴³ The chief port in Norway for this trade was Bergen although there is evidence of trading relations with Nidaros, Stavanger, Tønsberg and Oslo. The amount of English pottery increased in Bergen towards the end of the twelfth century, many of it paralleled with East Anglian pottery. It is this volume of English trade which resulted in Bergen being the largest Norwegian city in

medieval Norway.⁴⁴ Towards the end of the thirteenth century this relationship declined, partly because of diplomatic estrangement and partly due to the rise of the Hanseatic trade.⁴⁵

England also traded extensively with Denmark, especially from London, Yarmouth, and King's Lynn to Ribe. A special "Hall of the Danes" existed in London while in the late twelfth century the English pound became the standard value in Danish trading centers. As in Norway, the German Hanseatic trade became more important in the thirteenth century.⁴⁶ There is little documentation of Swedish trade with England but excavations of medieval towns have shown a fair amount existed. In Sigtuna most of the English finds and evidence of influence date to this period⁴⁷ while Gotlandic finds suggest a flourishing trade with England until it too became dominated by the Hanseatic league.⁴⁸

Altogether the evidence shows a fairly close relationship existed between England and Scandinavia in the post-Conquest period, especially Norway and Denmark. Politics, religion, and trade were all interrelated influences operating at much the same time, although even in times of political estrangement the religious and economic ties often continued. Denmark on the basis of the pre-Conquest situation was initially close but in church and political affairs soon turned away. Probably by the second half of the twelfth century the French influence was greater in the Danish church, and in turn was superseded by German influence in the second half of the fourteenth century.⁴⁹ Similarly in Sweden, by the time the church became firmly established at the end of the twelfth century, the French influence was greater, and, as in Denmark, gave way to German influence at the end of the fourteenth century.⁵⁰ In both countries the administrative functions which relate to the church

organization such as the chancery, exhibit little English influence. If there had been much English influence, it had been replaced relatively early.⁵¹ The situation in Norway, however, was quite different. There is far more evidence of a continued English impact in church affairs, both in organization and architecture, lasting until the end of the thirteenth century.⁵² Administrative features are much closer and the trading relations suggest a special relationship as well. This English influence did not decline until the late thirteenth century when Scandinavia was drawn into the Hanseatic league, though to a lesser degree contacts continued.

Appendix I: Footnotes

1. Heimskringla (Magnúss Saga ins Góða ch. 18, 36-7). vol. 3 pp. 32, 65-6.
2. Larson 1910 pp. 73-4; ASC 1044 C (E), 1045 D.
3. Adam of Bremen ii 77 (74), iii 12 (11).
4. Larson 1910 p. 74 felt it probably is accurate while Kärner 1964 p. 144 argued it was merely a propaganda statement that Sveinn had told Adam in order to justify his later actions.
5. See Stenton 1947 pp. 566-7.
6. ASC 1066.
7. Larson 1910 pp. 75-6.
8. ASC 1069 D (E), 1070 E.
9. ASC 1075 D (E).
10. ASC 1076 D (E).
11. ASC 1085 E; Larson 1910 pp. 79-80.
12. Leach 1921 pp. 29-30.
13. Barlow 1963 p. 15.
14. Leach 1921 p. 78.
15. King 1962-5 pp. 193-4, 199-200.
16. ibid. p. 196.
17. Leach 1921 pp. 80-1.
18. Storm 1911-2 pp. 229-31; but see also Olsen, O. 1969 p. 53 who felt the similarities suggest a pre-Conquest date, mainly, it seems, based on political probability.
19. Auden 1906-7 pp. 58-9.
20. Leach 1921 p. 89.
21. ibid. pp. 95-6.
22. ibid. pp. 89-91, 94; Hauglid 1972 pp. 54-5.
23. Larson 1912 pp. 193-4.
24. Leach 1921 pp. 84-5.
25. Dickens 1937-45 pp. 57-70.
26. ibid. pp. 71-8.
27. Bull 1913-4 p. 143.

28. Cinthio 1968 pp. 103-10, 112, 115.
29. Storm 1911-2 pp. 230-1.
30. Leach 1921 p. 90.
31. ibid. pp. 88-9; Bull 1913-4 pp. 139-40.
32. Olsen, M. 1954 vol. 3 pp. 178-9.
33. King 1962-5 pp. 197-9.
34. Leach 1921 p. 99.
35. ibid. pp. 27-8.
36. ibid. pp. 28-9.
37. Smith, A. 1928-36 p. 232.
38. Leach 1921 p. 73. For a discussion of English works in Norway
see also his pp. 118-21.
39. Harmer 1946-53 p. 151.
40. Leach 1921 pp. 45, 47-9.
41. Harmer 1946-53 pp. 144-5.
42. Leach 1921 pp. 38-40.
43. ibid. pp. 40-1; Carus-Wilson 1962-3 p. 185.
44. Leach 1921 pp. 42-3; Herteig 1959 pp. 182-4.
45. Leach 1921 pp. 43, 59-60.
46. ibid. pp. 31-3.
47. Floderus 1930 p. 105.
48. Leach 1921 p. 36.
49. ibid. p. 82.
50. ibid. p. 85.
51. Harmer 1946-53 pp. 144-5.
52. Leach 1921 p. 85.

Appendix II: Hoards in Britain, Ireland, and the Northern Isles
from the eleventh century with non-numismatic material.

The following list includes those hoards from Britain, Ireland, and the Northern Isles dating to the eleventh century which contain non-numismatic material; in those cases where the container itself was distinctive, this has been used as criteria for inclusion in the list, since the hoard allows it to be dated on a terminus ante quem basis. Most of the hoards with objects, hacksilver, or bars were not accurately recorded or preserved. As a result, many of the entries are based upon inadequate accounts, in many cases preserved only by chance.

I. England

1. Denge Marsh, Kent
found 1739

The find consisted of a large number of English pennies and fragments in a lidded silver pot with two small handles. The coins included ones of Harold and William but accounts are confusing and it is not known which Harold or William.

Deposit: after 1066

Comments: Later accounts also mention an earthen pot but there is no reason to reject the initial account. The silver pot has disappeared, but from the description there is no known parallel.

Literature:

Metcalf 1957 pp. 187, 190.

Dolley 1966 no. 183 p. 53.

2. Halton Moor, Lancs.
found 12 February 1815

The find consisted of 860 silver pennies, 6 stamped pieces of gold, a silver neckring of twisted wires, and a gilt silver and copper cup.

Deposit: after 1023

Comments: Of the total hoard, 400 pennies and two of the stamped gold pieces went to London. Of the coins, 21 of crude workmanship were identified as "Danish" and difficult to decipher, and 479 were of Knútr's Pointed Helmet type, mainly from the York mint. The remaining coins from the find were dispersed in the area. The two gold pieces are of thin metal struck on one side, both with a crude portrayal of a human head. They differ in weight and have drilled holes, suggesting they were perhaps used as ornaments.

The cup and neckring were exhibited, then sold to a goldsmith. The neckring is of Hårdh's Type I.D 2, with two hooks as a closing; the endpieces are ornamented with punched triangles. Similar examples are known from Scandinavian hoards. The cup, however, is not of Scandinavian workmanship. Rice 1952 p. 231 felt it was probably English, perhaps after Sassanian models.

Literature:

Combe 1817 pp. 199-202 (with sketches of the cup, neckring, and a gold piece).

Thompson 1956 no. 181 pp. 66-7.

Rice 1952 p. 231.

Dolley 1966 no. 151 p. 52.

3. London, no. 11 St. Mary Hill
found 1775

The find consisted of a number of coins and fragments of coins, and a gold filigree brooch with a sapphire in the center and four pearls (three remaining) in the margin, all covered by a small crucible-shaped vessel. These were in a larger earthen vessel, smashed when found. Found while digging up house foundations.

Deposit: c. 1075 (Dolley 1960 p. 39)

Comments: 300-400 coins were examined which were primarily of the reign of Eadward the Confessor, but also from the reigns of Harold II and William the Conqueror. Griffith 1786 p. 361 felt the hoard belonged to a moneyer or a person connected with minting. Dolley 1960 p. 40 felt it was deposited in the troubled times during the revolt of Roger and Waltheof.

Literature:

Griffith 1786 pp. 356-63.

Thompson 1956 no. 250 pp. 90-1.

Dolley 1960 pp. 39-40.

Dolley 1966 no. 198p. 53.

4. London, no. 16 Walbrook
found c. 1872

The find consisted of c. 7000 Anglo-Saxon, Norman, and a few foreign coins, together with unspecified non-numismatic material.

Deposit: c. 1070 (Thompson), c. 1066 (Dolley)

Comments: There are a number of problems with this hoard.

Thompson 1956 p. 99 said it was found during excavations but that there was great secrecy concerning it. He does not mention any finds. Dolley 1966 on his chart (p. 53), however, indicated the hoard was accompanied by numismatic material but he did not elaborate.

Dolley 1960 p. 40 also seemed to discuss this hoard although it is not mentioned by name. He felt that the hoard was probably a mixture of two separate ones, the first of c. 6000 coins mainly of Eadward the Confessor. He interpreted this group as consisting of part of the official bullion reserve awaiting melting as William the Conqueror entered London; the three foreign coins from Denmark and Germany he felt supported such a view. The second parcel he thought was much smaller and later, and presumably this is his Walbrook no. 2 (no. 197 on his chart in Dolley 1966).

For the possibility of Urnes ornamented mounts included in this hoard see Owen 1979 pp. 252-4.

Literature:

Thompson 1956 no. 255 pp. 92-9.

Dolley 1960 p. 40.

Dolley 1966 nos. 178, 197 p. 53.

Owen 1979 pp. 252-4.

5. Oving, Sussex
found 1789

The find consisted of 200 + coins of Eadward the Confessor and Harold, and "a small circular plate, about four inches in diameter, carved with cross-work, out of which rose six or eight little bosses" (quoted in Metcalf 1957 p. 198). One defaced Roman coin was also recorded.

Deposit: after 1042 (Metcalf), 1066 (Dolley)

Comments: The find is in the possession of the Duke of Norfolk but as of 1957 the disc brooch (?) could not be located.

Literature:

Metcalf 1957 p. 198.

Dolley 1966 no. 180 p. 53.

6. Sedlescombe, Sussex

found 26 August 1876

The find consisted of 2,000-3,000 Anglo-Saxon coins with one silver bar. These were in a leather bag inside a small iron pot, both of which are fragmentary.

Deposit: c. 1066

Literature:

Thompson 1956 no. 327 pp. 120-2.

Dolley 1966 no. 176 p. 53.

7. Soberton, Hants.

found 1851

The find consisted of 259 silver coins and two gold rings, found in an earthenware vessel which was broken or disintegrated upon discovery.

Deposit: c. 1068

Comments: Hawkins 1851 p. 100 described one of the gold rings as a torc, weighing 238 grains. The other was a simple gold ring with punched circles weighing 258 grains (illustrated in Hawkins 1851 p. 100).

Literature:

Hawkins's account in Archaeological Journal 8 (1851) p. 100.

Thompson 1956 no. 334 pp. 125-6.

Dolley 1966 no. 187 p. 53.

8. Sutton, Isle of Ely

found 1695

The find consisted of 100 + coins of William the Conqueror, five gold fingerrings, a plain silver dish/disc, and a decorated silver disc brooch, all in a lead casket.

Deposit: after 1066 (Thompson), c. 1070 (Dolley)

Comments: All the contents of the hoard were lost but the disc brooch later turned up. On the back it has an Anglo-Saxon inscription and a tacked on plate with an unintelligible runic inscription; nearby is an engraved triquetra knot. The front has nine bosses, and is divided into fields with crudely engraved ornamentation. This ornamentation has been variously interpreted: as "an English equivalent of the late Viking style" (Bruce-Mitford 1956 p. 197), as resembling Ringerike style in its foliate patterns but Urnes in its animals (R. Smith 1925 p. 137), the "nearest approach to a pure Ringerike style in the Anglo-Saxon metalwork in the British Museum" (Wilson 1964 p. 49), or as based in Anglo-Saxon art (Nordhagen 1974 p. 57). Nordhagen's analysis appears the most valid. The animals do not have the wind-swept character of Ringerike, nor the lines of Urnes, while the foliate ornament is stylized and not terribly close to Ringerike either. The brooch is clearly English, with very little Scandinavian influence.

Literature:

- Smith, R. 1925 pp. 137-8.
Bruce-Mitford 1956 pp. 193-8.
Thompson 1956 no. 346 p. 131.
Wilson 1964 p. 49.
Dolley 1966 no. 193 p. 53.
Nordhagen 1974 p. 57.

II. Scotland

9. Inchkenneth, Argyll

found c. 1830 (Thompson) or 1831 (Stevenson).

The find consisted of c. 100 coins of which 34 are known; of these 20 are from the British Isles. In addition, three armrings and a chain were found.

Deposit: c. 1000

Comments: The finds are described as three massive silver rings (now lost) and a curious silver chain (in the British Museum). This hoard is the only one from Scotland with Hiberno-Norse coins (Graham-Campbell 1975-6 p. 122).

Literature:

- Thompson 1956 no. 196 p. 72.
Dolley 1966 no. 133 pp. 52, 58.
Stevenson 1966 pp. xix, xxx-xxxi.
Graham-Campbell 1975-6 pp. 122, 129.

10. Jedburgh (Bongate), Roxburghshire

found 1827

The find consisted of 90 + Anglo-Saxon coins, mostly Æthelred, but also Knútr, and a (now lost) ring.

Deposit: c. 1025

Comments: The ring is described in the New Stat. Account 3 (1845) p. 13 as "'curiously formed of silver twine'" (quoted in Graham-Campbell 1975-6 p. 122).

Literature:

- Thompson 1956 no. 46 p. 16 (note: Thompson's dating is wrong).
Dolley 1966 no. 147 p. 52.
Stevenson 1966 p. xx.
Graham-Campbell 1975-6 pp. 122, 129.

11. Parkhill, Lindores, Fife

found 1814

The find consisted of a number of silver coins, at least some of which are Knútr's Pointed Helmet type, together with gold chains and bracelets in a hollow red freestone vessel.

Deposit: c. 1025

Comments: The chains were lost within nine years of the hoard's discovery, but were described as of slender make.

Literature:

- Thompson 1956 no. 234 p. 84 (note: his account is inaccurate).
Butler and Dolley 1961 pp. 171-4.
Dolley 1966 no. 149 p. 52.
Stevenson 1966 p. xxii.
Graham-Campbell 1975-6 pp. 122, 130.

III. Orkney

12. Burray, Orkney

found 1889 while cutting peat

The find consists of at least 12 coins, many fragmentary, and a large number of armrings, neckrings, and fragments in a small wooden bowl.

Deposit: c. 998 (Dolley, Graham-Campbell), after 1016 (Thompson)

Comments: Although Dolley and Graham-Campbell felt that the hoard was deposited c. 998, so few coins were identified that it could easily date to the early eleventh century; of the few coins identified, the latest belonged to Æthelred. The hoard, however, consists predominately of non-numismatic silver including a twisted neckring which seems to be Hårdh's Type I.C 2, and a fragment of another, 26 complete and 110 fragmentary plain armrings of circular or quadrilateral section, narrowing or slightly flattened at the ends, and one ingot and the fragments of another. Graham-Campbell 1975-6 p. 123 argued that the armrings were ring money, used for their metal weight. The objects are now in the National Museum of Antiquities in Edinburgh.

Literature:

Cursiter 1888-9 pp. 318-22.

Thompson 1956 no. 61 p. 20.

Dolley 1966 no. 132 p. 52.

Stevenson 1966 p. xviii.

Graham-Campbell 1975-6 p. 123.

13. Caldale, Orkney

found 1774 while digging peat

The find consisted of c. 300 coins of Knútr from 42 mints, and some silver objects in two horns.

Deposit: c. 1025 (Dolley, Graham-Campbell), c. 1030-5 (Thompson)

Comments: The objects were described as fibulae of silver in crescent shapes and various other shapes. Graham-Campbell 1975-6 p. 123 interpreted them as ring money similar to Carthbanks, Shetland (see no. 15 below); the description of crescent-shaped objects, however, suggests the possibility of the so-called Slavic halbmondförmige Anhänger which have been found in Scandinavian hoards (see above Chapter 7 pp. 240-1. Unfortunately, all these objects have been lost. Dolley 1966 p. 39 felt this hoard was related to Knútr's activities in Norway.

Literature:

Thompson 1956 no. 66 p. 21

Dolley 1966 no. 152 pp. 52, 59.

Stevenson 1966 p. xviii.

Graham-Campbell 1975-6 p. 123.

IV. Shetland

14. Dunrossness, Shetland

found in or shortly before 1844

The find consisted of an unknown number of coins including a Norwegian one of Haraldr Harthráthi, and a number of fragmentary armrings.

Deposit: after 1047

Comments: This hoard was poorly recorded, and the finds are now lost. Graham-Campbell 1975-6 p. 123 noted that it is the last hoard of purely Scandinavian character with hack-silver from Britain or Ireland.

Literature:

Graham-Campbell 1975-6 pp. 123, 129-30.

Skaare 1976 no. 186 p. 178.

15. Garthsbanks, Quendale, Shetland

found 1821? 1830?

The find consisted of an unknown number of coins, the latest of those known from Ethelred's reign, and some armrings found in a horn under the hearthstone at the base of the foundation of an old wall.

Deposit: c. 1000

Comments: There is some confusion concerning this hoard.

Thompson 1956 p. 62 equated it with Dunrossness which he felt was found in c. 1030. Graham-Campbell 1975-6 p. 128 felt it was the same as Dolley 1966 no. 130 based on a letter from Sir Walter Scott dating probably to 1821, and quoted in Beard 1933 (The Romance of Treasure Trove, London, p. 85) of a find from near Fitful Head. The description of the discovery matches closely that for the discovery of a hoard found at Garthsbanks, Quendale which is also near Fitful Head. The finds have all been lost, but from an unpublished drawing seem to be ring money.

Literature:

Thompson 1956 no. 144 p. 55, no. 161 p. 60.

Dolley 1966 no. 130 p. 51.

Stevenson 1966 p. xix.

Graham-Campbell 1975-6 pp. 122-3, 128-9.

V. Isle of Man

16. Kirk Michael

found 1972/5

The find consists of some coins and armrings.

Deposit: c. 1060

Comments: This find is unpublished but summarized in Graham-Campbell 1975-6 p. 125 who described them as ring money.

Literature:

Graham-Campbell 1975-6 pp. 125, 133 fn. 29.

17. West Nappin

found ?

The find consisted of some coins and at least one armring.

Deposit: 1040's

Comments: This hoard is not described in Thompson 1956 or Dolley 1966. Graham-Campbell 1975-6 p. 133 fn. 32 noted that an example of ring money from West Nappin is now known to be from a hoard which he dated (p. 125) to the 1040's.

Literature:

Graham-Campbell 1975-6 pp. 125, 133 fn. 32.

VI. Faroes

18. Sandø churchyard, Sandø

found 1863

The find consisted of 98 coins (24 English, 1 Irish, 4 Danish, 18 Norwegian, 50 German, and 1 Hungarian) and a small piece of a silver band ornamented on both sides with punched triangles, each filled with three dots.

Deposit: after 1095 (Skaare)

Comments: The fragment is probably part of an armring of a type found commonly in Scandinavia.

Literature:

Herbst 1863 p. 377ff.

Hauberg 1900 no. 119 p. 173.

Grieg 1929 pp. 269-70.

Skaare 1976 no. 185 pp. 177-8.

VII. Ireland

19. Fourknocks, Co. Meath

Found 1950 during excavation of a prehistoric mound

The find consisted of 27 Hiberno-Norse coins, two English coins from Athelred's reign, and one small silver ingot.

Deposit: c. 1027 (Dolley), c. 1030 (Graham-Campbell)

Comments: This is the only Irish hoard from the eleventh century with non-numismatic material.

Literature:

Dolley 1966 pp. 63-4.

Graham-Campbell 1976 pp. 48-9.

Appendix III: Scandinavian hoards with a tpq of 991 to 1120 with more English coins than German coins

<u>findspot</u>	<u>tpq</u>	<u>no. Eng.</u>	<u>no. Ger.</u>	<u>other</u>	<u>Literature/Comments</u>
I. Denmark (without southern Sweden)					
Yholm, Fyn	1002	238	174	59	Skovmand 1942 pp. 90-3, Galster 1964 no. 30 p. 29. Of the English coins, 235 are from Æthelred's reign, while 3 are from the reign of Edgar. As a result, it seems quite possible that the bulk of the English coins may have arrived as a danegeld payment, but were quickly merged with coins from a wide range of places and a fair amount of objects and hacksilver. Some of the hacksilver fragments suggest Slavic contacts.
Kelstrup, Sjælland	1018	725	307	66	Hauberg 1900 no. 62 p. 166, Skovmand 1942 p. 154, Galster 1964 no. 57 p. 33. Of the English coins, 167 are from Æthelred's reign and 532 from Knútr's reign. The 22 Danish coins also primarily belong to Knútr's reign. Some hacksilver fragments also suggest contacts with the Slavic region.
Enner, Jylland	1024	675	586	47	Hauberg 1900 no. 66 p. 167, Skovmand 1942 p. 150, Galster 1964 no. 65 p. 34. Like Kelstrup, the majority of the English coins date to Knútr's reign (207 Æthelred, 467 Knútr, 1 Edgar). Similarly, the 24 Danish coins belong to Knútr's reign. The hacksilver includes objects of Slavic origin.
Louns, Jylland	1035	18	11	79	Hauberg 1900 no. 69 p. 167, Skovmand 1942 p. 148, Galster 1964 no. 71 p. 35. An interesting hoard with an unusually high percentage of Danish coins (from Knútr's and Hørtha-knútr's reign) for the date. The English coins are predominantly Knútr but 3 date to his son Haraldr. No hacksilver or objects.

<u>findspot</u>	<u>tpq</u>	<u>no. Eng.</u>	<u>no. Ger.</u>	<u>other</u>	<u>Literature/Comments</u>
Strøby, Sjælland	1042	23	15	14	Hauberg 1900 no. 86 p. 169, Skovmand 1942 p. 162, Galster 1964 no. 85 p. 37. Another hoard with coins only. Of the English coins, 1 belongs to Æthelred, 15 to Knútr, 5 to Haraldr, and 2 to Eadward the Confessor. The other coins are from diverse areas: Denmark (from the reigns of Hórrthaknútr and Magnus), Sweden, Ireland, and Hungary.
Bonderup, Sjælland	1047	149	6	85	Hauberg 1900 no. 131 pp. 174-5, Skovmand 1942 p. 156, Galster 1964 no. 92 p. 38. The English coins are quite mixed: 1 Edgar, 19 Æthelred, 76 Knútr, 21 Haraldr, 7 Hórrthaknútr, 25 Eadward the Confessor. 84 coins are Danish, the majority from Sveinn Ulfsson's reign (1047-74). In addition, two neckrings, a necklace with a cross pendant were deposited with the coins.
Roskilde, Sjælland	1047	3	1	12	Hauberg 1900 no. 112 p. 172, Skovmand 1942 p. 159, Galster 1964 no. 80 p. 36. The significant coins in this hoard are the twelve Danish examples belonging to the reign of Sveinn Ulfsson. Of the three Anglo-Saxon coins, 2 belong to Knútr's reign and 1 to Eadward the Confessor's. No hacksilver or objects.
Stora Valby, Sjælland	1047	411	192	28	Hauberg 1900 no. 93 pp. 169-70, Skovmand 1942 pp. 158-9, Galster 1964 no. 82 p. 37. Of the English coins, 75 belong to Æthelred's reign, 302 to Knútr's, 30 to Haraldr's, 1 to Hórrthaknútr's and 3 to Eadward the Confessor's. The 26 Danish coins are spread over Knútr's, Hórrthaknútr's, and Magnus' reign. No hacksilver or objects.
Lyngby, Jylland	1051	146	124	185	Hauberg 1900 no. 120 p. 173, Skovmand 1942 p. 147, Galster 1964 no. 95a p. 39. The English coins are fairly mixed: 11 Æthelred, 45 Knútr, 11 Haraldr, 5 Hórrthaknútr, 74 Eadward. The German coins are from a diverse number of mints, and a coin from Mainz provides the <u>tpq</u> . 87 coins

<u>findspot</u>	<u>tpq</u>	<u>no. Eng.</u>	<u>no. Ger.</u>	<u>other</u>	<u>Literature/Comments</u>
					are Danish with the majority from Sveinn Ulfsson's reign. 95 coins could not be identified. The dating of the coins suggests a hoard gradually accumulated over the years or a long time in circulation. No hacksilver or objects.
II. Denmark: Skane, Halland, and Blekinge					
Ö. Torp, Skåne	996	69	41	—	Skovmand 1942 p. 137, Galster 1964 no. 25 p. 29, Hatz 1974 no. 86, Hårdh 1976a no. 151 p. 75. The English coins are all from Æthelred's reign. Two gold armrings, one of which has Ringerike tendril ornamentation, a fragment of a silver bead, and wire fragments were also found in the hoard.
Näsby, Skåne	996	93	c. 50	7	Skovmand 1942 p. 137, Galster 1964 no. 26 p. 29, Hatz 1974 no. 85, Hårdh 1976a no. 131 pp. 70-1. The English coins are predominantly from Æthelred's reign. A number of complete armrings, a large penannular brooch and a number of fragments are also from this hoard.
Igelösa, Skåne	1005 c.1850		133	27	Skovmand 1942 p. 136, Galster 1964 no. 37 p. 30, Hatz 1974 no. 124, Hårdh 1976a no. 78 p. 54. Over 1800 of the English examples are from Æthelred's reign. The only hacksilver in the hoard, a fragment of a round disc brooch with bosses may also be of English origin (see Bruce-Mitford 1956 p. 201, Wilson 1964 p. 7, but see also Hårdh 1976b pp. 73-4).
Grönby, Skåne	1024	755	671	35 +	Hauberg 1900 no. 67 p. 167, Skovmand 1942 p. 169, Galster 1964 no. 56 p. 33; Hatz 1974 no. 156, Hårdh 1976a no. 60 pp. 46-7. The English coins are mixed in this hoard with 1 Eadward the Martyr, 347 Æthelred, 405 Knútr, and 2 unidentified imitations. The 12 Danish coins are all from Knútr's reign. Some of the hacksilver is Slavic.
Börringe, Skåne	1047	78	27	2	Hauberg 1900 no. 91 p. 169, Skovmand 1942 p. 169, Galster 1964 no. 66 p. 34, Hatz 1974 no. 402, Hårdh 1976a no. 47 p. 41. Almost all the English

<u>findspot</u>	<u>tpq</u>	<u>no. Eng.</u>	<u>no. Ger.</u>	<u>other</u>
-----------------	------------	-----------------	-----------------	--------------

Literature/Comments

coins are from Knútr's reign. The 2 Danish coins, however, are from Hörthaknútr's and Sveinn Ulfsson's reign. The non-numismatic material consists of two earring fragments which suggest Slavic connections.

Vannegerga, Skåne	1056	174	49	32
----------------------	------	-----	----	----

Hauberg 1900 no. 103 p. 171, Skovmand 1942 p. 170, Galster 1964 no. 83 p. 37, Hatz 1974 no. 303, Hårdh 1976a no. 134, p. 71. The English coins were quite mixed with 14 Æthelred, 38 Knútr, 16 Haraldr, 5 Hörthaknútr, 101 Eadward the Confessor, and 4 unidentified. The 32 Danish coins mainly belong to Sveinn Ulfsson's reign. The German coins, however, provide the tpq for the hoard. Some unspecified gold and silver fragments were originally with the hoard but have been lost.

III. Norway

Fuglevik, Østfold	991/ c. 62 997		1	?
----------------------	-------------------	--	---	---

Grieg 1929 no. 13 p. 210, Skaare 1976 no. 3 p. 127. Poorly recorded. Many of the Anglo-Saxon coins are fragmentary and at least 17 coins were not classified.

Bore, Rogaland	997	65	14	22
-------------------	-----	----	----	----

Grieg 1929 no. 64 p. 241, Skaare 1976 no. 79 pp. 147-8. These coins are only a part of those discovered; an unknown number were not taken to the museum. The coins are poorly preserved; of the English coins, 56 are fragments.

Hårr, Rogaland	1017 c. 250		141	27
-------------------	-------------	--	-----	----

Grieg 1929 no. 21 pp. 219-21, Skaare 1976 no. 78 p. 147. A number of the Anglo-Saxon coins are fragmentary. They range from Æthelred's to the reign of Knútr which forms the tpq for the hoard. A fairly large amount of hacksilver.

Slethi (Tjora), Rogaland	1018? 534 + 800 sm. frags.		16	28
-----------------------------	----------------------------------	--	----	----

Hauberg 1900 no. 50 p. 165, Skaare 1976 no. 82 pp. 148-9. Of the 534 identifiable Anglo-Saxon coins, 280 were fragments. The Anglo-Saxon coins all date to Æthelred's reign while the tpq is provided by a Danish coin of Knútr. No objects or hacksilver.

<u>findspot</u>	<u>tpq</u>	<u>no. Eng.</u>	<u>no. Ger.</u>	<u>other</u>	<u>Literature/Comments</u>
Arstad, Rogaland	1029	1014	c. 690	145	Hauberg 1900 no. 61 p. 166; Grieg 1929 no. 20 pp. 218-9, Grieg 1969 p. 43, Skaare 1976 no. 95 pp. 152-3. A mixed hoard with coins of a wide range in date from a number of places. The Anglo-Saxon coins date from Athelred's and Knutr's reigns and provide the <u>tpq</u> . The Danish coins all date from Knutr's reign. The hacksilver includes a fragment of a Slavic earring.
Nesbøen, Møre og Romsdal	1023	268	121	27	Grieg 1929 no. 25 pp. 224-5, Skaare 1976 no. 135 pp. 162-3. The Anglo-Saxon coins range in date from Athelred's to Knutr's reign and include a large number of fragments; the Anglo-Saxon coins also provide the <u>tpq</u> . Interestingly, the hoard also contains a fragment of a Russian sbrenik dating from 1016-54.
IV. Sweden (without Gotland)					
Näs, Uppland	1006	281	98	69	Hatz 1974 no. 126. Hoard with coins only.
Arsta, Södermanland	1016	406	c. 280	c. 29	Linder 1936 no. 20 p. 27. Hoard with coins only. Some coins were found which do not survive. The English coins were mainly from Athelred's reign. The hoard was in a vessel which may be of southern Russian origin.
Stockholm, Uppland	1016	27	—	9?	Smith 1925 pp. 139-40 and Bruce-Mitford 1956 p. 199 both have different accounts of the number of non-English coins. The find also includes a late Saxon disc brooch.
Uddeby, Värmland	1016	?238	?26	?3	Hauberg 1900 no. 59 p. 166 gave the figures but Hatz 1974 no. 22 for some reason did not list any exact figures. Presumably an unknown number of coins were found, many of which did not survive. As a result, the hoard is of little use in analysis.

<u>findspot</u>	<u>tpq</u>	<u>no. Eng.</u>	<u>no. Ger.</u>	<u>other</u>	<u>Literature/Comments</u>
Djuped, Ångermanland	1030	718	679	17	Norberg 1943 no. 52 p. 76, Hellman 1947 pp. 32-3, Hatz 1974 no. 186. Although the Anglo-Saxon coins outnumber the German, the difference is small, suggesting a mixed circulation.
Varnhem, Västergötland	1035	?67	?26	?	Hauberg 1900 no. 73 p. 167, Hatz 1974 no. 162. Like Uddeby, a number of coins have not survived, nor is the total number found known. As a result, the hoard is of little value in analysis.
Broby, Södermanland	1040	223	189	18	Hatz 1974 no. 196. ^{Linder 1936 no. 60 p. 33} The mixing suggests a collection from a number of sources.
Lånns, Ångermanland	c.1050	351	—	—	Norberg 1943 no. 59 pp. 77-8, Hellman 1947 p. 33. The composition suggests direct links with England but the late date does not indicate from the early danegeld payments. Perhaps it indicates a man who served in England and brought his savings back to Sweden. It could also represent a man who dealt in trade merely to England and before the find could be mixed, was forced to deposit it.
Ugdrom, Ångermanland	1050	579	524	28	Hauberg 1900 no. 60 p. 166, Norberg 1943 pp. 71-2, Hatz 1974 no. 278. Part of a wealthy hoard which included an armring in Ringerike style as well as two other armrings, a neckring, a fingerring, and a number of fragments of objects. As a result, it appears to be an accumulation of wealth derived from various sources. The Anglo-Saxon coins include coins up to the reign of Knútr.
V. Gotland					
Högdarve, Rone <u>sn.</u>	994	46	29	98	Stenberger 1947 no. 433 p. 173, Hatz 1974 no. 39. The latest Anglo-Saxon coins are of Æthelred, while hacksilver includes some eastern objects.
Tystebols, Stenkyrka <u>sn.</u>	996	32	5	1	Stenberger 1947 no. 506 pp. 203-4, Hatz 1974 no. 90. The Anglo-Saxon coins are from Æthelred's reign. No objects or hacksilver.

<u>findspot</u>	<u>tpq</u>	<u>no. Eng.</u>	<u>no. Ger.</u>	<u>other</u>	<u>Literature/Comments</u>
Barshaga, Othem <u>sn.</u>	1011	65 +	51	13 +	Stenberger 1947 no. 414 pp. 162-3, Hatz 1974 no. 127. The Anglo-Saxon coins are from Æthelred's reign.
Bjärby, Ethelhem <u>sn.</u>	1016	10	5	3	Stenberger 1947 no. 142 pp. 55-6, Hatz 1974 no. 134. The Anglo-Saxon coins are from Æthelred's reign. The one Danish coin is from Knútr's reign. No objects or hacksilver.
Digrans, Sundre <u>sn.</u>	1016	208	—	26	Stenberger 1947 no. 524 p. 210. Of the Anglo-Saxon coins, 103 are from Æthelred's reign, 67 from Knútr's and 38 illegible. The other coins consist of 25 Arabic (latest 998) and one Byzantine (976-1025).
Kvie, Lojsta <u>sn.</u>	1016	99	77	21	Stenberger 1947 no. 335 p. 137, Hatz 1974 no. 141. The latest Anglo-Saxon coins are from Knútr's reign.
Ekeskogs, Hejde <u>sn.</u>	1017	273	248	126	Hatz 1974 no. 136.
Prostarve, Hogrån <u>sn.</u>	1020	39	4	21	Stenberger 1947 no. 301 pp. 124-5, Hatz 1974 no. 148. The latest Anglo-Saxon coins are from Knútr's reign, while the <u>tpq</u> is provided by a German coin. A strap end is perhaps of eastern origin (see Stenberger 1958 p. 235).
Myrungs, Linde <u>sn.</u>	1024	324	241	16	Stenberger 1947 no. 328 p. 135, Hatz no. 159. Latest Anglo-Saxon coins are from Æthelred's reign.
Österby, Othem <u>sn.</u>	1024	89	39	76	Stenberger 1947 no. 415 pp. 163-4, Hatz 1974 no. 160. The latest Anglo-Saxon coin is from Knútr's reign as is the one Danish coin. No hacksilver or objects.
Valldarve, Eskelhem <u>sn.</u>	1031	518	184	32	Stenberger 1947 no. 122 p. 50, Hatz 1974 no. 190. The Anglo-Saxon coins belong to Æthelred's reign. The <u>tpq</u> date is provided by a coin from Mainz. Many of the hacksilver fragments suggest eastern contacts.

<u>findspot</u>	<u>tpq</u>	<u>no. Eng.</u>	<u>no. Ger.</u>	<u>other</u>	<u>Literature/Comments</u>
Kviende, Othem <u>sn.</u>	1035	207	61	250	Stenberger 1947 no. 417 pp. 164-5, Hatz 1974 no. 198. The Anglo-Saxon coins all belong to Knútr's reign. 237 of the other coins are Arabic, dating from 917 to 1007, a large number for a hoard this late. The <u>tpq</u> is supplied by a Danish coin of Hórfhaknútr and a German coin from Magdeburg.
Kyrkebys, Habblingbo <u>sn.</u>	1035	53	33	8	Stenberger 1947 no. 275 p. 110, Hatz 1974 no. 158. The latest Anglo-Saxon coins belong to Knútr. The hacksilver suggests eastern contacts.
Nygårds, Våsterhejde <u>sn.</u>	1036	657	417	137	Stenberger 1947 no. 593 p. 241, Hatz 1974 no. 210. The latest Anglo-Saxon coin belongs to Haraldr. No objects or hacksilver.
Karls, Tingståde <u>sn.</u>	1039	778	200	c. 325	Hatz 1974 no. 232.
Lilla Valla, Rute <u>sn.</u>	1042	509	65	45	Stenberger 1947 no. 438 pp. 175-7, Hatz 1974 no. 175. Most of the Anglo-Saxon coins belong to Athelred's reign, although the <u>tpq</u> is provided by a coin of Eadward the Confessor. See plates 6 and 7.
Rosendal, Follingbo <u>sn.</u>	1042	78	59	29	Stenberger 1947 no. 163 p. 66, Hatz 1974 no. 236. The latest Anglo-Saxon coin belongs to Haraldr's reign while the <u>tpq</u> is given by a Danish coin.
Södra Byrummet, Visby	1042	977	220	443	Stenberger 1947 no. 569 pp. 229-30, Hatz 1974 no. 237. The latest Anglo-Saxon coin is from Haraldr's reign but the <u>tpq</u> is provided by a Danish coin from Magnus' reign. This hoard is unusual for its large number of Arabic coins (385) at this late date, which range from 744 to 1005.
Botvalde, Väte <u>sn.</u>	1047	264	13	27	Stenberger 1947 no. 606 pp. 244-5, Hatz 1974 no. 227. The latest coins belong to Knútr's reign while the <u>tpq</u> is provided by a Danish coin from Sveinn Ulfsson's reign.
Nore, Vamlingbo <u>sn.</u>	1048	416	241	43 +	Stenberger 1947 no. 559 pp. 223-5, Hatz 1974 no. 267. The latest Anglo-Saxon coins belong to Eadward the Confessor, while the <u>tpq</u> is provided by a German coin from the upper Lorraine. Some of the hacksilver and objects suggest eastern contacts.

<u>findspot</u>	<u>tpq</u>	<u>no. Eng.</u>	<u>no. Ger.</u>	<u>other</u>	<u>Literature/Comments</u>
Sigsarve, Hejde <u>sn.</u>	1055	298	225	809	Stenberger 1947 no. 269 pp. 106-9, Hatz 1974 no. 285. The latest Anglo-Saxon coins belong to Eadward the Confessor's reign. Like S8dra Byrummet, this hoard has an unusually high number of Arabic coins (772) for its date, which range from 739 to 1002. Many of the objects are complete (see Plate 16) and some have eastern parallels.
Petes, Öja <u>sn.</u>	1076	927	514	157	Hauberg 1900 no. 117 p. 173, Stenberger 1947 no. 610 pp. 246-7, Hatz 1974 no. 327. The latest Anglo-Saxon coins belong to Eadward the Confessor. 119 coins are from Denmark, mainly from the reign of Sveinn Ulfsson. The <u>tpq</u> for the hoard is provided by a German coin from the Maaslande area. All the objects in this hoard are complete, and consist of a number beads of diverse types, some with eastern parallels.
Domerarve, Öje <u>sn.</u>	1089	293	231	72	Stenberger 1947 no. 613 pp. 248-9, Hatz 1974 no. 352. The latest English coins belong to William the Conqueror while a German coin from K8ln provides the <u>tpq</u> for the hoard. Some of the finds suggest eastern connections.
Mickels, När <u>sn.</u>	1092	72	44	46	Stenberger 1947 no. 395 p. 156, Hatz 1974 no. 358. The latest English coins belong to William the Conqueror while German coins provide the <u>tpq</u> for the hoard. The hoard also contained a Thor's hammer, with many pecks to test its silver content.
Oxarve, Hemse <u>sn.</u>	1120	317	46	268	Stenberger 1947 no. 295 pp. 121-2, Hatz 1974 no. 374. The latest English coins are from William the Conqueror's reign. The composition of this hoard is quite strange. It includes 79 Roman denare dating from 70-192, 78 Arabic coins, the latest of which date to 1003. In addition, there are 114 Byzantine, the largest number found in a Gotlandic hoard. 98 of these date to 1042/55, while 2 are slightly later, dating to 1067/71. The <u>tpq</u> is provided by German coins. The only hacksilver is a piece of an armring and a fragment of a cast bar.

Bibliography

Note: The following order will be used in the bibliography: Å or Aa will be put first, followed by A-Z, then with Ä or Æ and Ø or Ö.

Primary sources:

Adam of Bremen, History of the Archbishops of Hamburg-Bremen, trans. and ed. by F. J. Tschan, New York, 1959.

Anglo-Saxon Chronicle. Text in Plummer, Charles and Earle, John, Two of the Saxon Chronicles Parallel, Oxford 1892. Translation in Whitelock, Dorothy, The Anglo-Saxon Chronicle, 2nd ed., London, 1965.

Byrhtferth's Manual, trans. and ed. by S. J. Crawford (Early English Text Society 177), London, 1929.

Encomium Emmae Reginae, trans. and ed. by Alistair Campbell (Royal Historical Society, Camden 3rd ser., vol. 72), London 1949.

Heimskringla, ed. Bjarni Aðalbjarnarson (Íslensk Fornrit vols. 26-8), Reykjavík, 3 vols., 1941, 1945, 1951.

Jömsvíkinga Saga, trans. and ed. by N. F. Blake, London, 1962.

Bibliographical references:

Nordic Archaeological Abstracts, Viborg.

Swedish Archaeological Bibliography, Uppsala.

Secondary sources:

Aakjær, Svend 1927. "Old Danish thegns and drengs", Acta Philologica Scandinavica 2, 1-30.

Adams, B. D. 1974. "A Sword of the Viking period from the R. Lea at Hertford", Med Arch 18, 154-8.

Addyman, P. V. 1964. "A dark-age settlement at Maxey, Northants.", Med Arch 8, 20-73.

Addyman, P. V. 1972. "The Anglo-Saxon house: a new review", Anglo-Saxon England 1, 273-307.

Addyman, P. V. 1976. "Archaeology and Anglo-Saxon society", in G. de G. Sieveking, I. H. Longworth and K. E. Wilson (eds.), Problems in Economic and Social Archaeology (G. Clark-festschrift), London, 309-22.

Addyman, P. V. 1978. The work of the York Archaeological Trust, 1978, York.

Albrecht, G. 1959. Das Münzwesen im Niederlothringischen und Friesischen Raum vom 10. bis zum beginnenden 12. Jahrhundert (Numismatische Studien 6), Hamburg.

Ambrosiani, Björn 1974. "Comments on Iron Age Farms in SW-Norway", Norwegian Archaeological Review 7, 40-3.

Ambrosiani, Björn 1977. "Urban archaeology in Sweden" in M. W. Barley (ed.), European towns: their archaeology and early history, London, 103-26.

Andersen, H. Hellmuth 1971. "Tordenguden", Skalk, 4-8.

- Andersen, H. Hellmuth, Crabb, P. J., and Madsen, H. J. 1971. Århus Sønder vold. En byarkæologisk undersøgelse, København.
- Andersen, H. Hellmuth, Madsen, H. J., and Voss, Olfert 1976. Danevirke (Jysk Arkæologisk Selskabs publikationer, skrifter XLII), 2 vols., København.
- Andersson, Aron, and Blindheim, Martin 1957. "Bysantisk stilinflytelse", in KHL vol. 2, cols. 431-44.
- Andersson, Gun 1976. "Visbys äldsta medeltid belyst av det arkeologiska materialet", Gotländskt Arkiv, 41-62.
- Andersson, Theodore M. 1977. "The conversion of Norway according to Oddr Snorrason and Snorri Sturluson" Med Scand 10, 83-95.
- Andren, Anders 1976. "Stadsbilden" in UffPKL, 21-40.
- Arbman, Holger 1926. "Bidrag till kännedomen om det äldsta Sigtuna", Fornvännen 21, 171-94.
- Arne, T. J. 1934. Das Bootgräberfeld von Tuna in Alsike Uppland, Stockholm.
- Ashdown, Margaret 1930. English and Norse documents relating to the reign of Ethelred the Unready, Cambridge.
- Auden, G. A. 1906-7. "Abbeys in Norway founded from York" Saga-Book 5, 58-9.
- Bakay, K. 1967. "Archäologische Studien zur Frage der Ungarischen Staatsgründung", Acta Archaeologica Academiae Scientiarum Hungaricae 19, 105-73.
- Balldis, F. 1940. Det äldsta Lettland, Stockholm.
- Barlow, F. 1958. "Two notes: Cnut's second pilgrimage and Queen Emma's disgrace in 1043" English Historical Review 73, 649-56.
- Barlow, F. 1963. The English church 1000-1066: a constitutional history, London.
- Barracough, G. 1954. "The Anglo-Saxon writ", History, 193-215.
- Bartholin, T. S. 1978a. "Dating of coffins and staves in medieval Lund" in John Fletcher (ed.), Dendrochronology in Europe (BAR S-51), Oxford, 275-8.
- Bartholin 1978b. "Dendrochronology, wood anatomy and landscape development in southern Sweden" in John Fletcher (ed.), Dendrochronology in Europe (BAR S-51), Oxford, 125-30.
- Bascombe, K. N. 1976. "Documentary evidence" in P. J. Huggins, "The excavations of an 11th-century Viking hall and 14th-century rooms at Waltham Abbey, Essex, 1969-71", Med Arch 20, 75-80.
- Benediktz, B. S. 1969. "The evolution of the Varangian regiment in the Byzantine army", Byzantinische Zeitschrift 62, 20-4.
- Bergman, Kjell and Billberg, Ingmar 1976. "Metallhantverk" in UffPKL, 199-212.
- Biddle, Martin 1966. "Excavations at Winchester, 1965", Ant. J. xlv, 308-332.
- Biddle, Martin and Hudson, Daphne M. 1973. The Future of London's Past (Rescue publication number 4), Worcester.

- Biddle, Martin and Keene, D. J. 1976. "Winchester in the eleventh and twelfth centuries" in Martin Biddle (ed.) Winchester in the Early Middle Ages, Oxford, 241-448.
- Birnbaum, Henrik 1978. "Yaroslav's Varangian connection" Scando-Slavica 24, 5-25.
- Björkman, E. 1900, 1902. Scandinavian Loan-words in Middle English, Halle, (1900 = vol. 1, 1902 = vol. 2).
- Björn, Anathon and Shetelig, Haakon 1940. "Viking antiquities in England" in Haakon Shetelig (ed.) Viking Antiquities in Great Britain and Ireland, vol. 4, Oslo.
- Blake, N. F. 1962. "Introduction" to Jónsvikinga Saga, London.
- Blindheim, Charlotte 1975. "Kaupang in Skiringssal. A Norwegian port of trade from the Viking Age" in H. Jankuhn, W. Schlesinger, and H. Steuer (eds.), Vor- und Frühformen der europäischen Stadt im Mittelalter, vol. 2, Göttingen, pp. 40-57.
- Blomqvist, Ragnar 1975. "Die älteste Geschichte der Stadt Lund" in H. Jankuhn, W. Schlesinger and H. Steuer (eds.), Vor- und Frühformen der europäischen Stadt im Mittelalter, vol. 2, Göttingen, 128-45.
- Blomqvist, Ragnar and Mårtensson, Anders W. 1963. Thulegravningarna 1961, Lund.
- Bolin, Sture 1926. Fynden av romerska mynt i det fria Germanien, Lund.
- Borg, Kaj 1976. "The settlement of Eketorp-III" in Kaj Borg, Ulf Näsman, and Erik Wegraeus, Eketorp: Fortification and Settlement on Öland/Sweden. The Monument, Stockholm, 161-88.
- Bosl, Karl 1970. "Political relations between east and west" in G. Barraclough (ed.) Eastern and Western Europe in the Middle Ages, London, 43-82.
- Brooks, N. P. 1978. "Arms, status and warfare in late-Saxon England", in David Hill (ed.) Ethelred the Unready (BAR 59), 81-103.
- Browne, G. F. 1885. "'Scandinavian' or 'Danish' sculptured stones found in London", Archaeological Journal xlii, 251-9.
- Bruce-Mitford, R. L. S. 1956. "Late Saxon disc-brooches" in D. B. Harden (ed.) Dark-Age Britain, London, 171-201.
- Brøndsted, Johannes 1924. Early English Ornament, London and Copenhagen.
- Brøndsted, Johannes 1936. "Danish inhumation graves of the Viking period" Acta Archaeologica 7, 81-228.
- Brøndsted, Johannes 1965. The Vikings, Harmondsworth.
- Bugge, Anders 1935. "The origin, development and decline of the Norwegian stave church", Acta Archaeologica 6, 152-65.
- Bugge, Gunnar and Norberg-Schulz, Christian 1969. Stav og Laft i Norge, Oslo.
- Bull, Edvard 1913-4. "The cultus of Norwegian saints in England and Scotland", Saga-Book 8, 135-48.
- Butler, V. J. 1961. "The metrology of the late Anglo-Saxon penny: the reigns of Æthelred II and Cnut" in R. H. M. Dolley (ed.) Anglo-Saxon Coins, London, 195-214.

- Butler, V. J. and Dolley, R. H. M. 1961. "A note on the Viking Age hoard from Lindores and on some other finds from the British Isles which are alleged to have contained coins of Ecgbearht" Numismatic Chronicle, 7th ser. vol. 1, 171-4.
- Bäumli, Franz H. 1969. Medieval Civilization in Germany 800-1273, London.
- Cameron, Kenneth 1961. English Place-names, London.
- Campbell, Alistair 1946-53a. "'Knúts saga'", Saga-Book 13, 238-48.
- Campbell, Alistair 1946-53b. "Saxo Grammaticus and Scandinavian historical tradition" Saga-Book 13, 1-22.
- Campbell, Alistair 1949. "Introduction" ^{and Appendices} to Encomium Emmae Reginae (Royal Historical Society, Camden 3rd ser. vol. 72), London.
- Campbell, Alistair 1970 (1971). Skaldic Verse and Anglo-Saxon History (The Dorothea Coke Memorial Lecture in Northern Studies, U. College London, 1970), London.
- Capelle, Torsten 1968. Der Metallschmuck von Haithabu. Studien zur wikingischen Metallkunst (Die Ausgrabungen in Haithabu, Bd 5), Neumünster.
- Carus-Wilson, Eleanora 1962-3. "The Medieval trade of the ports of the Wash", Med Arch 6-7, 182-201.
- Carver, M. O. H. 1979. "Three Saxo-Norman tenements in Durham city", Med Arch 23, 1-80.
- Cherry, Bridget 1976. "Ecclesiastical architecture" in D. M. Wilson (ed.) The Archaeology of Anglo-Saxon England, London, 151-200.
- Christensen, Aksel E. 1968. "Denmark between the Viking Age and the time of the Valdemars", Med Scand 1, 28-50.
- Christensen, Aksel E. 1969. Vikingetidens Danmark, København.
- Christiansson, Hans 1959. Sydskandinavisk stil, Uppsala.
- Christie, Håkon 1966. "Old Oslo", Med Arch 10, 45-58.
- Christie, Håkon, Olsen, Olaf, and Taylor, H. M. 1979. "The wooden church of St. Andrew at Greensted, Essex", Ant. J. 59:1, 92-112.
- Cinthio, Erik 1968. "The churches of St. Clemens in Scandinavia" in Ragnar Blomqvist (ed.) Res Mediaevales (Archaeologica Lundensia 3), 103-116.
- Cnotliwy, Eugeniusz 1973. Rzemiosło rógownicze na pomorzu wczesnośredniowiecznym (Antler handicraft in early Medieval Pomerania), Wrocław. (English summary pp. 312-21).
- Colyer, Christina and Jones, M. J. 1979 "Excavations at Lincoln. Second interim report: excavations in the lower town 1972-8" Ant. J. 59:1, 50-91.
- Combe, Taylor 1817. "Account of some Saxon antiquities found near Lancaster" Archaeologia 18, 199-202.
- Cross, S. H. 1930. "Scandinavian-Polish relations in the late tenth century" in Studies in honor of Hermann Collitz, Baltimore, 114-40.
- Cursiter, James W. 1888-9. "Notes on a hoard of silver ornaments and coins, discovered in the island of Burray, Orkney" PSAS 23, 318-22.

- Dahlbäck, Göran 1977. "Arkeologist och kulturgeografisk bebyggelse-historisk forskning i Sverige", Historisk Tidskrift för Finland, 377-85.
- Dalton, O. M. 1911 repr. 1961. Byzantine Art and Archaeology. New York.
- Davidan, O. I. 1970. "Contacts between Staraja Ladoga and Scandinavia" in Varangian Problems (Scando-Slavica Supplement 1), Copenhagen, 79-91.
- Dejevsky, N. J. 1977. "The Varangians in Soviet archaeology today" Med Scand 10, 7-34.
- Devenish, D. C. and Elliott, W. M. 1967. "A decorated axe-head of Viking type from Coventry", Med Arch 11, 251-2.
- Dickens, B. 1937-45. "The cult of S. Olave in the British Isles", Saga-Book 12, 53-80.
- Dolley, R. H. M. 1960. "Coin hoards from the London area", Trans. London and Middlesex Archaeological Soc. 20, 37-50.
- Dolley, R. H. M. 1966. The Hiberno-Norse coins in the British Museum (SCBI vol. 8), London.
- Dyggve, Ejnar 1954. "Gorm's temple and Harald's stave-church at Jelling", Acta Archaeologica 25, 221-39.
- Eckstein, D. 1978. "Dendrochronological dating of the medieval settlement of Haithabu (Hedeby)" in John Fletcher (ed.) Dendro-chronology in Europe (BAR S-51), Oxford, 267-74.
- Ellehoj, Svend 1965. Studier over den ældste Nørøne Historieskrivning (Bibliotheca Arnemagneana vol. 26), København.
- Evison, Vera I. 1969. "A Viking grave at Sonning, Berks.", Ant. J. 49, 330-45.
- Farbregd, Oddmun 1972. Pilefunn från Opdalsfjella (Det Kgl. Norske Videnskabens Selskab Museet, Miscellanea 5), Trondheim.
- Hell, Christine 1974. "The Icelandic saga of Edward the Confessor: its version of the Anglo-Saxon emigration to Byzantium", Anglo-Saxon England 3, 179-96.
- Fest, S. 1938. The sons of Eadmund Ironside. Anglo-Saxon king at the court of Saint Stephen. Saint Margaret of Scotland, Budapest.
- Fillipowicz, Wladyslaw 1975. "Die Entwicklung der Stadt Wolin vom 9. bis zum 12. Jahrhundert" in H. Jankuhn, W. Schlesinger, H. Steuer (eds.), Vor- und Frühformen der europäischen Stadt im Mittelalter, vol. 2, Göttingen, 190-208.
- Floderus, Erik 1930. "Sigtuna", Acta Archaeologica 1 (part 1), 97-110.
- Forsberg, Christina 1967-8. "Östergötlands vikingatida skattfynd", Tor 12, 12-37.
- Freeman, Edward 1870. The History of the Norman Conquest of England, 2nd ed., vol. 1, Oxford
- Fuglesang. See also Nordhagen.
- Fuglesang, Signe Horn 1978. "Stylistic groups in late Viking art" in James Lang (ed.) Anglo-Saxon and Viking Age Sculpture (BAR 49), 205-23.
- Galster, Georg 1929. "Møntfundet fra Store Frigaard", Aarbøger for nordisk Oldkyndighed og Historie, 3rd ser. vol. 19, 283-315.

- Galster, Georg 1964. Royal Collection of Coins and Medals National Museum Copenhagen. Part I: Ancient British and Anglo-Saxon Coins before Aethelred II (SCBI vol. 4), London.
- Galster, Georg 1977-8. "Vikingetidens møntfund fra Bornholm", Nordisk Numismatisk Årsskrift, 5-246.
- Garmonsway, G. N. 1963 (1964). Canute and his Empire (The Dorothea Coke Memorial Lecture in Northern Studies, U. College London, 1963), London.
- Gibbs-Smith, C. H. 1973. The Bayeux Tapestry, London.
- Gimbutas, Marija 1963. The Balts, London.
- Graham-Campbell, James 1975-6. "Viking-age silver and gold hoards from Scotland", PSAS 107, 114-35.
- Graham-Campbell, James 1976. "The Viking-age silver hoards of Ireland" in B. Almqvist and D. Greene (eds.) Seventh Viking Congress, Dublin, 39-74.
- Graham-Campbell, James 1980. Viking Artefacts: a Select Catalogue, London.
- Graham-Campbell, James and Kidd, Dafydd 1980. The Vikings, London.
- Grieg, Sigurd 1929. "Vikingetidens skattefund", Universitetets Oldsaksamlings Skrifter II, Oslo, 117-311.
- Grieg, Sigurd 1942. "The house in Norwegian archaeology", Acta Archaeologica 13, 169-78.
- Grieg, Sigurd 1969. "Lahellnavnet i arkeologisk og kulturhistorisk lys", Universitetets Oldsaksamling Årbok, 5-66.
- Grierson, Phillip 1941. "The relations between England and Flanders before the Norman Conquest" TRHS 4th ser. vol. 23, 71-112.
- Grierson, Phillip 1959. "Commerce in the Dark Ages", TRHS 5th ser. vol. 9, 123-40.
- Griffith, G. 1786. "Acct of coins etc found in the digging up the foundations of some old houses near the church of St. Mary Hill, London 1774", Archaeologia 4, 356-63.
- Gurevich, A. Ya. 1971. "Saga and history. The 'historical conception' of Snorri Sturluson", Med Scand 4, 42-53.
- Hårdh, Birgitta 1973-4. "Gewundene und geflochtene Halsringe in skandinavischen Silberhortfunden der Wikingerzeit", MLUHM, 291-306.
- Hårdh, Birgitta 1975-6. "The Bunkeflo silver hoard. Its discovery and a description of the non-monetary hacksilver", MLUHM, 31-9.
- Hårdh, Birgitta 1976a. Wikingerzeitliche Depotfunde aus Südschweden. Katalog und Tafeln (Acta Archaeologica Lundensia, series in 4^o No.9), Bonn and Lund.
- Hårdh, Birgitta 1976b. Wikingerzeitliche Depotfunde aus Südschweden. Probleme und Analysen (Acta Archaeologica Lundensia, series in 8^o minore. No. 6), Bonn and Lund.
- Hårdh, Birgitta 1977-8. "Trade and money in Scandinavia in the Viking Age", MLUHM, 157-71.
- Haastrup, Lars 1969. "Oversigt over kompositionen af danske skattefund ca. 800-ca. 1150", Nordisk Numismatisk Unions Medlemsblad 5, 129-32.

- Hagen, Anders 1955 (1956). "The Norwegian Iron Age farm" Bergens Museums Årbok, 49-58.
- Hall, Thomas 1973. "Sigtuna. Entstehung und Entwicklung einer mittelalterlichen Stadt", Konsthistorisk Tidskrift 43, 69-86.
- Harmer, Florence 1946-53. "The English contribution to the epistolary usages of early Scandinavian kings", Saga-Book 13, 115-55.
- Harmer, Florence 1952. Anglo-Saxon Writs, Manchester.
- Hatz, Gert 1974. Handel und Verkehr zwischen dem Deutschen Reich und Schweden in der späten Wikingerzeit. Die deutschen Münzen des 10. und 11. Jahrhunderts in Schweden, Lund.
- Haugberg, P. 1900. "Myntforhold og Udmyntninger i Danmark indtil 1146", Det Kongelige Danske Videnskabskabernes Selskabs Skrifter 6th ser. vol. 5, 1-266.
- Hauglid, Roar 1972. "The trussed-rafter construction of the stave churches in Norway", Acta Archaeologica 43, 19-55.
- Hauglid, Roar 1978. "Features of the origin and development of the stave churches in Norway", Acta Archaeologica 49, 37-60.
- Helbæk, Hans 1977. "The Fyrkat grain" in Olaf Olsen and Holger Schmidt 1977, Fyrkat, vol. I: Borgen og Bebyggelsen, København, [1] - [41].
- Hellman, B. 1947. "Vikingaskatter i Ångermanland", Ångermanland 4, 29-36.
- Hensel, Witold 1977. "The origins of western and eastern European Slav towns" in M. W. Barley (ed.) European Towns: their Archaeology and Early History, London, 373-90.
- Herbst, C. F. 1863. "Sandø fundet", Annaler for Nordisk Oldkyndighed og Historie, 376-93.
- Herrmann, Joachim 1977. "Research into the early history of the town in the territory of the German Democratic Republic" in M. W. Barley (ed.) European Towns: their Archaeology and Early History, London, 243-59.
- Herrmann, Joachim 1980. "The northern Slavs" in David M. Wilson (ed.) The Northern World, London, 183-206.
- Herteig, Asbjørn 1959. "The excavation of 'Bryggen', the old Hanseatic wharf in Bergen", Med Arch 3, 177-86.
- Herteig, Asbjørn 1975. "Borgund in Sunnmøre" in A. E. Herteig, H-E. Lidén, and C. Blindheim, Archaeological Contributions to the Early History of Urban Communities in Norway, Oslo, 23-48.
- Hohler, Erla Bergendahl 1975. "Tysk stilinnflyelse" in KHL vol. 19, cols. 150-4.
- Holdsworth, Philip 1976. "Saxon Southampton; a new review", Med Arch 20, 26-61.
- Hollister, C. Warren 1962. Anglo-Saxon Military Institutions on the eve of the Norman Conquest, Oxford.
- Holmberg, Rikard 1976. "Två ampuller, två skedar och en bildremsa" in UffPKL, 333-56.
- Holmqvist, Wilhelm 1951. "Viking art in the eleventh century", Acta Archaeologica 22, 1-56.

- Holst, Hans 1946-7. "Myntfunnet fra Sløgstad", Bergens Museums Årbok, 3-23.
- Hope-Taylor, Brian 1977. Yeavinger, London.
- Huggins, P. J. 1976. "The excavation of an 11th-century Viking hall and 14th-century rooms at Waltham Abbey, Essex, 1969-71", Med Arch 20, 75-133.
- Huszar, L. 1967. "Der Umlauf ungarischer Münzen des 11. Jahrhunderts in Nordeuropa", Acta Archaeologica Academiae Scientiarum Hungaricae 19, 175-200.
- Hvass, Steen 1979. "Jernalderlandsbyerne ved Vorbasse", Nationalmuseets Arbejdsmark (København), 105-12.
- Høeg, H. I., Lidén, H-E., Liestøl, A., Molang, P. B., Schia, E., and Wiberg, C. 1977. De arkeologiske utgravningen i Gamlebyen, Oslo, vol. 1 Feltet "Mindets Tomt", Oslo.
- Ingstad, Anne Stine 1977. The Discovery of a Norse Settlement in America. Excavations at L'Anse aux Meadows, Newfoundland 1961-1968, Oslo.
- Jacobsen, Lis and Moltke, Erik (eds.) 1941, 1942. Danmarks Runeindskrifter, København (1941 = Atlas, 1942 = Text).
- Jacobsen, Lis and Moltke, Erik 1947. The Runic Inscriptions of Denmark. Summary, København.
- Jakimowicz, Roman 1931. "Über der Herkunft der Hacksilberfunde", Congressus secundus archaeologorum Balticorum Rigae 1930, Riga, 251-66.
- Jammer, Vera 1952. Die Anfänge der Münzprägung im Herzogtum Sachsen 10. und 11. Jahrhundert (Numismatische Studien 3-4), Hamburg.
- Jankuhn, Herbert 1972. Haithabu. Ein Handelsplatz der Wikingerzeit, 5th ed., Neumünster.
- Jansson, Ingmar 1969. "Wikingerschmuck und Münzdateriung", Tor, 26-64.
- Jansson, Sven B. 1962. The Runes of Sweden, London.
- Jansson, Sven B. 1965 (1966). Swedish Vikings in England. The Evidence of the Rune Stones (The Dorothea Coke Memorial Lecture in Northern Studies, U. College London, 1965), London.
- Jones, Gwyn 1968. A History of the Vikings, Oxford.
- Jørgensen, Lise Bender and Skov, Torben 1978. "Trabjerg. Resultaterne af 5 års udgravningen af en vikingetidsboplads i NV-Jylland" Holstebro Museum Årsskrift, 7-40.
- Kaland, Sigrid H. H. 1969. "Studier i Øvre Telemarks Vikingetid", Universitetets Oldsaksamling Årbok, 67-215.
- Keller, Christian 1972-4. "Nordisk vikingetid — forsøk på en økonomisk modell", Universitetets Oldsaksamling Årbok, 99-110.
- Kendrick, T. D. 1930. A History of the Vikings, London.
- Kendrick, T. D. 1949. Late Saxon and Viking Art, London.
- Keynes, S. D. 1978. "The declining reputation of King Æthelred the Unready" in David Hill (ed.) Æthelred the Unready (BAR 59), 227-53.

- King, Peter 1962-5. "The Cathedral Priory of Odense in the Middle Ages", Saga-Book 16, 192-214.
- Kirpičnikov, A. N. 1970. "Connections between Russia and Scandinavia in the 9th and 10th centuries, as illustrated by weapon finds" in Varangian Problems (Scando-Slavica, Supplement 1), Copenhagen, 50-76.
- Kjaer, Hans 1928-36. "St. Canute and St. Olaf in the Church of the Nativity, Bethlehem", Saga-Book 11, 71-81.
- Kjølbye-Biddle, Birthe and Page, R. I. 1975. "A Scandinavian runestone from Winchester", Ant. J. 55:2, 389-94.
- Klindt-Jensen, Ole 1970. "The evaluation of the archaeological evidence" in Varangian Problems (Scando-Slavica, Supplement 1), Copenhagen, 39-44.
- Knorr, T. H. A. 1936. "Die Hacksilberfund Hinterpommerns, der Grenzmark und der Neumark", Mannus 28, 160-229.
- Knorr, T. H. A. 1940. "Hacksilberfunde im Weichsel- und Wartheraum. Ein Beitrag zu den dänisch-polnischen Beziehungen im 11. Jahrhundert", Mannus 32, 434-40.
- Kochkurkina, S. I. 1973. Yugo-vostochnoe Priladozh'e v X-XIII vv., Leningrad.
- Kyhlberg, Ola 1975. "Vågar och viktlo. Diskussion kring frågor om precision och noggrannhet", Fornvännen 70, 156-65.
- Körner, S. 1964. The Battle of Hastings: England and Europe 1035-1066, Lund.
- Lagerqvist, Lars O. 1968. "The coinage at Sigtuna in the names of Anund Jacob, Cnut the Great and Harthacnut", in Commentationes vol. 2, 383-413.
- Lang, James forthcoming. "Some aspects of Anglo-Scandinavian art in the late Viking period". Paper delivered at the CBA 3 conference, September 1979, Durham.
- Larson, Laurence M. 1904. The King's Household in England before the Norman Conquest (Bulletin of the University of Wisconsin no. 100), Madison, Wisconsin.
- Larson, Laurence M. 1909-10. "The political policies of Cnut as King of England", American Historical Review 15, 720-43.
- Larson, Laurence M. 1910. "The efforts of the Danish kings to recover the English crown after the death of Harthacnut", Annual Report of the American Historical Association (Washington), 71-81.
- Larson, Laurence M. 1912. Canute the Great and the Rise of Danish Imperialism, New York.
- Leach, H. G. 1921. Angevin Britain and Scandinavia, Cambridge, Mass.
- Leppäaho, Jorma 1964. "Späteisenzeitliche Waffen aus Finnland", Finska Fornminnesföreningens Tidskrift 61, 1-131.
- Lichačev, D. S. 1970. "The legend of the calling-in of the Varangians, and political purposes in Russian chronicle-writing from the second half of the XIth to the beginning of the XIIth century" in Varangian Problems (Scando-Slavica, Supplement 1), Copenhagen, 170-85.

- Lidén, Hans-Emil 1977. "Urban archaeology in Norway" in M. W. Barley (ed.) European Towns: their Archaeology and Early History, London, 83-101.
- Liebgett, Niels-Knud 1980. "Skuldevig", Skalk no. 2, 3-8.
- Liestøl, Aslak 1970. "Runic inscriptions" in Varangian Problems (Scando-Slavica, Supplement 1), Copenhagen, 121-31.
- Linder, Ulla S. 1935. "Södermanlands skattfynd från vikingatiden", Södermanlands Fornminnesförening Årsskrift, 47-68.
- Linder, Ulla S. 1936. "Södermanlands skattfynd från vikingatiden", Södermanlands Fornminnesförenings Årsskrift, 21-36.
- Lindqvist, Sune 1915. Den Helige Eskils Biskopsdöme, Stockholm.
- Lobbedey, Uwe 1977. "Northern Germany" in M. W. Barley European Towns: their Archaeology and Early History, London, 127-57.
- London Museum 1954 repr. 1967. Medieval Catalogue, London.
- Long, Clifford D. 1975. "Excavations in the medieval city of Trondheim, Norway", Med Arch 19, 1-32.
- Lund, Niels 1976. "King Edgar and the Danelaw", Med Scand 9, 181-95.
- Lundström, L. 1973 Bitsilver och betalningsringar (Theses and Papers in North-European Archaeology 2), Stockholm.
- Lundström, Per 1975. "Paviken I bei Västergarn — Hafen, Handelsplatz und Werft" in H. Jankuhn, W. Schlesinger and H. Steuer (eds.) Vor- und Frühformen der europäischen Stadt im Mittelalter, vol. 2, Göttingen, 82-93.
- Martensson, Anders W. 1962-3. "Wells and their contents from the early Middle Ages in Lund", MLUHN, 203-23.
- MacGregor, Arthur 1978. "Industry and commerce in Anglo-Scandinavian York" in R. A. Hall (ed.) Viking Age York and the North (CBA Research Report no. 27), 37-57.
- Magerøy, Ellen Marie 1961. "Flatatunga problems", Acta Archaeologica 32, 153-72.
- Magnus, Bente 1974. "Fisker eller Bonde? Undersøkelser av hustufter på ytterkysten", Viking 38, 68-108.
- Malmer, Brita 1961. "A Contribution to the numismatic history of Norway during the eleventh century" in Commentationes vol. 1, 223-376.
- Malmer, Brita 1972. "Hur gammalt är Lund?", Ale no. 2, 14-9.
- Malmer, Brita 1972 (1974). King Canute's Coinage in the Northern Countries (The Dorothea Coke Memorial Lecture in Northern Studies, U. College London, 1972), London.
- Mann, Sir James 1957. "Arms and Armour" in F. Stenton (ed.), The Bayeux Tapestry, London, 56-69.
- Martens, Irmelin 1970-1. "Gamle fjellgården fra Strøkene rundt Hardangervidda", Universitetets Oldsaksamling Årbok, 1-84.
- Martens, Irmelin 1972. "Møsstrand i Telemark", Viking 36, 83-114.
- Metcalf, D. M. 1957. "Find-record of Medieval coins from Gough's Camden's Britannia", Numismatic Chronicle, 6th ser. vol. 17, 181-207.

- Moe, O. H. 1955. "Urnes and the British Isles", Acta Archaeologica 26, 1-30.
- Müller-Wille, Michael 1970. "Ein neues ULFBERHT-Swert aus Hamburg", Offa 27, 65-88.
- Müller-Wille, Michael 1973. "Zwei wikingerzeitliche Prachtschwerter aus der Umgebung von Haithabu", Berichter über die Ausgrabungen in Haithabu 6, 47-89.
- Müller-Wille, Michael 1978. "Das Schiffsgrab von der Ile de Groix (Bretagne) — Ein Exkurs zum 'Bootkammergrab von Haithabu'", Berichte über die Ausgrabungen in Haithabu 12, 48-84.
- Myhre, Bjørn 1974. "Reply to the comments on Iron Age Farms in SW-Norway", Norwegian Archaeological Review 7, 63-83.
- Nerman, Birger 1929a. "Gotlands handel på Väst-Ryssland under 1000-talet", Rig 12, 9-18.
- Nerman, Birger 1929b. Die Verbindungen zwischen Skandinavien und dem Ostbaltikum in der jüngeren Eisenzeit (Kungl. Vitterhets Historie och Antikvitets Akademiens Handlingar vol. 40:1), Stockholm.
- Nerman, Birger 1953. "Två östliga bronsarmband från 1000-talet, funna i Uppland", Fornvännen 48, 124-8.
- Nerman, Birger 1958. Grobin-Seeburg. Ausgrabungen und Funde, Stockholm.
- Nielsen, Lief Chr. 1977-8. "Omgård — en vestjysk landsby fra vikingetid", Hardsyssels Arbog, 2nd ser., 11-2, 59-84.
- Nilsson, Thorvald 1976. "Hus och huskonstruktioner" in UffPKL, 41-71.
- Norberg, Rune 1943. "Norrländska skattefynd som vittnesbörd om ofredstider. I.", Norrlands Försvar, 54-78.
- Norberg, Rune 1945. "Norrländska skattefynd som vittnesbörd om ofredstider. II.", Norrlands Försvar, 23-32.
- Norberg, Rune 1971. "Sporre" in KHL vol. 16, cols. 530-4.
- Norberg, Rune 1972. "Stigbygel" in KHL vol. 17, cols. 176-9.
- Nordhagen. See also Fuglesang.
- Nordhagen, Signe Horn 1972. "Sverd" in KHL vol. 17, cols. 518-28.
- Nordhagen, Signe Horn 1974. "Some aspects of the Ringerike style. Unpublished Ph.D. thesis, University of Bergen.
- Nordman, Carl Axel 1924. Karelska Järnåldersstudier (Finska fornminnesföreningens Tidskrift 34), Helsingfors.
- Nordman, Carl Axel 1942. "Schatzfunde und Handelsverbindungen in Finnlands Wikingerzeit", Acta Archaeologica 13, 272-93.
- Nordman, Carl Axel 1943. "Vapnen i nordens forntid", Nordisk Kultur 12b, 1-66.
- Nyberg, Tore 1977. "Denmark" in M. W. Barley (ed.) European Towns: their Archaeology and Early History, London, 65-81.
- Nylén, Erik 1973. "Finskt, gotländskt eller nordiskt. Kring ett ovanligt exempel på sen runstenornamentik", Finska Fornminnesföreningens Tidskrift 75, 161-7.
- Nørlund, Poul 1968. Trelleborg, København (Nationalmuseet).

- Obolensky, Dimitri 1970. "The Byzantine sources on the Scandinavians in eastern Europe" in Varangian Problems (Scando-Slavica, Supplement 1), Copenhagen, 149-64.
- Ohlsson, Tom 1973. "Vikingatid och medeltid i Löddeköpinge", Ale, 27-42.
- Ohlsson, Tom 1975-6. "The Löddeköpinge Investigation I", MLUHM, 59-161.
- Oldberg, Andreas 1966. Metallteknik under Vikingatid och Medeltid, Stockholm.
- Olsen, Magnus 1941, 1951, 1954, 1957, 1960. Norges Innskrifter med de Yngre Runer, 5 vols., Oslo.
- Olsen, Olaf 1966. Hørg, Hov og Kirke, København.
- Olsen, Olaf 1969. "Die alte Gesellschaft und die neue Kirche" in Kirche und Gesellschaft im Ostseeraum und im Norden vor der Mitte des 13. Jahrhunderts (Acta Visbyensia III), Visby, 43-54.
- Olsen, Olaf and Crumlin-Pedersen, Ole 1978. Five Viking Ships from Roskilde Fjord, København.
- Olsen, Olaf and Schmidt, H. 1977. Fyrkat, vol. I: Borgen og Bebyggelsen, København.
- Olshawska, E. S. 1928-36. "Legal borrowings from Norse in Old and Middle English", Saza-Book 11, 233-8.
- Oppermann, C. J. A. 1937. The English Missionaries in Sweden and Finland, London.
- Ó Riordáin, Breandán 1971. "Excavations at High Street and Winetavern Street, Dublin", Med Arch 15, 73-85.
- Ó Riordáin, Breandán 1976. "The High Street excavations" in B. Almqvist and D. Greene (eds.) Seventh Viking Congress, Dublin, 135-40.
- Owen, Olwyne Anne 1979. A Catalogue and re-evaluation of the Urnes style in England. Unpublished M.A. dissertation, University of Durham.
- Page, R. I. 1973. An Introduction to English Runes, London.
- Paulsen, Peter 1933. "Wikingerfunde aus Ungarn im lichte der nord- und westeuropäischen Frühgeschichte", Archaeologia Hungarica 12, 7-58.
- Paulsen, Peter 1936. Der Goldschatz von Hiddensee (Führer zur Urgeschichte 13), Leipzig.
- Paulsen, Peter 1953. Schwertortbänder der Wikingerzeit, Stuttgart.
- Paulsen, Peter 1956. Axt und Kreuz in Nord- und Osteuropa, Bonn.
- Persson, Jan 1976. "Kammar" in UffPKL, 317-32.
- Petersen, Jan 1919. De norske vikingesverd. En typologisk-kronologisk studie over vikingetidens vaaben (Skrifter utgitt av det Norske Videnskaps-Akademi i Kristiania 2), Kristiania.
- Petersen, Jan 1928. Vikingetidens Smykker, Stavanger.
- Petersen, Jan 1955. Vikingetidens Smykker i Norge, Stavanger.
- Powicke, Michael 1962. Military Obligation in Medieval England, Oxford.

- Rahtz, Philip 1976. "Buildings and rural settlement" in D. M. Wilson (ed.), The Archaeology of Anglo-Saxon England, London, 49-98.
- Ramskou, Thorkild 1950. "Viking Age cremation graves in Denmark", Acta Archaeologica 21, 137-82.
- Ramskou, Thorkild 1953. "Lindholm", Acta Archaeologica 24, 186-99.
- Ramskou, Thorkild 1977. "Vikingebroen", Skalk, no. 1, 3-9.
- Randsborg, Klavs 1980. The Viking Age in Denmark, London.
- Rasmusson, Nils Ludvig 1961. "An introduction to the Viking Age hoards" in Commentationes, vol. 1, 3-16.
- Rasmusson, Nils Ludvig 1966. "Mark" in KHL vol. 11, cols. 420-5.
- Rasmusson, Nils Ludvig 1968. "An overlooked type of coin from the time of King Anund Jacob", in Commentationes vol. 2, 373-82.
- Rasmusson, Nils Ludvig, Holst, Hans, and Rosenstock, Leif H. 1957. "Bysantinska mynt" in KHL vol. 2, cols. 428-31.
- Rice, D. Talbot 1952. English Art 871-1100, Oxford.
- Rigold, S. E. 1962-3. "The Anglian cathedral of North Elmham, Norfolk", Med Arch 6-7, 67-108.
- Robertson, A. J. 1925. The Laws of the Kings of England from Edmund to Henry I, Cambridge.
- Roesdahl, Else 1976. "Otte vikingetidsgrave i Sdr. Onsild", Aarbøger for nordisk Oldkyndighed og Historie, 22-51.
- Roesdahl, Else 1977a. "Borgenes Borg", Skalk, no. 2, 3-9.
- Roesdahl, Else 1977b. Fyrkat, vol. II: Oldsagerne og Gravpladsen, København.
- Rygh, O. 1885. Norske Oldsager, vol. 2, Yngre Jernalder, Christiania.
- Salmo, Helmer 1948. "Deutsche Münzen in vorgeschichtlichen Funden Finnlands", Finska Fornminnesföreningens Tidskrift, 47.
- Salmo, Helmer 1956. "Finnische Hufeisenfibeln", Finska Fornminnesföreningens Tidskrift 56, 1-106.
- Sawyer, P. H. 1965. "The wealth of England in the eleventh century", TRHS 5th ser., vol. 15, 145-64.
- Sawyer, P. H. 1968. Anglo-Saxon Charters, London.
- Sawyer, P. H. 1971. The Age of the Vikings, 2nd ed., London.
- Schiørring, Ole 1978. "Korset i øksen", Skalk, no. 6, 28-9.
- Schmidt, Holger 1973. "The Trelleborg house reconsidered" Med Arch 17, 52-77.
- Schwarz-Mackensen, Gesine 1976. "Die Knochennadeln von Haithabu", Berichte über die Ausgrabungen in Haithabu 9, Neumünster.
- Seger, Hans 1928. "Die schliesischen Silberfunde der spät-slawischen Zeit", Altschlesien 2, 129-61.
- Seger, Hans 1931. "Nachträge zu den schlesischen Silberfunden der spät-slawischen Zeit", Altschlesien 3.
- Selling, Dagmar 1955. Wikingerzeitliche und frühmittelalterliche Keramik in Schweden, Stockholm.

- Shetelig, Haakon 1945. "The Viking graves in Great Britain and Ireland", Acta Archaeologica 16, 1-55.
- Shetelig, Haakon 1948. "The Norse style of ornamentation in the Viking settlements", Acta Archaeologica 19, 69-113.
- Shetelig, Haakon 1954. "The Viking movements" in W. Douglas Simpson (ed.) The Viking Congress, Edinburgh and London, 130-41.
- Simonsson, Henry 1969. "Ett senvikingatida gravfält från Västmanland", Fornvännen 64, 69-89.
- Skaare, Kolbjørn 1976. Coins and Coinage in Viking-Age Norway, Oslo.
- Skjølsvold, Arne 1961. Klebersteinsindustrien i vikingetiden, Oslo.
- Skovgaard-Petersen, Inge 1969. "Saxo, historian of the Patria", Med Scand 2, 54-77.
- Skovmand, Roar 1942. "De danske Skattefund fra Vikingetiden og den ældste Middelalder indtil omkring 1150", Aarbøger for Nordisk Oldkyndighed og Historie, 1-275.
- Slicher van Bath, B. H. 1965. "The economic and social conditions in the Frisian districts from 900 to 1500", Landbouwhogeschool Wageningen, Afdeling Agrarische Geschiedenis 13, 97-133.
- Smith, A. H. 1928-36. "The early literary relations of England and Scandinavia", Saga-Book 11, 215-32.
- Smith, Reginald A. 1925. "The Beeston Tor hoard", Ant. J. 5, 135-40.
- Snyser, H. M. 1965. "Ibn Fadlan's account of the Rus" in Jess B. Bessinger and Robert P. Creed (eds.), Medieval and Linguistic Studies in Honor of Francis Peabody Magoun, Jr., London, 92-119.
- Smyth, Alfred P. 1977. Scandinavian Kings in the British Isles 850-880, Oxford.
- Sognnes, Kalle 1975-6. "Jernpilar frå førhistorisk tid. Forsøk på klassifikasjon", Universitetets Oldsaksamling Årbok, 57-66.
- Sporrøng, Ulf 1974. "Two approaches. A contribution to the current debate about the early development of settlement in SW Norway", Norwegian Archaeological Review 7, 58-63.
- Stenberger, Mårten 1933. Öland under äldre järnåldern, Stockholm.
- Stenberger, Mårten 1947. Die Schatzfunde Gotlands der Wikingerzeit, vol. 2, Fundbeschreibung und Tafeln, Lund.
- Stenberger, Mårten 1958. Die Schatzfunde Gotlands der Wikingerzeit, vol. 1, Text, Lund.
- Stenberger, Mårten 1961. "Das Gräberfeld bei Ihre im Kirchspiel Hellvi auf Gotland. Der Wikingerzeitliche Abschnitt", Acta Archaeologica 32, 1-134.
- Stenberger, Mårten 1964. Det forntida Sverige, Stockholm.
- Stenberger, Mårten 1973. "Eketorp in Öland. Ancient village and trading settlement", Acta Archaeologica 44, 1-18.
- Stenholm, Leifh 1976a. "Dräkttillbehör och smycken" in UffPKL, 293-305.
- Stenholm, Leifh 1976b. "Foremål av täljsten" in UffPKL, 263-5.
- Stenholm, Leifh 1976c. "Hushåll skärl av äldre svartgods" in UffPKL, 251-262.

- Stenton, F. M. 1947. Anglo-Saxon England, 2nd ed., Oxford.
- Stevenson, Robert B. K. 1966. National Museum of Antiquities of Scotland. Part I. Anglo-Saxon Coins (SCBI vol. 6), London.
- Storm, A. V. 1911-2. "Early English influence on the Danish church", Saga-Book 7, 220-31.
- Strömberg, Märta 1961. Untersuchungen zur Jüngereren Eisenzeit in Schonen, 2 vols., Bonn and Lund.
- Suchowolski, Stanislaw 1971. "Die Anfänge der Münzprägung in Scandinavien und Polen", Nordisk Numismatisk Årsskrift, 20-37.
- Suhle, A. 1964. Deutsche Münz- und Geldgeschichte von den Anfängen bis zum 15. Jahrhundert, 2nd ed., Berlin.
- Talvio, Tuukka 1978. The National Museum, Helsinki and other public collections in Finland: Anglo-Saxon, Anglo-Norman, and Hiberno-Norse Coins (SCBI vol. 25), London.
- Temple, Elzbieta 1976. Anglo-Saxon Manuscripts 900-1066, London.
- Thompson, J. D. A. 1956. Inventory of British Coin Hoards A.D. 600-1500, London.
- Thun, Egon 1967. Medieval Tommarp. Archaeological investigations 1959-60 (Acta Archaeologica Lundensia 8:0.5), Bonn and Lund.
- Thunmark, Lena and Trotzig, Gustaf 1971. "Burge i Lummelunda. Ett forskningsprojekt", Gotländskt arkiv 43, 97-101.
- Trotzig, Gustaf 1969. "Gegensätze zwischen Heidentum und Christentum im archäologischen Material des 11. Jahrhunderts auf Gotland" in Kirche und Gesellschaft im Ostseeraum und im Norden vor der Mitte des 13. Jahrhunderts (Acta Visbyensia III), Visby, 21-30.
- Tschan, F. J. 1959. Introduction and notes in Adam of Bremen, History of the Archbishops of Hamburg-Bremen, New York.
- Turville-Petre, E.O.G. 1953. Origins of Icelandic Literature, Oxford.
- Turville-Petre, E.O.G. 1964. Myth and Religion of the North, London.
- Turville-Petre, E.O.G. 1966 (1968). Haraldr the Hard-ruler and his poets (The Dorothea Coke Memorial Lecture in Northern Studies, U. College London, 1966), London.
- Turville-Petre, E.O.G. 1976. Scaldic Poetry, Oxford.
- Vlasto, A. P. 1970. The Entry of the Slavs into Christendom, Cambridge.
- Wade-Martins, Peter 1969. "Excavations at North Elmham, 1967-8: an interim report", Norfolk Archaeology 34, 352-97.
- Wade-Martins, Peter 1970. "Excavations at North Elmham, 1969: an interim report", Norfolk Archaeology 35, 25-78.
- Warner, R. 1975-6. "Scottish silver arm-rings: an analysis of weights", PSAS 107, 136-43.
- Webster, Leslie E. and Cherry, John 1973. "Medieval Britain in 1972", Med Arch 17, 138-88.
- Wegraeus, Erik 1972-3. "Pilspetsar under Vikingatid", Tor, 191-208.
- Wheeler, R. E. Mortimer 1927. London and the Vikings (London Museum Catalogues: no. 1), London.

- Whitelock, Dorothy 1930. Anglo-Saxon Wills, Cambridge.
- Whitelock, Dorothy 1965. "Introduction" to The Anglo-Saxon Chronicle, 2nd ed., London.
- Whitelock, Dorothy 1979. English Historical Documents I. c. 500-1042, 2nd ed., London.
- Wideen, Harald 1955. Västsvenska Vikingatidsstudier, Göteborg.
- Wilde, K. A. 1953. Die Bedeutung der Grabung Wollin 1934. 1. Beiheft zum Atlas der Urgeschichte, Hamburg.
- Wilson, David M. 1964. Anglo-Saxon Ornamental Metalwork 700-1100 in the British Museum, London.
- Wilson, David M. 1965. "Some neglected late Anglo-Saxon swords", Med Arch 9, 32-54.
- Wilson, David M. 1976. "The Borre style in the British Isles" in Minjar og Menntir (K. Eldjarn festschrift), Reykjavik, 502-9.
- Wilson, David M. 1978. "The dating of Viking art in England" in James Lang (ed.) Anglo-Saxon and Viking Age Sculpture (BAR 49), 135-44.
- Wilson, David M. and Hurst, D. Gillian 1962-3. "Medieval Britain in 1961", Med Arch 6-7, 306-49.
- Wilson, David M. and Klindt-Jensen, Ole 1966. Viking Art, London.
- Wilson, David M. and Moorhouse, Stephen 1971. "Medieval Britain in 1970", Med Arch 15, 124-79.
- Wormald, Francis 1952. English Drawings of the Tenth and Eleventh Centuries, London.
- Wright, C. E. 1939. The Cultivation of Saga in Anglo-Saxon England, Edinburgh and London.
- Zak, Jan 1963, 1967. "Importy" Skandynawskie na ziemiach zachodniostowiańskich od IX do XI wieku, Poznań (3 vols: 1963 = vol. III (German summary pp. 242-3), 1967 = vol. I (German summary pp. 195-208) and vol. II (German summary pp. 395-400)).
- Zak, Jan 1968. "Die Münzen aus Lund (Schonen) in den polnischen Funden des XI. Jahrhunderts" in R. Blomqvist (ed.) Res Mediaevales (Archaeologica Lundensia 3), 279-85.
- Zak, Jan 1970. "Der westslawische Import in Skandinavien im 9. bis 11. Jahrhundert", Berichte über den II. Internationalen Kongress für slawische Archäologie, vol. 1, Berlin, 25-38.
- Zak, Jan 1975 (1977). "Kontakte zwischen Skandinaviern und Westslawen des 9.-11. Jahrhunderts n. Chr. im Lichte der archäologischen Quellen", Offa 32, 48-56.
- zur Mühlen, Bernt von 1975. "Die Kultur der Wikinger in Ostpreussen", Bonner Hefte zur Vorgeschichte 9.

Source of illustrations:

- Figure 4.1: after Petersen 1919 and Nordman 1943.
Figure 4.2: after Petersen 1919.
Figure 4.3: after Petersen 1919 (a-c), Schiørring 1978 (d).
Figure 4.4: after Rygh 1885, Nordman 1943.
Figure 4.5: after Rygh 1885 (a), London Museum 1954 (repr. 1967) (c-d), Norberg 1971 (e).

Figure 7.1: after Hårdh 1976a.
Figure 7.2: after Hårdh 1976a.

Figure 8.1: after Hårdh 1976b.

Plate 1: Kendrick 1949 Plate XVIII.
Plate 2: Wilson and Klindt-Jensen 1966 Plate LIX.
(dimensions: 27,8 x c. 19 cm.)
Plate 3a: Stenberger 1964 Fig. 321
(dimensions: 7.1 cm. in diameter, 1.2 cm. in width).
3b: Hårdh 1976a Tafel 53:II.
(dimensions: 62.5 x 84.3 cm.)
3c: Graham-Campbell 1980 Fig. 530.
(dimensions: height of left: 7.0 cm., of right: 6.4 cm.)
Plate 4: Graham-Campbell and Kidd 1980 Fig. 101.
(dimensions: width: 56 cm., thickness: 9.5 cm.)
Plate 5: Hårdh 1976a Tafel 38.
Plate 6: Stenberger 1947 Abb. 211.
Plate 7: Stenberger 1947 Abb. 212.
(dimensions of bowl: diameter at mouth: 16.5 cm.,
height: 6.1 cm.)
Plate 8: Stenberger 1947 Abb. 249.
Plate 9a: Graham-Campbell 1980 Fig. 165
(dimensions: left: height 4.5 cm., width 2.3 cm.;
right: height 3.6 cm., width 2.3 cm.)
9b: Hårdh 1976a Tafel 11:II.
Plate 10: Hårdh 1976a Tafel 29.
Plate 11a: Hårdh 1976a Tafel 30.
11b: Hårdh 1976a Tafel 40:I.
Plate 12: Skovmand 1942 Fig. 9 p. 48.
Plate 13a: Hårdh 1976a Tafel 52:I.
13b: Hårdh 1976a Tafel 52:II.
Plate 14: Stenberger 1947 Abb. 185.
Plate 15: Stenberger 1958 Abb. 19.
Plate 16: Stenberger 1947 Abb. 231, 232.

Note on plates:

If no scale, the dimensions are listed with the source of the illustrations on p. 367.

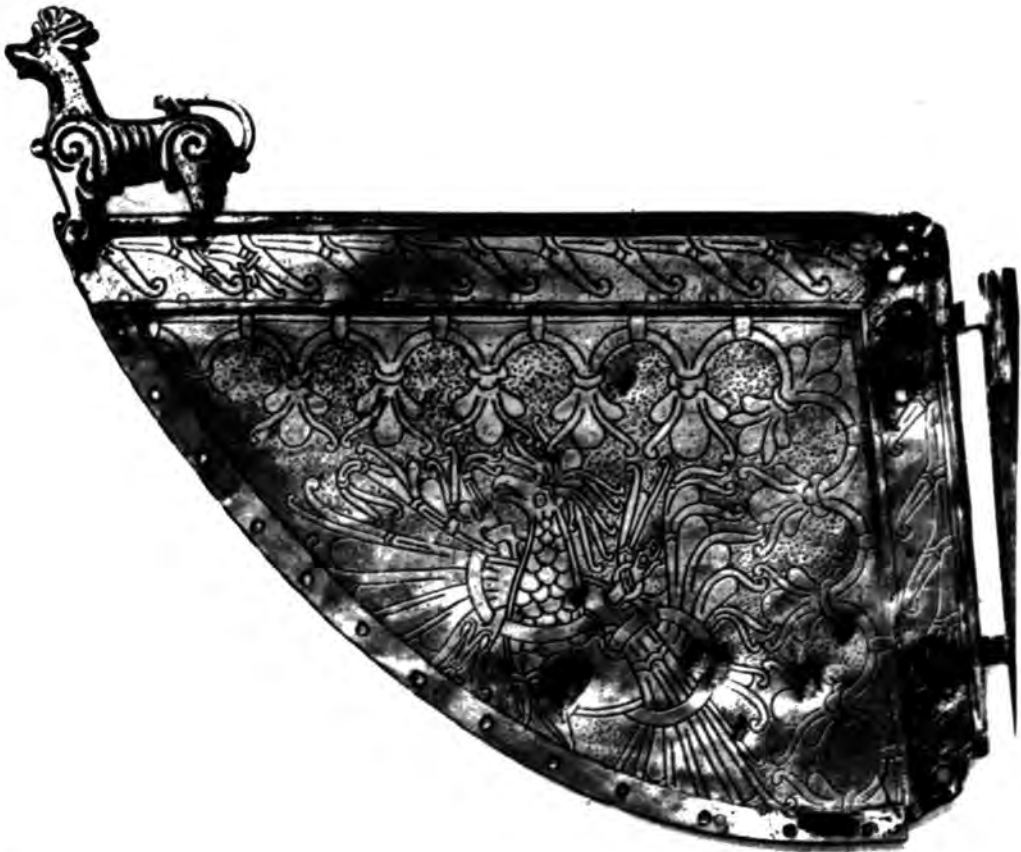




Plate 1: Knútr's donation picture
(British Library, Stowe 944, folio 6)



a.



b.

Plate 2: Vane from Heggen, Modrum, Buskerud, Norway



a.



b.



c.

Plate 3:

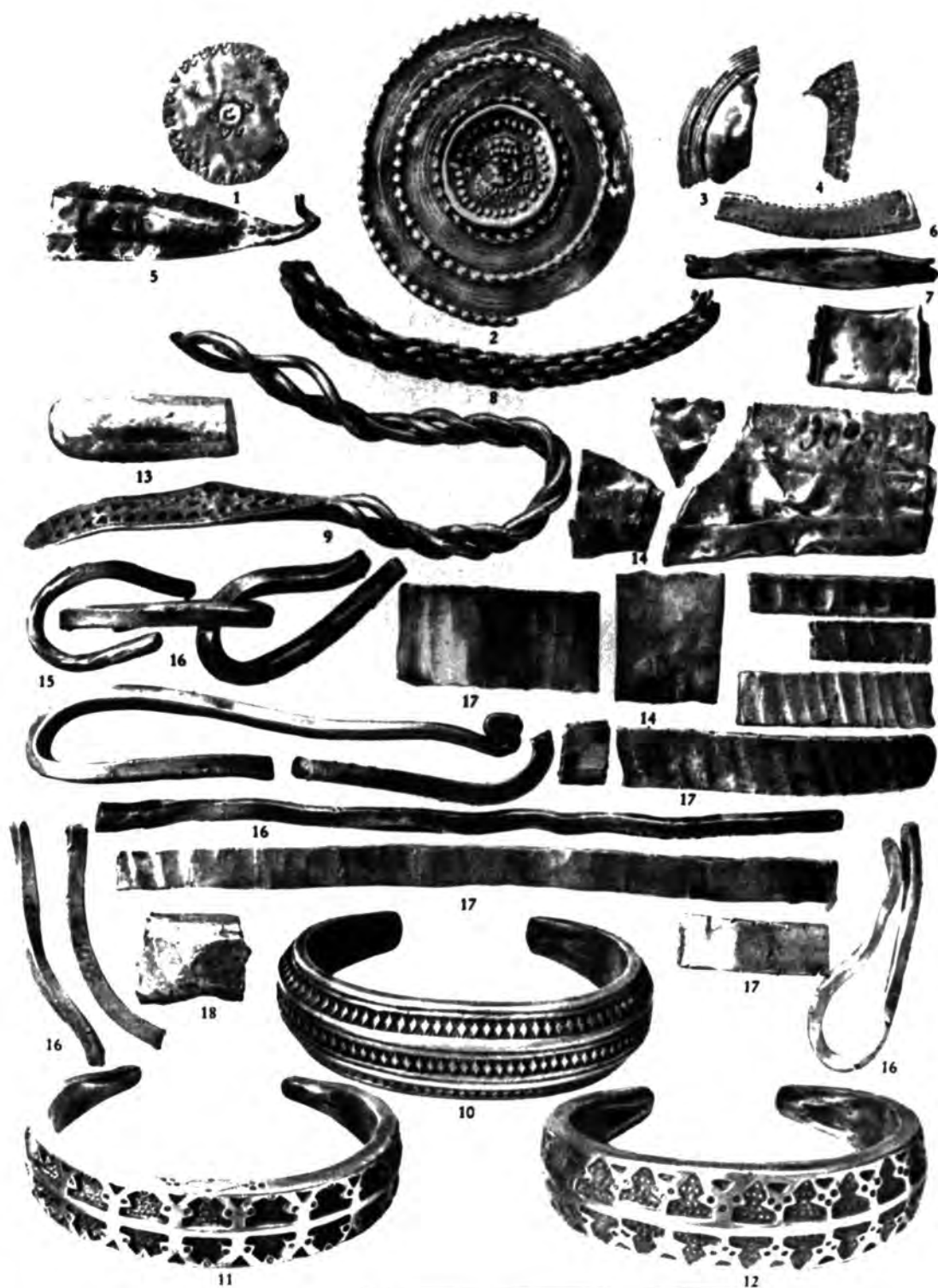
- a: armring from Undrom, Boteå, Ångermanland, Sweden
- b: armring from Öster Torp, Skåne
- c: crucifixes from Trondheim, Norway



Plate 4: The St. Paul's stone



Plate 5: Hoard from Åspinge, Skåne
SHM 6620, 23833 tpq 1047



0 1 2 3 4 5 cms

Plate 6: Hoard from Lilla Valla, Gotland
 SHM 3099, 3134 tpq 1042

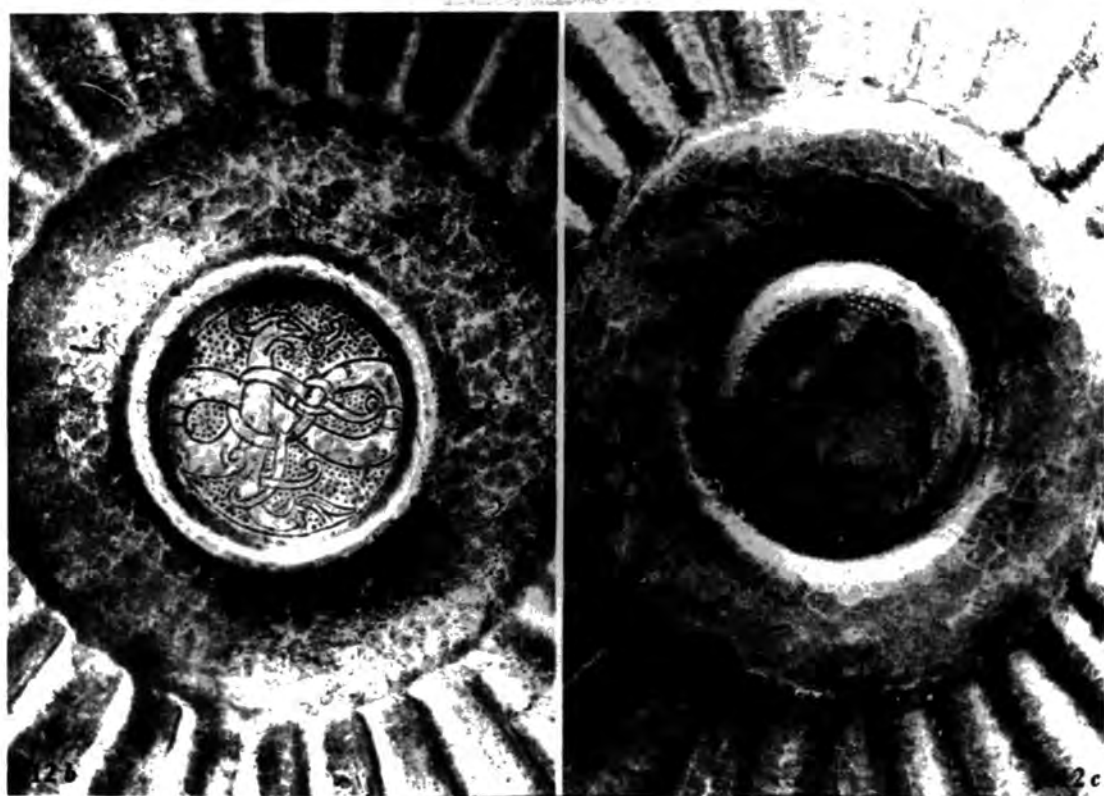


Plate 7: Hoard from Lilla Valla, Gotland (cont.)
 SHM 3099, 3134 tpq 1042



0 1 2 3 4 5 cms

Plate 8: Hoard from Gerete, Gotland
SHM 1219 tpg 1080

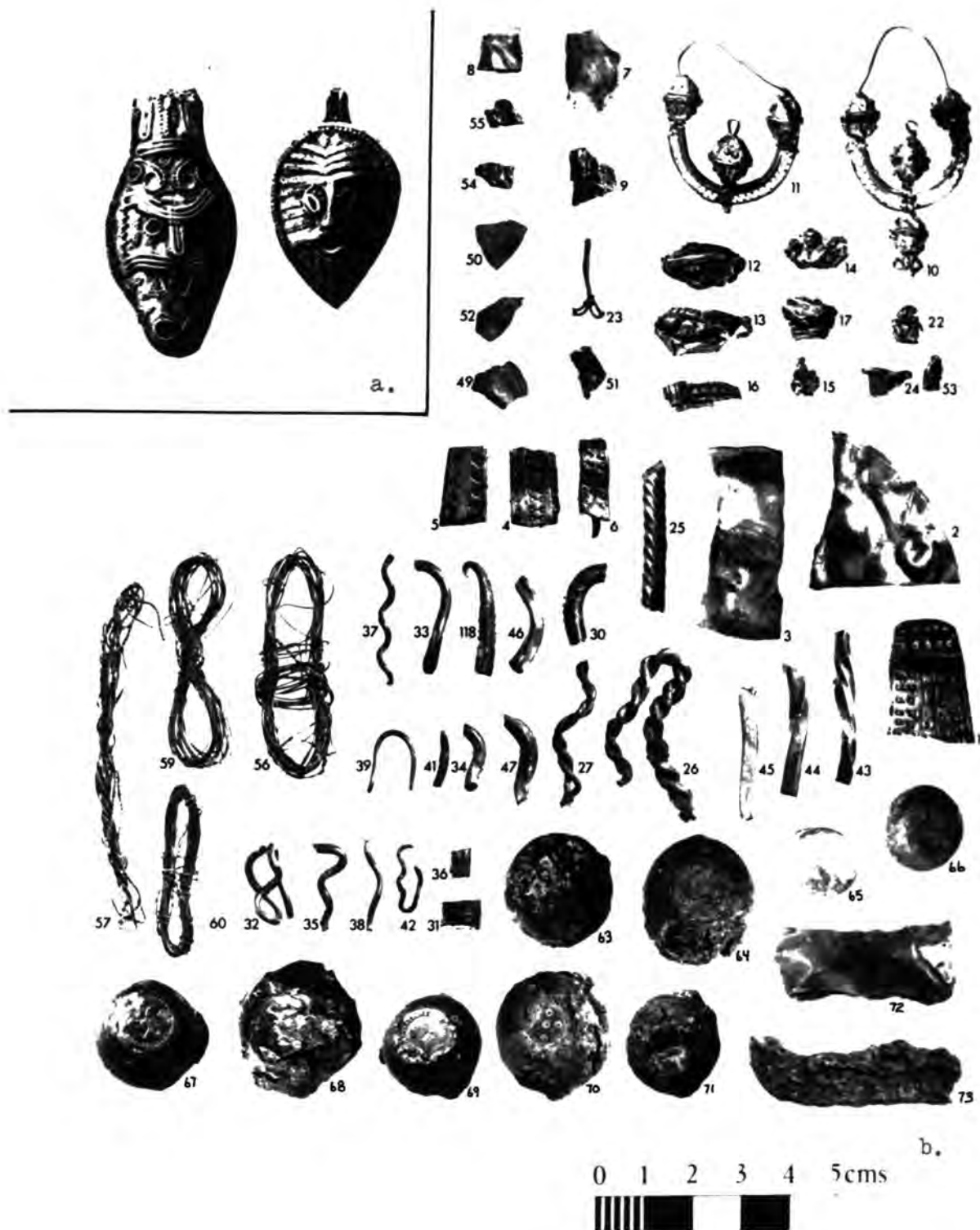


Plate 9:

- a: Pendants from Fülhagen, Gotland hoard
SHM 3547 tpq 991
- b: Hoard from Stürko, Blekinge
SHM 8770 tpq 1002



0 1 2 3 4 5 cms



Plate 10: Hoard from Glemminge, Skåne
SHM 14452 tpq 1000

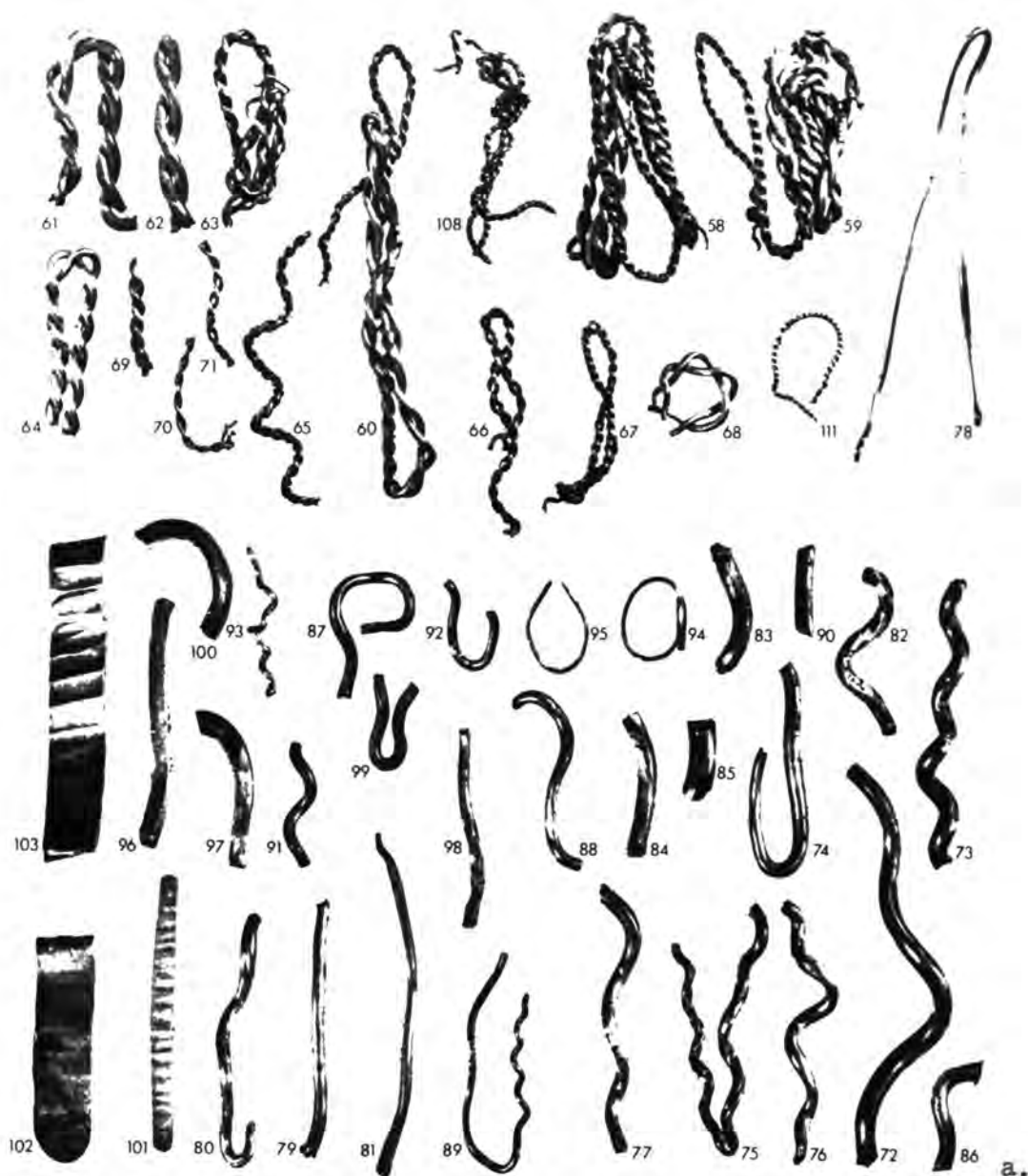


Plate 11:

a: Hoard from Glemminge, Skåne (cont.)

SHM 14452 tpq 1000

b: Hoard from Villie, Skåne

SHM 5870 tpq 1028

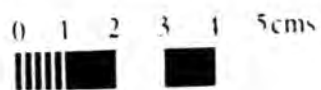


Plate 12: Hoard from Tolstrup, Jylland
tpq 991

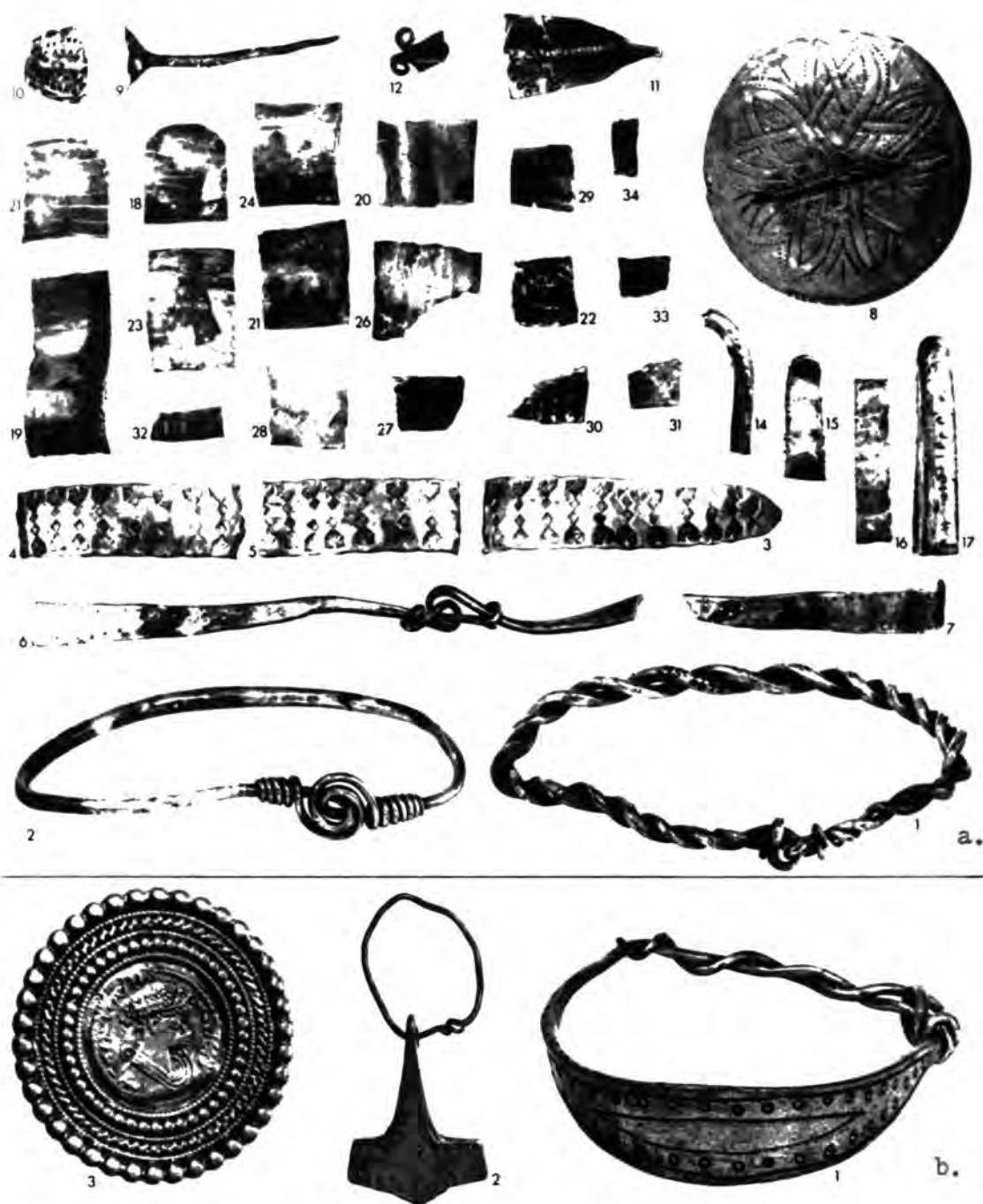


Plate 13:

a: Hoard from Öster Herrestad, Skåne
SHM 3699 tpq 1021

b: Hoard from Gårdsnäs, Skåne
SHM 85, 116; LUHM 6609 tpq 1018



Plate 14: Hoard from Hemänge, Gotland
GF C8914 tpq 1024



Plate 15: Hoard from Torsta, Hälsingland, Sweden
SHM 6820 date: second half of the tenth century

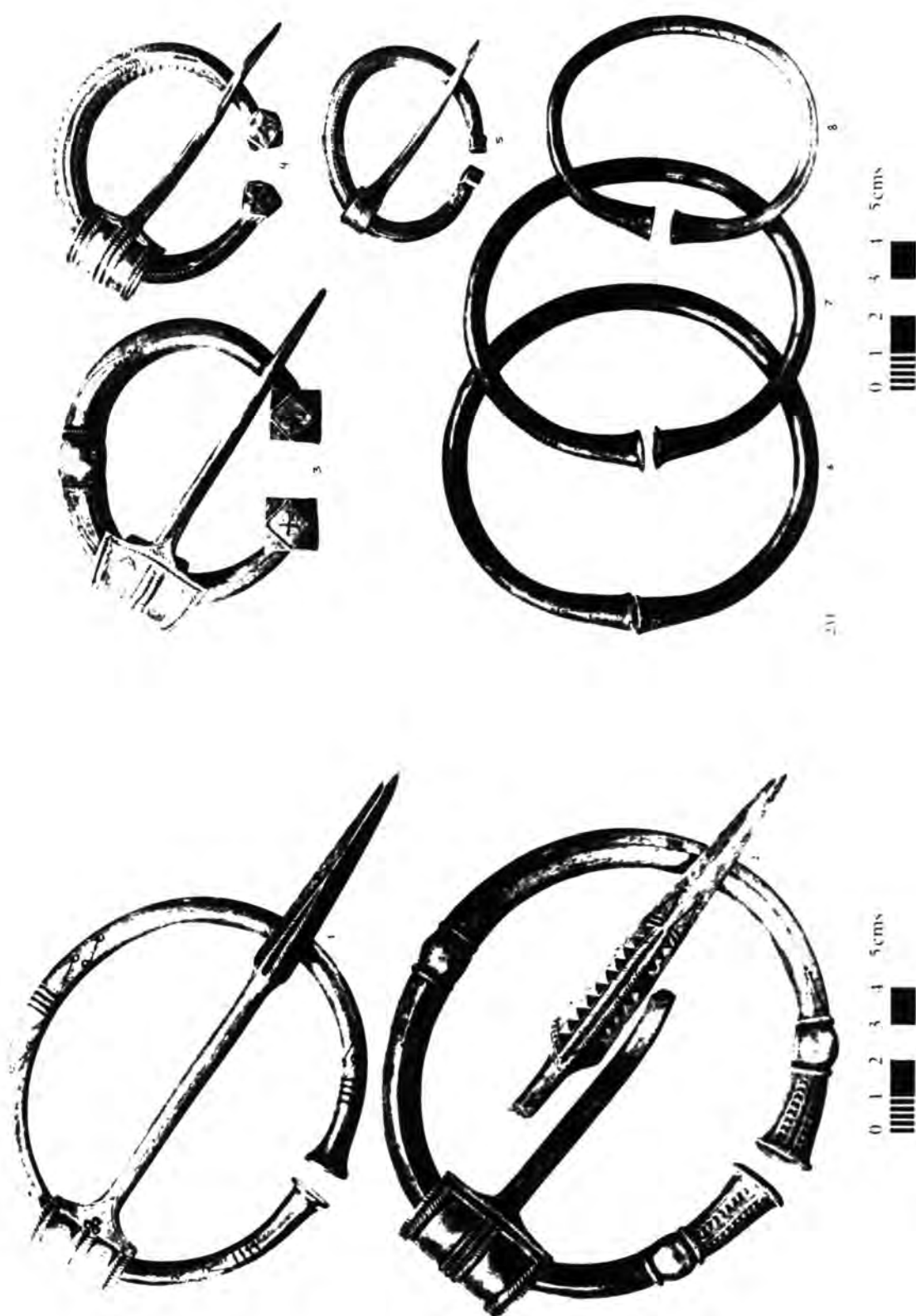


Plate 16: Part of Sigsarve, Gotland hoard
 SHM 16077, 16200 tpg 1055