

Viking Period Swords

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Introduction

The sword is the hero's weapon:

"So Regin makes a sword, and gives it into Sigurd's hands. He took the sword and said-- 'Behold thy smithying, Regin!' and therewith smote it into the anvil, and the sword brake..."

"Therewith He (Sigurd) went to his mother, and she welcomed him in seeming wise, and they talked and drank together."

"Then spake Sigurd, 'Have I heard aright, that King Sigmund gave thee the good sword Gram in two pieces?'

"'True enough.' she said."

"So Sigurd said, 'Deliver them into my hands, for I would have them.'"

Sigurd then has the sword Gram reforged and avenges his father and kills the dragon, Fafnir. The sagas and tales of Northern Europe are full of heroes with swords, like this part from *The Song of Volsungs* (1).

This is most likely the starting point of my interest in these weapons.

There are other books on Viking Period Swords. Unlike those books, the original purpose of this work was to reconnect these weapons to the archaeological context, and so compliment other scholarship on the subject. However, the first attempt demonstrated that the task of re-connection was not possible in a useful way. Revision was required.

During revision a new, plainer question arose: what sources can be found and how useful are they? This did not mean that original purpose was abandoned, but rather a more realistic understanding of the quality of sources found needed discussion. The revision also required obtaining more sources. These newly found sources called for more organization than the first attempt, and that affected the method used.

The core of this work is a cataloging scheme, which some folks call a typology. There are two basic parts to this scheme, the *condition* of the sword and the *context* of its discovery. As such:

The Sword's Condition

1. Intact (The sword has little damage, especially on the blade. The pommel, tang, and guard/hilt are complete).
2. Incomplete (Parts of the sword are missing, especially from the blade).
3. Corroded (The blade is rusted to the point of being damaged).
4. Broken (The blade is broken).
5. Intentionally Bent (The blade has been bent).
6. Fragmentary (The sword is in many pieces, or only a small part of the weapon is found).

The Sword's Context

A. Graves/Burials.

- a. Chamber Graves.
- b. Boat/Ship Graves.
- c. Burial Mounds
- d. Flat Graves.
- e. Stone Burials.

B. Bodies of Water.

- L. Lakes, ponds, bogs.
- R. Rivers.

C. Settlement Finds.

D. Stray Finds.

*= Designates Single Edged Swords.

#= Designates Inhumation Grave.

\$= Designates Cremation Grave.

A form based upon the scheme facilitated the cataloging of each sword:

Item Number_____. Grave _____.

Place: _____.

Petersen Type:

Condition: 1. Intact 2. Incomplete 3 Corroded 4. Broken 5. Bent 6. Fragmentary

Context: Unknown A. Burial B. Water C. Settlement D. Stray.

Remarks

Two and then three forms could be place on one 8.5 X 11 sheet of paper with plenty of room for remarks. Once each sword from a source was cataloged, then they were placed on list set up like this:

<u>Place</u>	<u>Scheme</u>	<u>Petersen Type</u>	<u>Date.</u>
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J. Petersen's typology of swords is used (2) because it is a standard work. However, F. Androschuk's modified chronology Petersen's typology is used to supply the approximate circulation dates of the weapon (3). For instance, Petersen thought Type H swords circulated from 800 to 950. Androschuk thinks this type circulated from 850 to 950. A typical list entry looks like this:

5.Scar, Sanday	2,A,b,#	H	850-950.
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The location of this sword is Scar, Sanday in Scotland. The sword is incomplete (Condition 2), and was found in an inhumation boat burial (Context "A", Burial/Grave context "b", and an inhumation grave "#."). The weapon is a Petersen Type H and was in circulation from 850-950.

With the exception of the First and Last Chapters, this work is set up along geographic areas within Europe. Originally, the areas were set up within the "Viking Area of Travel"—that is to say from

Iceland to the Ukraine. Since no swords have been found in Greenland or North America, they were excluded. Chapter 2 covers the Atlantic Islands—Iceland, Scotland, England, the Isle of Mann, and Ireland. With the exception of sword hilt found in water (4), no swords have been found in Wales. Chapter 3 discusses Norway, which has the most Viking Period swords of any location. Chapter 4 presents Sweden and Denmark. Chapter 5 is the Baltic Sea, and discusses Gotland, Poland, Southeastern Baltic, the Eastern Baltic (Lithuania, Latvia, and Estonia), and Finland. Chapter 6 discusses Eastern Europe, Russia/Ukraine, Croatia, Slovenia, Austria, Hungary, Romania, and Slovakia. Chapter 7 discusses Western Europe, France/Belgium, Holland, and Germany.

There is also a historical element in this work. The term “Viking Period” needs to be defined. The phrase Viking Period is used to avoid confusion with other archaeological terms, such as “Iron Age” and its variations “Older Iron Age” and “Younger Iron Age.” Also, there have proposed alternatives to use of the word, “Viking” which defies an exact definition. But such phrases as, “The Scandinavian Expansion of the Early Middle Ages” lacks rhetorical convenience. The term “Viking Period” is convenient and the least confusing.

Important to the definition of the period are the beginning and ending of it. Conventional thinking states that the period began with the Raid on Lindisfarne (793 AD), and with the Battle of Stamford Bridge (1066 AD). However, the dating of swords is too inexact for these event. For this reason, the dates for this work are defined as *about* 750 AD to *about* 1100 AD.

Another element in this work is an attempt to briefly discuss a certain country’s understanding of archaeology. The idea here is to relate what swords that have been found to the significance of archaeology in that country. With some countries, there is little connection. With other countries, however, their understanding of archaeology of the Viking Period is important. For instance, Finland’s archaeologists place the Viking Period in their “Late Iron Age,” whereas in Poland the Viking Period/Early

Middle Ages is important to the formation of first Polish Kingdom, the Piast State. Emphasis varies from country to country. That emphasis should be understood.

The last area needing explanation is sword terminology. First, single-edged swords are simply called that. Other works use “sax,” “seax,” or “scramaseax.” All this is confusing, and so the simplest term is used. Please remember that single edged swords are designated with an “*” in the list. All other entries are assumed to be double-edged swords. Secondly, the hilt/guard, the handle/grip/tang, and the pommel of the swords is referred to as the “hilt-construction.” There is some confusion about the names of the sword parts. The hilt/guard is on the lowest part of the hilt-construction, and butts up against the blade. The handle/grip of the sword is attached to the tang of the sword. The tang is attached to the blade and sticks out. The function of the handle/grip/tang is obvious. The pommel is on top of the hilt-construction, and has the two-fold purpose of acting as a counter-weight and not allowing the weapon to slip out of the warrior’s hand.

Finally, acknowledgment and thanks should be given. The Free Library of Philadelphia should be thanked for not only giving me a job, but a job that required me to explore all sorts information (in all sorts of forms) in preparation of this work. The Libraries of the University of Pennsylvania, especially the Museum Library, for allowing me access should receive thanks. Professor Robin Oggins, who probably knew I was going to work on arms and armor before I did, receives my deepest gratitude. The unfortunately late Lawrence Richards, who recognized my driven curiosity, and said, “You should write a book, Steve.” Finally, there is my wife, Linda, and the Cats who tolerated all the work and on occasion told me to stop for the day, my love and thanks can never be enough.

Notes

1. Morris, W. *Song of the Volsungs and the Nibelungs*. Chicago, Illinois: Henry Regnery Company (1949) 38-39.

2. Petersen, J. *De Norske Vikingesverd. En Typologisk-Kronologisk Studie Over Vikingetidens Vaaben*. Kristiana, Norway: I Kommission Hos Jacob Dybwad (1919). Chapter One has more to say about this work.
3. Androschuk, F. *Viking Swords. Swords and Social Aspects of Weaponry in Viking Age Societies*. Stockholm: Historiska Museet (2014). ISBN: 978918976515. Chapter One also has more to say about this work. It was used extensively as a source (for Sweden) and as a reference book in this work.
4. Redknap, M. *Viking in Wales: An Archaeological Quest*. Cardiff, Wales: National Museums & Galleries of Wales (2000).

Chapter One: The Scholars of Swords.

The study of Viking Period swords is possible because of the efforts of archaeologists, who documented and dated what they unearthed. Before archaeology, many objects such as swords were simply collected. J.A.A. Worsaae—arguably the first archaeologist—promoted the Three Age System (Stone, Bronze, and Iron) in the English edition of *The Primeval Antiquities of Denmark* (1849) and placed Viking Period swords in the Iron Age (1). While other weapons are discussed, it is the swords that seems to have continued to spark the interest of later generations. A review of past work into the present is worthwhile.

Worsaae only took a passing notice of swords. The first important source that contained swords is O. Rygh's *Norske Oldsager* (2) of 1885. Like his predecessor, Rygh divides his catalog into ages, however, the Iron Age is split between "Elder" and the "Younger" ages. The term "Viking Age" is not used. This may seem odd, but 19th Century archaeology did not have the dating techniques of later generations. The category "Younger Iron Age" is a well thought out term for its time (3).

Each item in Rygh's catalog is numbered. The swords of the Younger Iron Age (beginning about 800 AD) are numbered 489 through 512. Items 489 to 491 show etching of entire double-edged swords; 492 to 945 present only hilt construction of the weapon. Items 946 to 500 show single-edged swords with a hilt construction; 501 to 512 returns to only the hilt constructions, the exception being Item 507. This item is a guard and pommel only.

Norske Oldsager is a catalog with a great variety of objects and does not concentrate on swords. A. Lorange's *Den Yngre Jarnalder's Svaerd (The Sword of the Younger Iron Age)* of 1889 is the first work to physically examine swords now dated to the Viking Period (4). Well illustrated, Lorange presents 26 swords along with the object's date of discovery, the oldest being from 1825.

Lorange asked questions about these weapons that are still relevant today. The first question is about inscribed blades, especially VLFBERHT inscriptions. The second question examines how these swords were forged. Looking at the distinctive patterns found on some the blades, Lorange concluded they were made using a "false-Damascus" process. Later studies would call this process pattern welding. Scholars are still trying to understand these questions presented in 1889.

The first typology of Viking Period sword is *De Norske Vikingesverd: Ein Typologisk-Kronologisk Studie Over Vikingtidens Vaaben* by J. Petersen. Published in 1919 this work has been considered the standard for most of the 20th and 21st Centuries. J. Graham-Campbell, V. Kazakevius, and F. Androshchuk (among many others) have all included this typology in their works (5).

With a sample of about 1000 swords, Petersen devised a typology not based upon the weapon's blade, but upon the hilt-construction. Each hilt/guard-tang-pommel construction was designated with a letter. Earlier hilt constructions have letter designations in the beginning of the alphabet, where later constructions have designation at the end. Types A and B designate pre-Viking Period swords and are

considered transitional examples. Types C through Type I designate the Early and Middle Viking Periods (About 750 to about 950). Types K through Z represent the Middle to Late Viking Periods (About 950 to about 1100). The most numerous example is Type H with 213, followed by Type M with 198.

The strength of Petersen's typology is the size of its sample. Many, however, have criticized Petersen for not taking the blade of the sword into consideration. Given the 1919 date publication, the author's ability to examine a sword's blade was limited. As a graduate student writing his Phd. thesis, Petersen was probably not entrusted with technologies like X-Ray machines, which were new. Other scientific methods of examination were also not developed.

J. Petersen was not the only early 20th Century archaeologist to devise a Viking Period sword typology. In 1927 M. Wheeler published in typology in *London and the Vikings* (6). Like Petersen, Wheeler's typology did not take the sword's blade into account. His typology consists of seven hilt-constructions:

- I. Hilt with straight cross-pieces: no capping pommels
- II. Hilt with straight cross-pieces and a triangular pommel.
- III. Three or five lobes pommels with straight guards.
- IV. A type which...has comparatively flat pommel, generally, with five lobes.
- V. ...a distinctive group with (a) high-peaked central lobe and...curved guards.
- VI. A later type...with three lobed (pommels), with flat curved guards.
- VII. (A type)...with a semicircular pommel, some plain but often with grooves...

The size of Wheeler's sample is not discussed.

This English typology of swords might have become an archaeological curiosity if it had not been adopted by E. Oakeshott. In his book *The Archaeology of Weapons* (7), published in 1960, Oakeshott modified Wheeler's typology, adding two more forms:

VIII. (This type)...has a pommel which is...nothing but a simplified Type VI,...leaving a form just like a brazil nut.

IX. (This Type)...is,...a bye-form of VIII. The general shape is of the hilt is similar...(but) the upper taking on an exaggerated cocked-hat form.

After presenting this typology, the author discusses the decoration of the hilt-construction. Oakeshott then discusses the forging of swords. Yet, as much as the author has contributed to the study of medieval weapons, *The Archaeology of Weapons* does not present the size of the sample for Viking Period swords. The only advantages the Wheeler/Oakeshott typology has is its simplicity and that it is written in English.

The decades between the publication of Wheeler's typology and Oakeshott's modification of it—from the 1920s through the 1950s—was a highly productive time for archaeology. Much was published by archaeologists like J. Brondsted, S. Lindqvist, H. Shetlig, G. Ardwidsson, H. Jankuhn and many others. Archaeology became a more mature discipline with the publication of old and new discoveries. Matters of interpretation began to be a primary function of the profession. Typologies helped in this time, and they continue to help now.

After World War II, scholars interested in ancient and medieval swords turned their attention to the blade and its manufacture. H. Maryon seems to have coined the term *pattern welding* to describe the method used to forge many Viking Period swords and weapons (8). The author, after his own experiments, explained the differences between pattern welding and damascening in the forging of sword blades. With pattern welding softer rods of iron are twisted with harder steel rods and forged together. This technique makes for a blade that returns to form after striking—an elastic blade.

Damascening is folding layers of specialized steel—in the Middle Ages usually from India and called “wootz”—in order to achieve elastic blade.

J.W. Anstee further documented pattern welding with series of eight experiments (9). Using a small hearth, a box bellows, a simple anvil (a cast iron cheese weight), a small vice, a three-pound hammer, and a pair of tongs, Anstee conducted his experiments. Using wrought iron from an old fence and charcoal (at first), each experiment built upon the previous work. The supply of charcoal was inadequate, and so the author had to use a mixture of hard woods, but results were examined visually, with a hardness test, and with a series of x-rays. Anstee states the final blade took 74.5 hours to complete. The manufacture of a pattern welded blade was not a hap-hazard affair, but required a specialized, highly skilled craftsman.

Other scholars used other means to examine the manufacture of sword blades. In 1966 A. Antein published a study of weapons dated to between the 6th to the 12th centuries from the Baltic (10). 41 swords were examined. The author divided his results into five groups:

1. This group consisted of blades forged entirely by pattern welding.
2. The group consisted of pattern welded central cores, but the edges were different—probably tempered.
3. This group consisted of VLFBERHT inscribed blades only.
4. This group consisted of one sword.
5. This group consisted of blades with inscriptions other than VLFBERHT.

Viking Period swords were found throughout the study, especially in Group 3.

In 1986 R.F. Tylecote and B.J.J. Gilmour published *The Metallography of Early Ferrous Edge Tools and Edged Weapons* (11). The authors' method of examination was to cut out a sample from the blade.

Samples were placed in a resin and then prepared to etched with nitric acid. The results were then examined under a microscope.

Both single-edged and double-edged swords were examined. Eight single-edged swords were examined, with seven of them dated to between the Eighth to Tenth Centuries. 39 double-edged swords were examined, with 11 dated to the Viking Period. There was considerable variation in the construction of these 11 swords. The authors concluded that pattern welding was falling into disuse as far as the 10th Century is concerned. One sword, S-43, dated to about 900 AD, showed a complex structure of a composite iron/steel around a central core.

In 1989 J. Land and B. Ager (12) examined 142 pattern welded sword owned by the British Museum. 32 swords were dated to the Viking Period, with eight being considered from Scandinavia. Using X-Rays five main types were discerned:

- A. Two strips of iron or steel forged together.
- B. Three strips forged together.
- C. Four strips forged together.
- D. Five strips forged together.

- P. Undefinable.

This report shows that the forging of swords was not homogeneous. The skill of forging them varied from smith to smith.

Twenty years later paleo-metallurgist A. Williams (13) examined 44 VLFBERHT inscribed sword blades using a hardness test and a Vickers Hardness Scale. First, however, the author explained the differences between *euctoid* steel and *hypereuctoid* steel. Euctoid steel is softer, with a hardness of

about 250, and is usually found in Early Medieval European bloomery smelting. Hypereutectoid steel, with hardness of about 300 to 350, is usually from Indian crucible smelting. Hypereutectoid steel is not European, and so should not be found in Viking Period Swords.

Williams identified five groups:

- A. 14 swords, 9 with hypereutectoid steel, or crucible steel. All with +VLFBERT+ inscriptions.
- B. 5 swords with hardened or heat treated edges with +VLFBERT+ inscriptions.
- C. 14 swords with variations of the VLFBERT inscription, but with hardened edges.
- D. 11 swords made of softer iron and no steel.
- E. 7 swords with either a unique inscription or no inscription, but with some grade of steel.

Obviously, Williams shows that all VLFBERT blades are not the same. The blades belonging to Group D were probably fakes, designed to fool the unwary (and probably illiterate) customer. But Williams by finding hypereutectoid steel—crucible steel—in some of these inscribed blades, he shows that a trade from Central Asia, possibly India, existed. The author further believes that VLFBERT blades were not made Frankish Europe, but rather in Eastern Europe, along the Volga Trade Routes.

Williams conclusions were not met with universal agreement. In 2011 paleo-metallurgists from Norway, E. Astrup and I. Martens, published three objections to Williams' article (14). First, the sample of the swords did not include enough examples from Central Europe (which was Christian), but instead used swords from mostly pagan areas. Before Williams' work, most scholars believed these swords were a product of Frankish civilization. Second, Astrup and Martens state that Williams did not conduct his tests using standard procedures, specifically that both edges of the blades were not tested. Third, the authors point out that the approximant dates of the blades were included.

Williams was allowed to answer. He points out that the source of crucible steel, the Volga Trade Routes, was cut off in the 11th Century, when ULFBERHT blades ceased being forged. Secondly, Williams explains his methods of examination by stating, "Sectioning undamaged historical objects is simply not permissible..." (15) as Astrup and Martens seem to require. The swords Williams examined were loaned to him. He could not have damaged them by cutting out a sample.

Williams is not only paleo-metallurgist interested in Viking Period swords. J. Hosek from Eastern Europe has published a great many articles on the structure of swords. One of Hosek's more recent publications is the analysis of the swords from Mikulcice (16). Mikulcice is a stronghold and town complex located in Great Moravia, north of the Danube River. 16 swords have been found in burials there. 4 fragments have also been found. Archaeological excavation of the site has been conducted since the 1950s.

The examination and analysis of the 16 swords was done by cutting away a small sample from each blade. It must be mentioned that a fire in 2007 burned away all the organic material(possibly from scabbards) on the sword blades. Samples were taken from an edge and the middle of each sword. Each sample was then polished and examined under a microscope. The swords were not X-rayed. Hosek looked for impurities (slag inclusions) in each sample to determine the metal's make. Once all the samples were examined, the structure of the sword was determined.

Hosek is a scholar from a long line of Eastern European scholars interested in swords. People like Nadolski and Kazakevicius have well-studied contributions to the scholarship of Viking Period swords. But the most prominent name who study swords is Soviet scholar A.N. Kirpicnickov. His three volume *Drevnerusskoe Oruzhie* (17) published from 1966 to 1971 set the foundation for the Eastern European study of Early Medieval arm and armor. Volume One of *Drevnerusskoe Oruzhie* concerns itself with

swords, but Kirpicnickov did not finish there. He turned his interest to Viking Period sword blades with inscriptions.

Kirpicnickov's method to expose inscriptions on blades was mechanical-chemical. The area of the blade with a suspected inscription would be ground down and polished to reveal the metal. Then the blade was cleaned and soaked in a chemical reagent to expose the inscription. In 1998 Kirpicnikov and L. Thalin-Bergmann applied this method to a small number of swords in the Swedish Historical Museum (18). Three of the fourteen swords has an VLFBERHT inscription, and one of the fourteen has an inscription of INGELRIIMEFECIT—"Ingelrii Made Me." The other ten have other inscriptions, some of which have lattice work inscription.

In 1994 A. Stalsberg announced a collaboration between Russia and Norway (19). Stalsberg's has charted 166 examples of VLFBERHT inscribed blades found all over Europe. With this sample she discerned seven types (20):

1. +VLFBERH+T
2. +VLFBERHT+
3. VLFBERHT+
4. +VLFBERH+T+
5. +VLFBERH+T
6. +VLFBERHIT, +VLFBEHT+, +VLFBERH+, VLFBERHH+T, VLFBERTH
7. Undefinable.

Variant 1 is not the same as Variant 5. 5 has a larger second cross (between the H and the T) than 1, thus the difference (21). Stalsberg also examined the inscriptions found the reverse side of these blades. "Inscription V," for instance, looks approximately like II IXXI I.

Stalsberg then applied the VLFBERHT swords geographically to Petersen's chronological typology (22). EVA: Early Viking Age; MVA: Middle Viking Age; LVA: Late Viking Age. The results:

Iceland: 2 MVA.

Norway: 17 EVA; 19 MVA; 5 LVA

Sweden: 9 EVA; 3 MVA; 1 MVA

Denmark: 3 MVA

Finland: 2 EVA; 3 MVA; 2 EVA

Ireland: 2 EVA

England: 1 EVA; 1 MVA; 2 LVA

France: 1 LVA

Switzerland: 1 LVA

Belgium: 2 LVA

Holland: 2 EVA

Germany: 2 EVA; 3 MVA; 9 LVA

The Former Czechoslovakia: 2 LVA

Poland: 3 MVA; 3 LVA

Croatia: 2 EVA

Ukraine: 1 EVA; 5 MVA

Belorussia: 1 MVA

Lithuania, Latvia, & Estonia: 5 EVA; 5 MVA; 7 LVA

Russia: 4 EVA; 5 EVA; 1 LVA

Summary: Early: 50. Middle: 49. Late: 37.

What these numbers mean is muddled since the Early and Middle are so close. One could speculate that the most VLFBERHT inscribed blades existed from about 850 to 950, but there are probably too many variables here.

A comparison between A. Williams Group A, crucible steel swords (with the +VLFBERH+T inscription) and Stalberg's first group with the same inscription has sparked my interest. Assuming all "+VLFBERH+T" inscribed blades had crucible steel, what time(s) of the Viking Period these blades were in circulation can be determined by counting the number of Variant 1 in Stalsberg. The archaeologist used J. Petersen's chronological part of his typology. In a quick counting the results look like this:

Total Number of Variant 1: 45

Sword of unknown type: 24

Type X: 8

Type T: 3

Type H: 2

Type V: 2

Type Y: 2

Type Z: 2

Type R: 1

Type S: 1

With more than half of the Variant 1 sword of unknown type, it is almost impossible to discern when crucible steel blades were circulating. Furthermore, to assume all Variant 1 swords have crucible steel is unwise. The swords should be tested for it. Still it is curious that most of the typed swords supposedly with crucible steel are dated to the Late Viking Period—the exception being two Type H swords.

By 1990 a large enough sample had been collected and enough blades had been analyzed to warrant other sword typologies. The most prominent of these new typology was created by A. Geibig in 1991. In *Beiträge zur Morphologischen Entwicklung des Schwerts im Mittelalter* (23). Geibig re-examined the hilt-construction, and perhaps more importantly, included sword blades. Two typologies were created: 19 basic for the hilt-construction (Kombinationstyp—combination types), and 14 types for blades (Klingentypen). Geibig's work is very complex.

C.L. Miller—found online at <http://myArmoury.com>-- and L.A. Jones in the book, *Sword of the Viking Age* explain Geibig's typologies (24). The author's sample consisted of 347 swords, dated to between Late 7th to the 13th Centuries. The sample is not taken from Scandinavia, but from East Frankia (essentially Germany).

Geibig applied his typologies to the swords discovered at Hedeby, a Viking Period trading port now in Germany, but once belonging to Denmark. The author's *Das Archäologische Fundmaterial IV* (25) published in 1999 presents twelve swords. Of these twelve, only four can be typed. Four other swords have fragmentary blades; the last four have no blades what-so-ever.

Yet the important part of Geibig's work is the blade typology: the klingentypen. The author examined blades dated to before and after the Viking Period. This work is only concerned with types

dated to between about 750 to 1100. As such, Blade Type 1, dated to before the Period, is excluded.

Types 6 through 13 are dated to after the Period, and so are also excluded.

Type 2: Mid-8th to 10th Century with a fuller groove and less taper. 27.5 to 31.5 inches.

Type 3: Mid-8th to 10th Century with a partial groove and clearer taper. About the same length.

Type 4: Mid-10th to 11th Century with a partial groove and a greater taper, but shorter length.

Type 5: Mid-10th to 11th Century with a partial groove, but slimmer and longer. 32.7 to 35.8 inches.

Type 14 is reserved for single-edged blades, which are dated to before the Viking Period.

With the exception of Blade Type 14, all blades are double-edged and have a fuller down the middle.

Contemporary with Geibig is M. Jakobsson's *Krigarideologi och Vikingatida Svardtypology* published in 1992 (26). The author divided a large sample of swords in six "Untformningsprinciperna" which when translated means "Design Principles." Along with the size of their sample, these six principles are:

1. Triangular Pommel; Petersen Types A,B,C,H/I, N-D-S and Special Types (sartyp) 8,6,15,3. Size of sample: 880.
2. Tripartite Pommel: Petersen Types A,D,L,E,R,S,T,U,V,W,X,Z; The Mannheim Types, and Special types 1,2,6,13,14,19. Size of sample: 490.
3. Five or Polyparte Pommel: Petersen Types K,O,S. Size of sample: 90.
4. Absence of Pommel: Petersen Types M,Y,P,Q, AE, Special Type 5. Size of sample: 170.
5. Bent "Bottom Guard" (Guard/Hilt): Petersen Types K,L,O,P,Q,T,X,Y,Z, AE. Special Types 7,14,15,16,19. Size of sample: 480.
6. Absence of Top Hilt: Petersen Types, X,W. Size of sample 210.

Jakobsson's principles make for a complex typology. It is best explained in the provided English summary: "In this thesis it is suggested that the design principles from strategies of reproduction, where the purpose was to reproduce a symbolic value attached to the physical form." In other words, Viking Period swords had a symbolic meaning beyond their obvious purpose. This meaning is expressed in the hilt-construction, but varied from place to place and time to time. For someone to own and carry a sword gave them a general sense of empowerment.

A more recent scholar who is also interested in the symbolic meaning of swords is F. Androshchuk. In his 2014 book, *Viking Swords. Swords and Social Aspects of Weaponry in Viking Age Society* he states (27):

"Like other colleagues in Eastern Europe I gradually became interested in Viking Age weaponry—the category of material culture most discussed in Eastern European archaeology. The types of weapons, their chronology, distribution, technical production, consumption, and social setting were some of the questions that were most unclear...we cannot come to agreement in our interpretations without a deep knowledge of Scandinavian material."

The author's book is the result of an examination of 832 swords, mostly found in Sweden. The work is comprehensive, discussing typologies (mostly Petersen), sword furniture (scabbards and scabbard chapes), sword decoration, sword dating, and the distribution of swords. The discussion of Petersen's Typology and its additions and modifications is highly critical, and probably the most useful chapter in the book.

But Androshchuk isn't just a critic of past scholarship. He is also interested in the political, social, and cultural aspects of swords. His approach is to divide his analysis into microanalysis and macroanalysis. Microanalysis sees the weapon as the structure/composition of the blade, the decoration or non-decoration of the hilt-construction, and the scabbard assembled for a specific purpose: fighting and war. The minute details of construction and decoration of the sword will or will not allow it to fulfill its purpose. Macroanalysis sees the sword as circulating through a series of

communities in a political/social aspect, finally leaving the community in a burial or water sacrifice. In its travels to its final place, the sword enhances the position of the owner as a statement of wealth, favor, and finally power.

The problem with summary essays is that they can create a false sense of continuity. The study of Viking Period swords has been a disjointed one. The people who did and studying these weapons had other historic or archaeological interests. Lorange was an archaeologist and museum curator. Other objects were of interest to him. Petersen's sword typology was his doctoral thesis. He turned his attention to Viking Period jewelry after 1919. Wheeler became involved in archaeology in India and Pakistan later in his life. Even Oakeshott, whose interest in swords is well known, wasn't all that interested in the Viking Period. Indeed, his interest was in later medieval swords as his *Records of the Medieval Sword* (28) can testify.

But progress has been made in the study of Viking Period swords. These swords can now be discussed because a nomenclature has been created. When someone uses, "Petersen Type _" most of the readers have an idea of what the author is presenting. When someone uses the term "pattern welding" it refers to a defined technique of forging a blade. When someone uses "VLFBERHT" or "INGELRII" less explanation is required as to what that means.

Technical examination of the swords will continue with improved methods. U. Lehmann has published an examination of 24 pre-Viking Period swords using "computerized x-ray tomography" (29). This adaptation of an industrial technology allows us to see the layers of a sword blade in a non-destructive way. Such technology is complex and expensive. No one knows who is going to pay for the use of such technology. More importantly, no one knows the size of an acceptable sample for it. Still, as technology is improved, the cost of its predecessor may become affordable. Technical work has much to contribute to study of swords.

One of the original purposes of this work was to re-connect Viking Period swords with the context of their discovery. Such a purpose turned out to be fraught with problems. This work is an unabashedly second attempt not to fulfill that original purpose. Though documenting some portion of a find's context is still important, the other purpose of this work is simply determine what is out there, what is available, and what can be used. Put differently, this work is an attempt to define the problem of Viking Period swords in an accessible way.

Notes.

1. Worsaae, J.A.A. *The Primeval Antiquities of Denmark*. London: JH Parker (1847, English Edition) 19-50.
2. Rygh, O. *Norske Oldsager (Antiquities Norvegiennes)*. Christina, Norway: Forlgt AF (1885).
3. The term "Younger Iron Age" is an invention of 19th Century archaeologists, mostly from Norway. The term "Viking Age" or "Viking Period" was a matter for debate. The periodical *Bergen Museums Aarbog* did not use the term Viking Age until 1904. The *Stavanger Museums Aarshefte* used "Younger Iron Age" in the same year. The problem is one of dating found objects. Archaeologists needed many objects in order to discern a series of finds within a geographic area.
4. Lorange, A. *Den Yngre Jernalders Svaerd. Et Bidrag til Vikingtidens Historie og Teknologi*. In: *Bergens Museums Skrifter* 4. (1889).
5. Petersen, J. *De Norske Vikingesverd. En Typologisk-Kronologisk Studie Over Vikingetidens Vaaben*. Kristiana, Norway: I Kommission Hos Jacob Dybwad (1919).
6. Wheeler, M. *London and the Vikings. London Museum Catalogues No. 1*. London: Lancaster House (1927) 18-37.
7. Oakeshott, E. *The Archaeology of Weapons*. New York: Praeger (1960). I believe this book is available online.
8. Maryon, H. "Pattern Welding and Damascening of Sword Blades." *Studies in Conservation* 5 (1960) 25-30, 52-60. Maryon was not the first to investigate pattern welding. M. Janssens in "De Reconstitution d'un procede de fabrication d'epees damassces." *Studies in Conservation* 3 (1958) 93-106 was the first to investigate pattern welding.
9. Anstee, J.M. and L Brek. "A Study in Pattern Welding." *Medieval Archaeology* 5 (1961) 71-93.
10. Antein, A. "Im Ostbalttrkum gefundese Schwerter mit damaszerter Klingen." *Waffen und Kostumekunde* (1966) 111-125.

11. Tylecote, R.F. and B.J.J. Gilmour. *The Metallography of Early Ferrous Edge Tools and Edged Weapons*. Oxford, England: British Archaeological Reports (B.A.R.) British Series 155 (1986)
12. Lang, J. and B. Ager. "Swords of the Anglo-Saxon and Viking Periods in the British Museum: A Radiographic Study." In: *Weapons and Warfare in Anglo-Saxon England*. Sonia Chadwick Hawkes (ed.) Oxford, England: Oxford University Press (1989) 85-122.
13. Williams, A. "A Metallurgical Study of Some Viking Age Swords." *Gladius* (2009) 121-184.
14. Martens, I. and I. Astrup. "Studies of Viking Age Swords." *Gladius* (2011) 203-206.
15. Williams, A. "A Note on the Analysis of Viking Swords." *Gladius* (2011) 207-210.
16. Hosek, J. and J. Kosta. *Early Medieval Swords from Mikulice*. Brno, Czech Republic: Institute of Archeology of the Academy of Sciences of the Czech Republic (2014). ISBN: 9788086023588.
17. Kirpichnikov, A.N. *Drevnerusskoe Oruzhie*. Moscow: Arkheologiya SSR (1966-1971). Volume I was published in 1971.
18. Kirpichnikov, A.N. L. Thalin-Bergmann and I. Jansson. "A New Analysis of Viking Age Swords in the Collection of the Statens Historiska Musset, Stockholm, Sweden." *Russian History* 28 (2001) 221-224.
19. Stalsberg, A. "The Russian-Norwegian Sword Project." In: *Developments Around the Baltic and Northern Sea in the Viking Age. (The Twelfth Viking Congress)*. B. Ambrosiani and H. Clarke (eds.) Stockholm: Statens Historiska Museer (1994) 183-198.
20. Stalsberg, A. "Herstellung und Verbreitung der Vlfberht-Schwertklingen." *Zeitschrift für Archaeologie des Mittelalters*. 36 (2008) 89-118. This article has been translated into English and is now available online as "The Vlfberht Swords Revisited."
21. Ibid, Stalsberg (2008).
22. Ibid, Stalsberg (2008).
23. Geibig, A. *Beiträge zur Morphologischen Entwicklung des Schwertes im Mittelalter. Eine Analyse des Fundmaterials vom ausgehenden 8 bis zum 12 Jahrhundert aus Sammlungen der Bundesrepublik*. Neuminster, Germany: Karl Wachholtz Verlag (1991).
24. Two Citations:

Jones, L.A. "Overview of Hilt and Blade Classifications" In: *Swords of the Viking Age*. I. Peirce (ed.) Woodbridge, England: The Boydell Press (2002). ISBN: 0851159141.

Miller, C.L. <http://myArmoury>. (2003)
25. Geibig, A. "Die Schwerter aus dem Hafen von Haithabu." In: *Das Archäologische Fundmaterial IV*. A. Geibig and H. Paulsen (eds.) Neuminster, Germany: Wachholtz Verlag (1999) 9-92.
26. Jacobsson, M. *Krigarideologi oc Vikingtida Svardstypologi*. Stockholm: Akademityck AB (1992).

27. Androshchuk, F. *Viking Swords. Swords and Social Aspects of Weaponry in Viking Age Societies*. Stockholm: Historska Museet (2014). ISBN: 978918976515.
28. Oakeshott, E. *Records of the Medieval Sword*. Woodbridge, England: The Boydell Press (1991).
29. Lehmann, U. "Wurmbunte Klingen—Studies of Pattern-welded Swords in Early Medieval Westphalia Using Computerised X-ray Tomography" In: *Dying Gods—Religious Beliefs in Northern and Eastern Europe in the Time of Christianization*. C. Ruhmann and V. Brieske (eds.) Stuttgart, Germany: Neidersachsisches Landesmuseum Hanover (2015) 269-285. ISBN: 97838062322908. This article is also available online under the author's name on *academia.edu*.

Chapter Two: The Atlantic Islands.

To say that the Scandinavian presence in the North Atlantic was considerable during the Early Middle Ages is an understatement. Beginning with raids, the Danes and the Norwegians sailed their open ships over the North Atlantic into the bays and rivers of the British Isles, Ireland, the Faroes, Iceland, Greenland, and North America. Eventually the raiding became invading and colonizing, depending on the location.

This is not to say that swords went to all the island and areas of the Atlantic. No swords have been found on the Faroes, in Greenland, and in Newfoundland. Very little evidence of swords—a sword guard discovered by Mark Redknap—has been found in Wales (1). These locations are not included here. The islands and countries that are included were highly affected by Scandinavian emigration, and they can count the Viking Period as a significant part of their history.

Iceland

Beginning in the late 9th Century, Norwegians and others began to emigrate to Iceland. The reasons for this movement have been argued about over the decades, but a few things are clear. They brought their material culture with them. Most importantly, they passed the doings of their ancestors down through an oral tradition that was eventually written down into stories that are their own

literature. The Icelandic Sagas have sparked people's interest in the Viking Period more than anything else.

Icelandic archaeology has had to work under the shadow of these sagas. This does not mean the efforts of archaeologists were sub-standard. What is interesting about Viking Period Iceland is the limitations upon it. Only settled in the late 9th and 10 centuries, the archaeology of Iceland reflects that fact. The situation is such that Kristjan Eldjarn published a summary book entitled, *Kuml og Haugfe ur Heithnum sith a Islandi* in 1956 (2). A. Frithriksson updated the publication in 2000 and again in 2016m (3). The book is the main source of information here.

Place	Scheme	Petersen Type	Date
1.Hraungerthishrepper	?,A,#	?	?
2.Kaldarhofthi	3,4,A,b,#	O	900-950.
3.Grave 3, Hafarbjarnarstathir	2,A,#	S	950-1000.
4.Ondvertharnes	2,A,#	M	900-950.
5.Hofthi	6,A,#	?	?
6.Hoskaldsstathir	?,A,#	?	?
7.Grave 1, Silastathir	2,6,A,#	M	900-950.
8.Grave 4, Silastathir	4,A,#	Q	950-1000.
9.Bringa	2,3,A,#	Q	950-1000.
10.Laufas	?,A,#	?	?
11.Framdalir	2,3,A,#	M	900-950.
12.Baldursheimar	2,A,#	?	?
13.Eyrarteigar/Skirthdalshreppar	3,A,#	V	950-1000.
14.Brennisathir	6,A,#	M	900-950.
15.Grave 4, Grannagil	6,A,#	?	?
16.Grave 2, Glaumbaer	6,A,#	?	?
17.Sakkas	?,A,#	?	?
18.Dalvik	6,A,b,#	?	?

19.Hrafneldar	3,D	V?	950-1000.
20.Grave 2, Hringsdalar	?,A,#	Q	950-1000.

Kuml og Haugfe (2016) lists 157 grave-sites. 19 swords from graves (the 20th is a stray) isn't much. Furthermore, the items from Glaumbaer, Hofthi, Hoskuldssadthir, and Laufas are doubtful as swords. This leaves 16 swords for analysis. Some of the burials are very rich. The boat burials at Kaldarhofthi and Dalvik were the graves of important people since the use of a wooden boat on an Island with little or no wood would be a significant loss. The equestrian graves at Silastathir (Grave 4) and Baldursheimar may also be considered of important people.

Yet this also leaves the question of the other swords found in the other burials. Were the people buried there important? What justified the use of useful and important objects in one grave, but not another? Our knowledge of social relations in 10th Century Iceland is incomplete. Land-owners had some prominence, but what of those people who "rented" from them, and what about those people who had smaller claims in this newly settled country? The study of swords, alone, cannot answer these questions.

Scotland.

The archaeological evidence of the Scandinavian presence in Scotland during the Viking Period is such that a book has been written. *Vikings in Scotland. An Archaeological Survey* by J. Graham-Campbell and C.E. Batey was published in 2001 (4). For swords, however, this book is not the only source. There are others, most especially G. Zabinski's article, "Viking Age Swords from Scotland" (5).

<u>Place</u>	<u>Scheme</u>	<u>Petersen Type</u>	<u>Date.</u>
1.Torbeck Hill	2,3,D	L	850-900.

2.Boiden Mound	5,A,c,\$	H	850-950.
3.Baknakeil	2,3,A,#	H	850-950.
4.Sweindrow & Westness, Rousay			
	6,A,#	I	850-950.
5.Scar, Sanday	2,A,b,#	H	850-950.
6.Styles, Sanday	2,3,A	X	900-1050.
7.Pierowal, Westray, Orkney			
	6,A.c,#	H	850-950.
8.Sumburgh, Shetland	?,A,#	?	?
9.Eriskay, Western Isles	6,A	O	900-950.
10.Ballinbay, Islay	2,A,#	H	850-950.
11.Ballinbay	2,3,A,#	Q	950-1000.
12.Kiloran Bay, Colonsay	6,A,b,#	U or V	950-1000.
13.Machrias, Machain,			
Colonsay	6,A	L	850-950.
14.Colonsay	6,A,b	?	?
15.Lamaness, Sanday	6,A?	X	900-1050.
16.Kildonnan, Eigg,			
Western Isles	2,A	D	800-950.
17.Kildonnan, Eigg			
Western Isles	2,6,A	W?	?
18.Bate, Firth of Clyde	6,A	H	850-950.
20.Dumbarton Rock,			
Firth of Clyde	6,A?	I	850-950.
21.St. Cuthbert's			
Kirkadbright			
Galloway	2,3,A	?	?
22.Strathspey	3,A	Y	950-1000.
23.Havreston,			

Tillicoultry			
Firth of Fourth	3,A	L	850-950.
24. Westness, Rousay	2,A,b,#	H	850-950.
25. Westness, Rousay	6,A,b,#	?	?
26. Westness, Rousay	2,A,b,*	H	850-950.
27. Westness, Rousay	?,A	H	850-950.

Sources:

Batey, C. and C. Paterson. "A Viking Burial at Balnakeil, Sutherland" in *Early Medieval Art and Archaeology in the Northern World*. A. Reynolds and L. Webster (eds.) Boston, Massachusetts: Brill (2013) 631-659.

Bryce, T.H. "A Viking Cist-Grave at Ballinbay, Islay." *Proceedings of the Society of Antiquaries of Scotland* (1934) 74-48.

Graham-Campbell, J. and C. Batey. "Chapter 7. Pagan Norse Graves Part I: Case Studies" in *Vikings in Scotland. An Archaeological Survey*. Edinburgh: Edinburgh University Press (1998,2001) 113-140.

Owen, O. and M. Dalland. *Scar. A Viking Boat Burial on Sanday, Orkney*. Tuckwell Press (1999).

Redmond, A.Z. *Viking Burial in the North of England. A Study of Contact, Interaction and Reaction Between Scandinavian Migrants with Resident Groups, and the effect of Immigration on Aspects of Cultural Continuity*. BAR British Series 429. Oxford, England: British Archaeological Reports (BAR) (2007).

Zabinski, G. "Viking Age Swords from Scotland" *Acta Militaria Mediaevalia III*. Krakow, Poland: (2007) 29-84.

Summary:

Condition:

2. (Incomplete): 11

3. (Corroded): 7

5. (Bent): 1

6. (Fragment): 11

1 single-edged sword.

Combinations:

2/3--Incomplete/Corroded: 4

2/6--Incomplete/Fragmentary: 1

Context:

A.Graves: 26

b.Boat/Ship: 6

c.Mound: 2

10 Inhumation Graves; 1 Cremation Grave.

D.Stray Find: 1

Petersen Types:

Type D (800-950): 1

Type H/I (850-950): 10

Type L (850-950): 3

Type Q (950-1000): 1

Type W (950-1000): 1

Type X (950-1050): 2

Type Y 950-1000): 1

Unknown: 4

What is notable here is the number of boat graves--6, the number of Type H/I swords--10, and the number of Type L swords--3. B. Solberg believes that Type H/I swords were imported from Frankish Europe (6) and so the ten found in Scotland suggest a connection with Europe. They could also suggest a connection with Norway. That four swords of this type were found in boat burials may also be important since the swords reinforce the possible connection between prestige and trade.

With a curved guard/hilt and a curved pommel, the highly decorated Type L sword is distinctive. F. Androschuk points that the origin of this type is British or Irish (7). Finding Type L swords in Scotland points towards the nature of foreign connections between the Atlantic Isles during the Viking Period. If

Type H swords were imported the area, then Type L swords were imported as well. These swords suggest connections within a trading network.

England

The Scandinavian invasions and settlement of Anglo-Saxon England during the Viking Period is arguably an important series of events in English History. The establishment of the Scandinavian colony, the Danelaw, and the on again-off again wars between the Anglo-Saxons and the Danes affected the population of the kingdom in many ways. The *Anglo-Saxon Chronicle* (8) is the best known written source for this period of history.

Material Culture has not been ignored. Finding its origins in a visit by Danish archaeologist, J.A.A. Worsaae (9), the archaeology of Viking Period England has shown a slow, steady progress. Work is still being conducted to this day. Swords and other finds have been found dating to Viking Period and published for the use of interested people.

Place	Scheme	Petersen Type	Date
1.Grave 3, Cumwhitton	4,A,#	U	950-1000
2.Grave 4, Cumwhitton	4,A,#	L	850-950
3.Grave 5, Cumwhitton	4,A,#	X	900-1050
4.Grave 6, Cumwhitton	6,A,#	L	850-950
5.Mortlake	2,3,B,R,*	?	9 th Century
6.Putney, London	3,B,*	?	9 th Century
7.Waterloo Bridge, London	1,B,R	M	900-950
8.Near London	2,3,B,R	I	850-950
9.Vauxall, London	2,B,R	?	?
10.Wandsworth Reach	1,B	Z?	1000-1050
11.Near Brentford	2,B,R	P or Y	950-1000
12.Stains	2,3,B,R	Z?	1000-1050
13.Sonning, Berks	4,A	H	850-950

14.Santon Downham,				
Norfolk	3,A,#	L		850-950
15.Lea Valley,				
Walthamstow	?,A,#	C		800-900
16.Reading	?,A,#?	?		?
17.Near Battersea,				
London	5,B,R	?		?
18.Fiskerton, Lincolnshire	1,B	L?		850-950
19.Goodstone, Norfolk	5,D	?		9 th Century?
20.Kersey, Suffolk	2,D	L?		850-950
21.Mileham, Suffolk	2,C	?		11 th Century?
22.Wensley Churchyard,				
Yorkshire	3,A,d,#	L?		850-950
23.Near Westminster				
London	1,B,R	L		850-950
24. Repton	3,A,d,#	M		900-950
25.Aspatria, Cambria	2,A,c,#	D		800-950
26.Crossmoor,				
Lancashire	2,A,\$	L		850-950
27.Mound 1, Heathwood,				
Derbyshire	2,4,A,c,\$	L?		850-950
28.Mound 7, Heathwood				
Derbyshire	6,A,c,\$	H?		850-950
29.Mound 50, Heathwood				
Derbyshire	6,A,c,\$?		?
30.Tendley Hill, Cambria	2,3,A,c?,#	H or I		850-950
31.Ormside,				
Westmoreland	3,A,#	M		900-950
32.Rampsile,				

Lancashire	2,3,A,#	M	900-950
33.Kildale, Yorkshire			
1 st Burial	1,A,#	X	950-1050
34.Kildale, Yorkshire			
2 nd Burial	1,A,#	X	950-1050
35.Clanhthon Hall,			
Lanacshire	?,A,a,#	?	?
36.Hesket-in-the-Forest,			
Cumbria	6,A,c,\$	O	900-950
37.Bumside, Lanacshire	2,A,d,#	M	850-950

Sources:

Collingwood, W.G. "Some Illustrations of the Archaeology of the Viking Age in England." *Saga Book of the Viking Club*. London: (1907) 111-141.

Evison, V.I. "A Viking Grave at Sonning, Berk." *Antiquaries Journal* (1969).

Hadley, D.M. *The Vikings in England. Settlement, Society, and Culture*. New York: Manchester University Press (2006).

Paterson, C. et al. *Shadows in the Sand: Excavation of a Viking Age Cemetery at Cumwhitton*. Oxford, England: Oxford Archaeology (2014).

Redmond, A.Z. *Viking Burial in the North of England. A Study of Contact, Interaction and Reaction Between Scandinavian Migrants with Resident Groups, and the effect of Immigration on Aspects of Cultural Continuity*. BAR British Series 429. Oxford, England: British Archaeological Reports (BAR) (2007).

Richards, J.D. "Excavations at the Viking Barrow Cemetery at Heath Wood, Ingleby, Derbyshire." *The Antiquaries Journal* 84 (2004) 23-116.

Wheeler, M. *London and the Vikings. London Museum Catalogues No. 1*. London: Lancaster House (1927).

Wilson, D.M. "Some Neglected Late Anglo-Saxon Swords." *Medieval Archaeology*. 9 (1965) 32-54.

Summary:

Total Number of Swords: 37

Condition:

1.(Intact): 5

2.(Incomplete):12

3.(Corroded): 8

4.(Broken): 5

5.(Bent): 1

6.(Fragment): 4

Unknown: 3

Single Edged Blades: 2

Combinations:

2/3--Incomplete/Corroded: 4

2/4--Incomplete/Broken: 1

Context:

A. Graves: 23

c.(Mounds): 5

d.(Flat): 2

Number of Inhumation Graves: 17

Number of Cremation Graves: 5

B.Water Finds: 11

R.(Rivers): 7

C.Settlement Finds: 1

D.Stray Finds: 2

Petersen Types:

Type C (800-900): 1

Type D (800-950): 1

Type H/I (850-950): 4

Type L (850-950): 8

Type M (900-950): 5

Type O (950-1000): 1

Type P (950-1000): 1

Type U (950-1000): 1

Type X (950-1050): 3

Type Y (950-1000): 1

Unknown: 8

There are eleven other swords found in England that are not included in the list above. The documentation for these swords is inadequate (10) at this time. These swords are from Camphill, Beacon Hill, Santon Downham (Norfolk), Nottingham (two graves), Leigh-on-the-Sea (Essex), Reading (Berkshire), Bumpside, Farndon, and West Seaton. All of the swords are from burials.

That 23 of the swords were found in graves should come as no surprise. Anglo-Saxon England was invaded by the Scandinavians/Vikings, and armies fought. The number of swords found with the dead seems to be low. Look at the cemetery at Heathwood, Derbyshire. Only three swords discovered from some 70 mounds speaks for the rarity of weapons with swords in England. Of course this assumes that all the mounds were excavated graves. Furthermore, many of the mounds there were cremation graves—it is possible that swords and other objects were destroyed in the fire of the death ritual.

The number of Type L swords—8—is of note. While there is an equal number of swords of unknown type, that the Type L sword was forged in England is worth consideration. Due to their decorated hilt construction, the Type L should be considered a prestigious weapon. Who controlled the making and distribution of these swords is a matter of speculation, but mostly likely these persons were of high rank. Ownership of these Type L swords in Anglo-Scandinavian England may indicate political affiliations.

The most interesting swords discovered in England have not been found in burials. The eleven swords found in bodies of water, mostly rivers, require discussion. An old explanation for the context of these swords, other weapons, and other objects was that these items found their way into rivers, etc. by

accident. Another old explanation is that these weapons found their way into the river during battle, when its owner died and fell into the water.

J. Lund (11), however, believes that many of swords and other weapons were intentionally placed into rivers and other bodies of water. The author believes that places for bridges and fords hold a sacral place in the pagan landscape of Scandinavia, and points out that some 140 weapons found near bridge, fords, the mouths of rivers and streams, lakes and bogs. The sword was ritually sacrificed by casting it into the water. The purpose of the ritual, Lund speculates, is the establish borders and other treaties between two or more peoples. Certainly some (if not all) of the swords listed above would fit into this interpretation.

Isle of Man

The Isle of Man is located in the Irish Sea between England and Ireland. To the North is Scotland and an entrance into the North Sea. To the South is Wales and an entrance to the Atlantic Ocean, the English Channel, and Europe. For the Scandinavians the island is an ideal location to establish a colony.

Archaeologists have been finding items dated to the Viking Period since the 19th Century. The best known archaeological source about the Isle of Man is Bersu and Wilson's *Three Viking Graves at the Isle of Man* published in the 1960s (12). This book is excellent, but recently D.H. Steinforth has published a more comprehensive work (13).

<u>Place</u>	<u>Scheme</u>	<u>Petersen Type</u>	<u>Date</u>
1.Ballabrodie, Patrick	2,3,A	L	850-950
2.Ballaugh	2,3,A	L	850-950
3.Maughold	3,5,A	L	850-950
4.St. Johns, German	2,3,A	L?	850-950

5. Balladoyne, German	2,3,4,A,d	M	900-950
6. Croak Moor, Jurby	3,4,A,c	S	950-1000
7. Ballatere, Jurby	3,4,A,c	V	950-1000
8. Knocky Doone, Andreas	3,4,A,b,c,#	X	900-1050
9. Jurby	6,A	S	950-1050
10. Ballachrink, Jurby	2,3,6,A	L	850-950
11. St. John Kirk, German	2,3,A	P	950-1000
12. Old Kirk, Braddan	6,A	?	?
13. Orry's Grave, Gretch, Kirk Lonan	6,A,c	?	?
14. Claghbane, Maughold	6,A	L	850-950
15. Maughold	6,A	?	?

Sources:

Redmond, A. Z. *Viking Burial in the North of England. A Study of Contact, Interaction, and Reaction Between Scandinavian Migrants with Resident Groups, and the Effect of Immigration of Aspects of Cultural Continuity*. Oxford, England: British Archaeological Reports (BAR) (2007)

Steinforth, D.H. *Die Wikingergraber auf der Isle of Man*. Oxford, England: Archaeopress for British Archaeological Reports (BAR) (2015). ISBN: 9781407373658.

Wilson, D. and Bersu. *Three Viking Graves in Isle of Man*. London: Society for Medieval Archaeology (1966).

Wilson, D. "Early Finds of Viking Graves in the Isle of Man." In: *Early Medieval Art and Archeology in the Northern World*. A. Reynolds and L. Webster (eds.) Boston, Massachusetts: Brill (2013) 663-683.

Summary:

15 total swords

Condition:

1.(Intact): 0

2.(Incomplete): 5

3.(Corroded): 9

4.(Broken):3

5.(Bent):1

6.(Fragment): 6

Unknown: 0

Combinations:

2/3--Incomplete/Corroded: 4

3/5--Corroded/Bent:1

2/3/4--Incomplete/Corroded/Broken: 1

3/4--Corroded/Broken: 3

2/3/6--Incomplete/Corroded/Fragmentary: 1

Context:

A. Graves/Burials: 15

a.(Chamber Graves): 0

b.(Boat/Ship): 1

c.(Burial Mound): 3

d.(Flat): 1

f. (Unknown/Other):0

Petersen Types.

Type L (850-950): 6

Type M (900-950): 1

Type S (950-1000): 2

Type P (950-1000): 1

Type V (950-1000): 1

Type X (950-1050): 1

Unknown Type: 3

The 6 Type L swords found on Man is notable, even if the origins of these swords were not English. If they are English shows the importance of the local connections and trade between the Isle of Man and its neighbors. Again, these Type L sword may indicate political affiliation.

The burial at Knocky Doone, Andreas is also notable. This burial is boat burial in a mound. Not only does the grave contain a sword (Type X), but the grave was probably of a chieftain, of at least someone of great importance. The use of a mound being built around a boat (or ship) denotes the prestige of the deceased since a valuable boat was used. The sword and other items included here are also valuable, adding to the prestige of the deceased. Finally, the mound built around these items required planning and considerable labor. Whoever was buried with this sword was an important member of the community, if not the region.

Ireland

Ireland is home to some of the most spectacular Viking Age finds of the Atlantic Islands. Found in the 1840s, the objects discovered at Islandbridge and Kilmainham, both of Dublin, are as numerous as they are impressive. Unfortunately, the graves that contained these objects were not documented, and full context of the finds cannot be discussed. This situation reflects the state of archaeology at the time. The discipline was fairly new in the mid-19th Century, and documenting burials was rare.

Other problems occurred with these finds. Matters of interpretation were nationalistic, even if the Danish archaeologist J.A.A. Worsaae commented on them (14). Furthermore, and perhaps more importantly, the collecting and cataloging of Islandbridge and Kilmainham finds led to future confusion. Both the 1910 publication by Armstrong and Coffey (15) and the 1940 book by Boe (16) tried to describe the objects in detail in order to clear up mistakes. More recent efforts by S. Harrison has made the finds more useful to contemporary scholars (17).

But the objects of Islandbridge and Kilmainham have not been the only Viking Period finds of Ireland. Other digs, such as the recent excavations at Woodstown have added to a collection to examine. More, hopefully, will be discovered and Ireland's part in the Viking Period will be better understood.

Place	Scheme	Petersen Type	Date
1.Kilmainham, Bally Acre, 1785	?,A,#	?	?
2.Kilmainham, 1832	1,A	X	950-1050
3.Kilmainham, 1836	?,A	?	?
4.Kilmainham, D349	3,4,A	K	800-950
5. D 350	3,5,B,R	X	950-1050
6.Kilmainham, D351	2,3,A	H	850-950
7.Kilmainham, D352	4,A	H	850-950
8.Kilmainham, D354	3,4,A	D	800-950
9.Kilmainham, D355	3,5,A	K	800-950
10.Kilmainham, D356	5,A	I	850-950
11.Kilmainham, D 357	3,A,*	H	850-950
12.Kilmainham, D358	3,A,*	C	800-900
13.Kilmainham, D359	3,A,*	C	800-900
14.Kilmainham, D360	2,3,A,*	F	850-900
15.Kilmainham, D361	3,A,*	F	850-900
16.Kilmainham, 1881, 363	6,A	E	850-900
17.Kilmainham, 1845A	6,A	H?	850-950
18.Kilmainham	2,A	?	?
19.Kilmainham, NMD10506	3,5,A,*	K	800-950
20.Kilmainham, NMD10507	3,4,A	K?	800-950
21.Kilmainham, 1911, 65	3,A	H	850-950
22.Kilmainham,			
Cork Street	2,A	K?	800-950
23.Kilmainham, W 77	2,3,4,A	E	850-900
24.Kilmainham, P943	6,A	H	850-950
25.Kilmainham, 1881, 362	4,A	H	850-950
26.Kilmainham,			
BM1884.0318.1	3,D,A,*	H	850-950

27.Kilmainham, W78	2,3,4,A	K	800-950
28.Kilmainham, W79	3,A	I	850-950
29.Kilmainham, W85, 1849	6,A	H	850-950
30.Killmainham, W86	3,A	C	800-900
31.Kilmainham, R425	3,A	K	800-950
32.Kilmainham, R426	3,A,*	C	800-900
33.Kilmainham, Wk1	3,A,*	H	850-950
34.Islandbridge, R417	2,3,5,A	K	800-950
35.Islandbridge, R2356, Wk 20	3,A,*	C	800-900
36.Islandbridge, R2357, Wk 35	3,A,*	C	800-900
37.Islandbridge, R2358, Wk 15	2,3,A	H	850-950
38.Islandbridge, R2359, Wk 37	3,A	H	850-950
39.Islandbridge, R2391, Wk 21	2,3,4,A	H	850-950
40.Islandbridge, R2357, Wk 16	3,A	C	800-900
41.IslandBridge, Wk 17	2,4,5,A	H	850-950
42.Islandbridge, 2007, 215	2,A	C	800-900
43.Bride Street, Dublin			
R431, Wk 19	3,4,A,#	X	900-1050
44.College Green, Dublin	2,3,A	H	850-950
45.College Green, Dublin,			
Sirr 261, Wk 28	3,A,*	K	800-950
46.College Green, Dublin,			
1882, 153, Wk 32	2,3,A	K	800-950
47.Dawson 376, Cork Street	2,3,4,A	H	850-950
48.Dolly Mount, 1872: 36, Wk 43	2,5,A	H	850-950
49.Donnybrook, T608	2,A	D	800-950
50.Inchore, 1933: 7	4,A,#	H	850-950
51.inchichore, 1933: 16A	2,4,A	E	850-900
52.Inchichore, 1934: 10877	3,4,A,#	H	850-950
53.Kildare Street, SA1898: 104	2,3,4,A	H	850-950

54.Parnell Square, Dublin	?,A,#	?	?
55.Parnell Square, Dublin	2,A,#	?	?
56.Parnell Square, Dublin	6,A	?	?
57.Ship Street	3,6,A	?	?
58.Church Bay, Rathlin Island	2,4,A,#	?	?
59.Eyrephet	2,3,A.#	K	800-950
60.Larne, County Antrim	3,A,#	X	950-1050
61.Legar Hill, County Armagh, SA1908: 11	2,A	H	850-950
62.The Murragh, County Wicklow SA1909: 31	2,6,A	K	800-950
63. St. John's Point, County Down Wk 18	2,3,5,A	?	?
64.Tibberaghney, County Killkenny, RSAI 17	2,3,A	H	850-950
65.Woodstown, County Waterford, O2E441	4,A,#	N	900-950
66.Sirv 268	2,3,?	H	850-950
67.1880:1543A	2,?	X	950-1050
68.1880: 1543B	2,3,?	H	850-950
69.Wk 30	3,4,?	H	850-950
70.Wk 143B	6,?	?	?
71.X2808	6,?	E	850-900
72.Islandbridge, R2390	2,A	D	800-950
73.Ballinderry Crannog	1,C	K	800-950
74.Dunyloman River	1,B,R	H	850-950
75.Askeaton, County Limrick	1,B,R	A	800-900
76.Morragh at Wicklow	3,6,D	?	?
77.Tome and Greagh	3,B,R	?	?
78.Cowford, County Armagh	2,5,B,R	X	950-1050

79.Wheelam, County Kildare	2,D	“Saertyp”	800-900
80.Wk 84	2,?	?	?
81.1898:106	2,?	H	850-950
82.Wk 7	2,3,?	L	850-950
83.W25	6,?	R or S	950-1000
84.Wk 41	3,6,?,*	?	?
85.1880: 1543	3,?	X	950-1050
86.The River Bann	1,B,R	L	850-950

Summary:

Total Number of Swords: 86

Condition:

1. (Intact): 4
2. (Incomplete): 29
3. (Corroded): 41
4. (Broken): 12
5. (Bent): 9

Unknown: 3

Single Edged Sword: 13

Combinations:

3/4--Corroded/Broken: 6

3/5--Corroded/Bent: 3

2/3--Incomplete/Corroded: 11

2/3/4--Incomplete/Corroded/Broken: 5

2/3/5--Incomplete/Corroded/Bent: 2

2/4--Incomplete/Broken: 3

2/5--Incomplete/Bent: 2

3/6--Corroded/Fragmentary: 2

2/6--Incomplete/Fragmentary: 1

Context:

Graves/Burials: 66

Bodies of Water: 5

Rivers: 5

Settlement Finds: 1

Stray Finds: 2

Unknown Context: 12

Petersen Types:

1 "Saertyp", Special Type (800-900)

Type A (800-900): 1

Type C (800-900): 8

Type D (800-950): 3

Type E (850-950): 4

Type F (850-900): 1

Type H (850-950): 26

Type I (850-950): 2

Type K (800-950): 14

Type L (850-950): 2

Type N (950-1000): 1

Type R or S (950-1000): 1

Type X (950-1050): 7

Unknown: 12

Sources:

Boe, J. *Viking Antiquities in Great Britain and Ireland. Volume III. Ireland.* H. Shetelig (ed.) Oslo: Aschehoug (1940).

Bourke, C. "A Medieval Sword and Scabbard from the River Bann" in *Early Medieval Art and Archaeology in the Northern World*. A. Reynolds and L. Webster (eds.) Boston, Massachusetts: Brill (2013) 317-337.

Briggs, C.S. "A Neglected Viking Burial with Beads from Kilmainham, Dublin, Discovered in 1847." *Medieval Archaeology*. 29 (1985) 94-107.

Coffey, G. and E.C.R. Armstrong. "Scandinavian Objects Found at Island-Bridge and Kilmainham." *Proceedings of the Royal Irish Academy. Section C. Archaeology, Linguistics, and Literature*. 28, #5 (1910) 107-122.

Fanning, T. "The Viking Grave Goods Discovered near Larne, Co. Antrim in 1840." *The Journal of the Royal Society of Antiquaries of Ireland*. 100, #1 (1970) 71-78.

Hall, R.A. "A Viking-age Grave at Donnybrook, Co. Dublin." *Medieval Archaeology*. 22 (1978) 64-83.

Harrison, S.H. "Bride Street revisited—Viking Burial in Dublin and beyond" in *Medieval Dublin X. Proceedings of the Friends of Medieval Dublin Symposium 2008*. S. Duffy (ed.) Portland, Oregon: Four Courts Press (2008) 126-152.

Harrison, S.H. "Weapons and Grave Goods. Chapter 7 Metal" in *Woodstown. A Viking-Age Settlement in Co. Waterford*. I. Russell and M.F. Hurley (eds.) Portland, Oregon: Four Courts Press (2014) 155-161.

Harrison, S.H. and R. O'Flionn *Viking Graves and Grave-Goods in Ireland*. Dublin: The National Museum of Ireland (2015).

Sheenhan, J. "A Reassessment of the Viking Burial from Eyrephort, Co. Galway." *The Journal of the Galway Archaeological and Historical Society*. 41 (1987/1988) 60-72.

The swords from the burials at Kilmainham and Islandbridge dominate the list above. As stated in the introduction of this section, most of the graves were discovered in the 1840s, and the graves were not documented. No one is really certain if the obviously rich graves were inhumation or not. Also we don't know what form (chamber, mound, flat, etc .) the burials were. Wilde, writing in the 19th Century, stated that some bones had been found and that the burials had been found some 18 or so centimeters into the ground (18). This would argue for flat, inhumation burials.

But without the burials being documented the nature of the cemeteries at Islandbridge and Kilmainham the full context of the site cannot be discussed. Were there other, unfurnished graves? Were the graves laid out neatly in to specific place, away from other burials?

Still, however, the finds recovered from these two sites for a fairly rich community. All the objects, especially swords, speak to an active economic center. A break-down of the swords by Petersen Type only from Islandbridge and Kilmainham looks like this:

Type C: 7

Type D: 1

Type E: 2

Type F: 2

Type H: 11

Type I: 2

Type K: 5

Type X: 2

Unknown: 3

The significant numbers here are for Types H (with 11) and K (with 5). At least some of Type H swords are thought to be imported from Frankish Europe (19). Type K swords are found in Hedeby, Croatia, and elsewhere. The possibility of 18 swords being imported suggests that Dublin—and possibly Ireland—was no backwater location.

Another fact is the lack of Type L swords. The Type L from the River Bann is from outside of Dublin. The other Type L, “Wk 7,” does not designate its location. Considering the closeness of the Scotland, England, and especially the Isle of Man, the lack of Type L swords suggest a lack of trade, and that the Irish/Scandinavian rulers of Dublin/Ireland were at odds with other rulers in the area.

The other curiosity is the Type K sword found in the Ballinderry Crannog. This is one of the few swords found in a settlement in the Atlantic Isles. A Crannog is an artificial island built as a fortress.

They existed before and after the Viking Period in Ireland. To find a sword such the Type K only at Ballinderry and not in other crannogs seems strange.

However, as the Woodstown excavation of the Early 21st Century confirms, archaeological concerns of the Viking Period may have more to offer. Indeed, the introduction of new technologies like ground penetrating radar, the possibility of the discovery of new information is greater than ever. Our understanding of Ireland's involvement with the Viking Period is not complete.

Observations

185 swords are documented well enough to be included here. Almost half are from Ireland. Of all the 77 are in corroded condition, and 34 are in incomplete/corroded condition. The most swords of a specific Petersen Type is H with 36, but it is tied with "unknown" also with 36. There are 19 Type L swords. Most of the swords have been in burials and graves.

Type L swords need a closer look. Considering where this type was and wasn't found, speculation of Type L swords as a political statement is possible. Was this sword given away a diplomatic gift? Or could this sword be part of a payment for services rendered? Could it be both? Certainly this highly decorated and distinctive weapon would be a notable addition to anyone's possessions.

Yet, Type L swords were only more distinctive among an object that was distinctive in the first place. Owners of a sword in the Atlantic Islands were rare. Only 17 swords found out of 157 Icelandic burials argues for this rarity. Only three swords found in some 70 burials mounds at Heathwood, England, and only sword found in a grave at Repton out of dozens reinforces the argument. The owners of these swords were a people apart from everyone else.

The nature of that separation is a matter for further study, which should be done in conjunction with other objects found in the context. Why were certain people buried with their swords is an old question. Why other people weren't buried with their sword is question that is just as old. Speculation on these two questions continues.

Notes

1. Redknap, M. "The Vikings in Wales." In: *The Viking World*. S. Brink and N. Price (eds.). New York, New York: Routledge (2008) 401-410. ISBN: 97804159625. The author mentions an 11th Century sword guard discovered by a diver on page 406.
2. Eldjarn, K. *Kuml of Haugfe. Ur Heidnum Sith A Islandi*. Reykjavik: Bokautgafan Northri (1956).
3. Eldjarn, K and A. Frithriksson. *Kuml og Haugfe. Ur Heidnum Sith A Islandi*. Reykjavik: Mal og Memming (2016). ISBN: 9789979997362.
4. Batey, C. and J. Graham-Campbell. *Vikings in Scotland. An Archaeological Survey*. Edinburgh, Scotland: Edinburgh University Press (2001). ISBN: 0748606416.
5. Zabinski, G. "Viking Age Swords from Scotland" *Acta Militaria Mediaevalia III*. Krakow, Poland: (2007) 29-84.
6. Solberg, B. "Weapon Export from the Continent to the Nordic Countries in Carolingian Period." *Studien zur Sachsenforschung 7*. Heidesheim, Holland: Niedershcsisches Landesmuseum Hannover, (1991) 241-259.
7. Androshchuk, F. *Viking Swords. Sword and Social Aspects of Weaponry in Viking Age Societies*. Stockholm: The Swedish History Museum (2014). ISBN: 9789189176515.
8. The *Anglo-Saxon Chronicle* is now available online at <http://omac.org/Anglo/>. This translation is from 1923 and originally done by J. Ingram, and then proofed by D.B. Killings in 1996. It is copyright free. Strangely, a more recent translation was done by Dorothy Whitelock in 1961 and published by Rutgers University Press.
9. Worsaae, J.A.A. *Den Danske Erobring af England og Normandiet*. Copenhagen: (1863). In the 1840s Worsaae toured the British Isles. His effect was profound, and in 1849 a translation of his *Denmarks Oldtid* was published as *The Primeval Antiquities of Denmark*.
10. Hadley, D.M. *The Vikings in England. Settlement, Society, and Culture*. New York: Manchester University Press (2006).
11. Lund, J. "Thresholds and Passages: The Meaning of Bridges and Crossings in the Viking Age and Early Middle Ages." *Viking and Medieval Scandinavia*. Volume 1 (2005) 109-135. This article can be found on academia.edu under the author's name.
12. Wilson, D. and Bersu. *Three Viking Graves in Isle of Man*. London: Society for Medieval Archaeology (1966).

13. Steinforth, D.H. *Die Wikingergraber auf der Isle of Man*. Oxford, England: Archaeopress for British Archaeological Reports (BAR) (2015). ISBN: 9781407373658.
14. Worsaae, J.A.A. "An Account of the Formation of the Museum at Copenhagen, and General Remarks on the Classification of the Antiquities Found in the North and West of Europe." *Proceedings of the Royal Irish Academy (1836-1869)*. Volume 3 (1844-1847). The author discusses sword and other objects found at Kilmainham beginning on page 331.
15. Coffey, G. and E.C.R. Armstrong. "Scandinavian Objects Found at Island-Bridge and Kilmainham." *Proceedings of the Royal Irish Academy. Section C. Archaeology, Linguistics, and Literature*. 28, #5 (1910) 107-122.
16. Boe, J. *Viking Antiquities in Great Britain and Ireland. Volume III. Ireland*. H. Shetelig (ed.) Oslo: Aschehoug (1940).
17. Harrison, S.H. and R. O'Flionn *Viking Graves and Grave-Goods in Ireland*. Dublin: The National Museum of Ireland (2015).
18. Wilde, W.R. "On the Scandinavian Antiquities Lately Discovered at Islandbridge, near Dublin." *Proceedings of the Royal Irish Academy*. Vol. X (1870) 13-22. Wilde's interpretation of these finds has been rejected.
19. Solberg, B. Ibid. See Note #6.

Chapter 3: Norway

Norway deserves its own chapter because it has around 3000 Viking Period Swords—the most of any location (1). Because of the amount of swords documented, the list is not included with the text, as is done in other chapters. The list of 898 cataloged swords is at the end of the chapter.

This is not to say that finding information about these weapons is easy. The first attempt of this project listed only 48 swords for Norway. This put the entire project in jeopardy. In order to improve, an understanding of Norway's archaeological establishment had to be examined.

The foundation of the Norway's archaeological establishment is found in four museums—Oslo, Bergen, Tromsø, and Stavanger. Founded in the 19th Century, these institutions came with an archaeologist on the staff. The archaeologist's job was to conduct digs, consult with people who found objects, store and preserve those objects, and publish these new finds. Most of the objects found were published and described in the museum's yearbooks.

However, the purpose of the museums was not solely archaeological. The natural sciences such as biology, botany, etc. were also part of these museums. These sciences dominated the publications of the museums. This domination made looking for archaeological reports a time consuming process, at least in the United States, because the full publication was placed in a bound periodical. Putting these older publications on the internet may have helped accessibility, but it did not lessen the time it took to find something by much.

More importantly, dig reports in these publications lacked detail. A typical report looked like this:

30. Gravfund fra vikingetiden fra *Syngesand, Helgeiml sogn, Jølster*

Pdg. Nordre Bergerhus amt.

a. Tveegget *sverd* med simpelt, renedrenhjalt og havvrund,

massiv knap, begge af jern. Klingen er boiet i stump
vinkel og har tydelige rester af glodeskal. Den fulde længde er 89 cm.

This example is from the *Bergens Museums Aarbog* for 1905 (2). The sword in question was from a grave, the full form of the grave is not stated. The description of the sword is brief. Illustrations are rare. The rest of the entry describes other burial finds.

A further obstacle with Norwegian documentation is the terminology. In general, the Norwegian division of archaeological ages is divided into Stone Age, Bronze Age, Older Iron Age, and Younger Iron Age. The Younger Iron Age spans a time from about 500 AD to about 1100 AD. The Viking Period spans from about 800 AD to about 1100 AD, and so is part of the Younger Iron Age. In 19th Century and Early 20th Century publications, this terminology can lead to confusion. Sometimes the “Younger Iron Age” is used. Sometimes the “Viking Period” is used. Without illustrations or references to numbered items in Rygh’s *Norske Oldsager* (3) surety of what you’re reading is not there.

Much of the frustration with Norwegian sources was solved by the internet. Two of the four regional museums placed their collections onto a database and then down-loaded it onto the web. The databases are accessible through the museum’s website. The database of the Archaeology of Museum of Bergen University is called “Arkeologisk Hovedkatalog” (<http://www.dokpro.uio.no/arkaeologi/bergen/hovedkat.html>) (4) and is searchable by object (in this case “sverd”—sword) and material (“jern”—iron). 153 records of iron swords appeared after conducting a search. 111 records were examined in more detail. The Bergen Database does not have illustrations, and translating each description from Norwegian to English (using Google Translate) was not always successful.

The only word that can describe the database from the Archaeology Museum of Oslo University (<http://www.unimus.no/arkeologi>) is huge (5). Entering the word “sverd” into the search field resulted in 69 pages with 60 items on each page. That would be about 4140 entries to read and catalog.

Care had to be exercised when working through the Oslo Database, since the swords cataloged were dated to The Younger Iron Age, and not the Viking Period. Some entries used Petersen’s typology (6); some used Rygh’s numbered items (7). All the examples cataloged here had photographs which presented the weapon’s condition and gave important typographical information.

Working through all 69 pages seemed like a daunting task. However, only the first 22 or 23 pages of the database had photographs. The rest—pages 24 to 69—were not used since there were no photographs. The resulting sample of swords including the Bergen Database, the Oslo Database, and other previously obtained sources is 898. The numerical breakdown:

Number of Swords as Stray Finds (“D”):	173.
Number of Swords of Unknown Context:	14.
Number of Swords as Burial/Grave Finds	711.
Swords from Chamber Graves, (“a”)	3.
Swords from Boat Burials (“b”) or	
Boat Burials in Mounds (“b,c,”)	25.
Swords from Mound Burials, (“c”)	255.
Swords from Flat Graves, (“d”)	13.
Swords from Known Inhumation Graves :	77.
Swords from Known Cremation Burials:	54.

Petersen’s Types:

Mannheim Type (750-850): 1

Special Type 1 (800-900): 4

Special Type 2 (800-900): 7

Type A (800-900): 5
Type B (800-900): 17
Type C (800-900): 35
Type B or C (800-900): 30
Type D or E (850-900): 32
Type F (800-850): 4
Type G (850-950): 4
Type H (850-950): 179
Type K (800-950): 21
Type L (850-950): 25
Type M (900-950): 146
Type N (900-950): 3
Type O (900-950): 17
Type P (950-1000): 9
Type Q (950-1000): 26
Type R (950-1000): 12
Type S (950-1000): 8
Type T (950-1000): 9
Type U (950-1000): 1
Type V (950-1000): 5
Type W (950-1000): 1
Type X (950-1050): 42
Type Y (950-1000): 10
Type Z (1000-1050): 2
Type AE (1000-1050): 5
Unknown Type: 176.
Other Types: 47.

The Sword's Condition:

1. Intact:	65.
2. Incomplete	386.
3. Corroded	321.
4. Broken	100.
5. Bent	64.
6. Fragmentary	183.

Swords that are Incomplete & Corroded (2,3): 110.

Swords that are Incomplete, Corroded, & Broken (2,3,4): 18.

Swords that are Incomplete & Fragmentary (2,6): 8.

Number of Single-Edged Swords: 150.

Type H Single-Edged Swords:	38.
Type M Single-Edged Swords:	15.
Type C Single-Edged Swords:	13.
Rygh Item # 491 (B or C) Single-Edged Swords:	23.
Rygh Item # 498 Single-Edged Swords:	57.
Other Types/Unknowns Types Swords:	17.

Number of Swords by Region:

Akershus (Oslo):	13.
Aust-Agder:	27.
Buskerud:	22.
Hedmark:	30.
Hordaland:	25.
Kaupang:	36.
More og Romsdal:	75.
Nordland:	36.
North Trondelag:	220.
Oppland:	39.
Rogaland:	26.
Sogn og Fjordane:	58.

Gloppen:	18.
South Trondelag:	147.
Telemark:	34.
Ukjent fylke:	15.
Vestfold:	20.

If the Petersen Types are divided a rough estimate of sword circulation during the Viking Period begins to appear. The first division is Type A through F, mostly comprising the 9th Century. This division had 155 swords. The second division is Type G through O, mostly comprising the late 9th century to the mid 10th Century. This division had 395 swords. The third division is Type P through Z (including Type AE), and had 130 swords. From these divisions, we can estimate that the peak of sword circulation was around the mid 10th Century.

Assuming the 898 entries is a reasonable sample, the district in Norway with the most swords is Trondelag. North Trondelag has 220 swords. South Trondelag has 147. Combined the entire area has 367 swords found and documented—over one third of the entire list. Trondelag is off the Western Coast of Norway in the middle of the country. That coast is dotted with a series of islands and inlets that lead to the mainland. In fact, the City of Trondheim is found on one of the larger inlets. The city is on the mainland. This geography allowed for a safe harbor, and so reasonable growth. A quick breakdown by Petersen Type is:

Unknown: 119.

Type A: 3

Type B: 12

Type C: 16

Type B or C: 19

Special Type 1: 3

Special Type 2: 3

Type D or E: 11

Type F: 1

Type G: 1

Type H/I: 86

Type K: 3.

Type L: 8.

Type M: 44

Type N: 1

Type O: 4

Type P: 2

Type Q: 4

Type R: 5

Type S: 2

Type T: 6

Type V: 2

Type X: 18

Type Y: 2

This break down suggests a peak of sword circulation in Trondelag at the Mid 10th Century.

However, it should be noted that this breakdown of only Trondelag does not match the more general numbers. There seems to have been *less* swords in Trondelag in the Early Viking Period, and *more* there in the Late Viking Period.

The most abundant *known* type of sword from Trondelag is H with 86. Type M is second with 44. This is not surprising either with the most abundant known type being H with 179 examples in the entire sample. Type M with 146 is second. Some scholars have pointed out that both Types H and M were imported (8). While I am not doubting their conclusions, the Type H and M single-edged swords present some troubling questions. There are 38 Type H single-edged swords. There are 15 Type M. Were these

single-edged swords imported, or were Norwegian made single-edged sword fitted with these Frankish hilt-constructions?

Yet the most intriguing question with sword types is the number of unknown: 176 (119 from Trondelag). The reason for this uncomfortable number vary. A few swords, especially single-edged ones, had no hilt/guard or pommel and so cannot be typed. Other swords are so corroded so as to be incomplete and so cannot be typed. The real question, however, with these untyped swords is does their admittedly large number invalidate any thinking based upon type?

Another intriguing question is the 25 Type L swords. As discussed in Chapter 2, the distinctive Type L is of English origin. How did these 25 swords find their way to Norway? Before speculating an answer to this question, in the interests of full disclosure, 2 Type L swords were not included in the list due to poor documentation (9)—their context, condition, and location remain unknown. Having stated that, I believe that the Type L swords of Norway were not items of trade. Rather these weapons were more likely diplomatic gifts or rewards for services rendered.

Turning to the condition of the swords in the sample, there is no surprise that many a find was not intact. There were only 65 swords considered intact, where there were 386 swords were incomplete and 321 swords were corroded. 110 swords were considered both incomplete and corroded, and 18 swords were considered incomplete, corroded *and* broken. Unsurprising as these number are, they open-up a couple of questions. First, what condition must a sword be in to be metallurgically examined? Can useful information be derived from and incomplete or, worse yet, a corroded sword? Second, is there a large enough sample of swords in acceptable condition to be examined? What size sample is needed to create a representative conclusion?

Not being a metallurgist, or more exactly a paleometallurgist, I don't have an answer to these questions. I suspect what swords can be examined and sample size is a matter of argument. Continuing

to look at the swords' conditions, the most interesting is the number of bent (the fifth condition) swords. Only 64 bent swords out of 898 total seems to be small number. The reason(s) for this number is matter for discussion. Again, breaking down the numbers:

Aust-Agder: 2.

Buskerud: 2.

Hedmark: 5.

Hordaland: 9.

Kaupang: 1.

More og Romsdal: 4.

Oppland: 8.

Sogn og Fjordane: 14 (including Gloppen)

Gloppen: 6.

Telemark: 2.

Trondelag (North & South): 9.

Vestfold: 4.

Other: 3.

Unknown: 3.

Bent swords do not seem to be located in one place in Norway. Also while most of bent sword were found in graves, 8 were stray finds. Why some swords were intentionally bent, why many were not is an intriguing question. With so few bent swords scattered over the country, the answer may vary from context to context. Examination of all those contexts would be needed, but I would not be surprised to see evidence of some form of deviant burial practices. Bending a sword in order to "kill" it and then burying with the deceased requires some effort, and if those people responsible for arranging the burial did not necessarily like the deceased, destroying the items of personal authority of the deceased makes sense.

That is speculation. Proving such speculation, however, is probably impossible due the lack of documentation of Viking Period graves and burials. 711 swords in this chapter were found in burials/graves. The details of those burials is not available. Only three of them are known to be chamber graves; 25 are boat burials; 13 are flat graves. 225 graves are mounds. Furthermore, we know that only 72 are inhumation graves, and 54 are cremation burials. The details of graves and burials are in the minority. The details of many burials is not included in the sources. Therefore, comparing burials from one place to another is a doubtful exercise. Questions that include graves cannot be fully answered.

Other doubts exist as well. The largest of these is the lack of documentation for the other 2000 swords in Norway. 898 swords is a sizeable sample which allows people to ask questions. The sample here can only *suggest* conclusions. Hopefully the museums and other archaeological institutions of Norway will be able to make the weapons, along with other finds, readily available in the future.

Notes:

1. Martens, I. "Thousands of Swords. Why is the Number of Viking Age Weapons Found in Norway Higher than Any Other European Country?" *Collegium Medievale*. 16 (2003) 51-66.
2. Shetelig, H. "Item 30." *Bergens Museums Aarbog 1905*. Bergen, Norway: (1906) 20.
3. Rygh, O. *Norske Oldsager (Antiquites Norvegiennes)*. Christiania, Norway: Forlagt AF ALB. Cammermeyer (1885).
4. The University Museum of Bergen. "Arkeologisk Hovedkatalog." <http://www.dokpro.uio.no/arkaeologi/bergen/hovedkat.html>
5. The University of Oslo. University Museums. "The Norwegian Archaeological Collection." <http://www.unimus.no/arkeologi>.
6. Petersen, J. *De Norske Vikingesverd. En Typologisk-Kronologisk Studie Over Vikingtidens Vaaben*. Kristiana, Norway: Jacob Dywad (1919).
7. Rygh, O. *Norske Oldsager*.
8. Solberg, B. "Weapon Export from the Continent to the Nordic Countries in the Carolingian Period." *Studien zur Sachsenforschung* 7. Hildesheim: Niederschissches Landesmuseum Hannover, (1991) 241-259.

Also,

Martens, I. "Norwegian Viking Age Weapons: Some Questions Concerning their Production and Distribution." In: *Developments Around the Baltic and the North Sea in the Viking Age (The Twelfth Viking Congress)*. B. Ambrosiani and H. Clarke (eds.). Stockholm: Staten Historiska Museer (1994) 180-182.

9. Petersen, J. *British Antiquities of the Viking Period, Found in Norway*. Oslo: Aschehoug (1940). Part V of *Viking Antiquities of Great Britain and Ireland*. H. Shetelig (ed.).

Bibliography/Sources:

Androschuk, F. *Viking Swords. Swords and Social Aspects of Weaponry in Viking Age Societies*. Stockholm: The Swedish History Museum (2014).

Blindheim, C. and B. Heyerdahl-Larsen, R.L Tollnes. *Kaupang-Funne. Bind I*. Oslo: Universitetets Oldsakamling (1981).

Blindheim, C. and B. Hayerdahl-Larsen. *Kaupang-Funne. Band II*. Oslo: Universitetets Oldsakamling.

Brogger, A.W. "Baatgraven fra Valle." *Bergens Museums Arbok, 1920-21, Hist-antikv, raekk nr. I. Et arkeologisk bid til Vikingetiden historie*. Bergen, Norway: Bergens Museum (1922).

Gjerpe, L.S. "Gravfeltet pa Gulli." *Varia 60*. Kulturhistorisk Museum (2005).

Grieg, S. *Gjermundbufunnet*. Oslo: John Griegs Boktrykkeri (1947).

Gronnesby, G. "Graver I Veien. Arkeologiske undersokelser E6 Steinker." *Vikark 8*. Trondheim, Norway. Acta Archaeologica Nidrosiensia (2012).

Lorange, A.L. *Den Yngre Jernalders Svaerd. Et Bidrag til Vikingetidens Historie og Teknologi*. As: Bergens Museums Skrifter 4. Bergen, Norway: Bergen Museum (1889).

Nicolaissen, O. "Oldsager fra det nordligste Norge." *Tromso Museums Aarshefter 25*. Tromso, Norway: Tromso Museum (1902) 1-16.

Petersen, J. *De Norske Vikingsverd. En Typologisk-Kronologisk Studie Over Vikingtidens Vaaben*. Kristiania, Norway: Jacob Dywad (1919).

Petersen, J. *British Antiquities of the Viking Period, Found in Norway*. Oslo: Aschehoug (1940). Part V of *Viking Antiquities in Great Britain and Ireland*. H. Shetelig (ed.)

Rygh, O. *Norske Oldsager (Antiquites Norvegiennes)*. Christiania, Norway: Forlagt AF ALB. Cammermeyer (1885).

Schetelig, H. *Gravene ved Myklebostad paa Nordfjordied (Bergens Museums Aarbog 1905 No. 7)*. Bergen, Norway (1905).

Schetelig, H. "Weapons from Western Europe Found in Norway." In *Viking Antiquities in Great Britain and Ireland. Part V. British Antiquities of the Viking Period, Found in Norway*. Oslo: H. Aschehoug & Co. (1940).

The University Museum of Bergen. "Arkeologisk Hovedkatalog."
<http://www.dokpro.uio.no/arkaeologi/bergen/hovedkat.html>

The University of Oslo. University Museums. "The Norwegian Archaeological Collection."
<http://www.unimus.no/arkaeologi>.

Appendix: Swords Cataloged.

Because of the number of entries this list is included as an appendix. Other lists of cataloged swords have been placed with whatever sub-region is being discussed. The exception here was done for the sake of convenience. As usual the Type of the sword and its date is based upon Androchchuk's *Viking Swords* (2014), which criticized and updated J. Petersen's work.

Item No./Place	Scheme	Type	Date
1.Bergen #10021c-Hordaland	5,A,\$	H	850-950.
2.Bergen #10021n-Hordaland	4,5,A,\$	K	800-950.
3.Bergen #10053-Gloppen	4,5,A	?	?
4.Bergen #10413	1,A	?	?
5.Bergen #10414a	1,A	B	800-900.
6.Bergen #10425	5,A,c	?	?
7.Bergen #10437	2,A	B?C?	800-900.
8.Bergen #10776a-Sunnmore	2,A	H	850-950.
9.Bergen #10862-Hordaland	2,A	C	800-900.
10.Bergen #11034a-Gjerde, Hordaland	2,4,A	H/I	850-950.
11.Bergen #11053a-Skjedal, Hordaland	2,A,#	H	850-950.
12.Bergen #11096a, Gloppen	2,4,A	H	850-950.
13.Oslo C29163, Vestfold	3,A	C	800-900.
14.Oslo C4115, Akershus	3,A,c	X?	950-1050.
15.Oslo C29699a, Oppland	5,A	M	900-950.
16.Oslo C25396a, Telemark	3,A	Special Type 1	800-850.
17.Oslo C29700a, Telemark (1 st sword)	1,A	X	950-1050.
18.Oslo C29700a, Telemark (2 nd sword)	1,A	X	950-1050.

19.Oslo C7816, Aust-Agder	2,A	?	?
20.Oslo C28678a, Akershus	2,A	M	900-950.
21.Oslo C8486, Hedmark	1,A,c	M	900-950.
22.Oslo C19763, Oppland	1,A,c	M	900-950.
23.Oslo C30060a, Aust-Agder	2,3,A	?	?
24.Oslo C3427, Vestfold	5,A	H	850-950.
25.Oslo C8330, Buskerud	3,A,c,*	?	?
26.Oslo C31908, Vestfold	3,A,c	M	900-950.
27.Oslo C34082, Vestfold	3,A,c	M	900-950.
28.Oslo C26269, Aust-Agder	2,A	M	900-950.
29.Oslo C17004, Aust-Agder	3,A,*	?	?
30.Oslo C3593, Buskerud	5,A,c	?	?
31.Oslo C29338a, Buskerud	2,A,c	L?	850-950.
32.Oslo C34829, Buskerud	2,A,d	Q	950-1000.
33.Oslo C9707, Hedmark	2,A	H?	850-950.
34.Oslo C35247a, Aust-Agder	3,A	Y	950-1000.
35.Oslo C15181, Hedmark	1,A,c,#	M	900-950.
36.Oslo C10649, Hedmark	5,A,c	K	800-950.
37.Oslo C34061, Hedmark	3,A,d,*	B	800-900.
38.Oslo C2526, Hedmark	3,A,c	M?	900-950.
39.Oslo C2544, Hedmark	3,4,A,c	K	800-950.
40.Oslo C34086, Akershus	3,A	B	800-900.
41.Oslo C7898, Oppland	1,A,*	?	?
42.Oslo C34138a, Buskerud	4,A	M	900-950.
43.Oslo C34138b, Buskerud	4,A	M	900-950.
44.Oslo C34067, Hedmark	2,D	O	900-950.
45.Oslo C34066a, Hedmark	3,A	H	850-950.
46.Oslo C34251a, Akershus	2,A	Q	950-1000.
47.Oslo C33574a, Telemark	3,A	M	900-950.

48.Oslo C34018a, Telemark	3,A,*	M	900-950.
49.Oslo C25156a, Telemark	2,3,A	M	900-950.
50.Oslo C33578, ?	2,D	Q	950-1000
51.Oslo C33563, Hedmark	2,D	R	950-1000.
52.Oslo C32844, Vestfold	3,D	U or V	950-1000.
53.Oslo C33154, Akershus	2,3,D	M	900-950.
54.Oslo C33157, Telemark	6,A	?	?
55.Oslo C32025a, Telemark	6,A,\$	H	850-950.
56.Oslo C20171b, Hedmark	5,A,c	?	?
57.Oslo C25559a, Oppland	1,A	M	900-950.
58.Oslo C12696, Telemark	1,A	C	800-900.
59.Oslo C23485, Ukjent fylke	2,3,A	H?	850-950.
60.Oslo C29511, Telemark	3,A	H	850-950.
61.Oslo C22238a, Oppland, (1 st sword)	1,A,*	?	?
62.Oslo C22238a, Oppland, (2 nd sword)	4,5,A	M	900-950.
63.Oslo C22238a. Oppland, (3 rd sword)	2,3,A	M.	900-950.
64.Oslo C20311a, Aust-Agder	2,4,A	R	950-1000.
65.Oslo C26494a, Oppland	1,A	X	950-1050.
66.Oslo C22664a, Aust-Agder	2,A	M	900-950.
67.Oslo C30475a, Aust-Agder	2,A	Q	950-1000.
68.Oslo C10075, Vestfold	2,A	X	950-1050.
69.Oslo C11550, Oppland	2,A,*	M	900-950.
70.Oslo C30318a, Aust-Agder	2,A	M	900-950.
71.Oslo C30278, Aust-Agder	2,6,A	K	800-950.
72.Oslo C30429, Aust-Agder	2,6,A	H	850-950,
73.Oslo C30295a, Aust-Agder	2,A	H	850-950.
74.Oslo C30339, Aust-Agder	2,A	X	950-1050.
75.Oslo C30483a, Aust-Agder	2,A	Y	950-1000.
76.Oslo C30533, Aust-Agder	2,D	X	950-1050.

77.Oslo C8073, Telemark	1,D	X	950-1050
78.Oslo C10494, Oppland	1,A,c	H?	850-950.
79.Oslo C30432, Aust-Agder	3,A	?	?
80.Oslo C30442, Aust-Agder	2,3,A	?	?
81.Oslo C30493, Aust-Agder	2,4,A,c	M	900-950.
82.Oslo C36770, Buskerud	6,A	M	900-950.
83.Oslo C8074, Oppland	3,A,c	M	900-950.
84.Oslo C7859, Akershus	4,A	?	?
85.Oslo C30158, Hedmark	1,D	?	?
86.Oslo C8565, Akershus	1,D	M	900-950.
87.Oslo C6852, Buskerud	3,A,c	C or B	800-900.
88.Oslo C30020a, Hedmark	3,A	M	900-950.
89.Oslo C12928, Buskerud	3,A,*	H	850-950.
90.Oslo C16558, Telemark	4,5,A,c	M	900-950.
91.Oslo C16559, Telemark	5,A,c,*	Y	950-1000.
92.Oslo C3989, Akershus	3,A,c (1 st Sword)	M?	900-950.
93.Oslo C3989, Akershus	2,A,c (2 nd Sword)	P	950-1000.
94.Oslo C3989, Akershus	2,A,c (3 rd Sword)	?	?
95.Oslo C7588, Rogaland	3,A,*	?	?
96.Oslo C7589, Rogaland	3,A,*	?	?
97.Oslo C3971, Rogaland	2,A	?	?
98.Oslo C23653a, Hedmark	1,A,*	?	?
99.Oslo C31301, Oppland	1,D,*	?	?
100.Oslo C27781, Oppland	6,D (Hilt Construct Only)	E	850-900.
101.Oslo C154, Hedmark	6,A,*	?	?
102.Oslo C30436, Aust-Agder	6,D (Pommel only)	O	900-950.
103.Oslo C280, Ukhent fylke	3,D	X	950-1050.
104.Oslo C10662, Hedmark	2,A,c	L	850-950.
105.Oslo C10650, Hedmark	5,A,c	?	?

106.Oslo C18798, Aust-Agder	3,A,c	Y	950-1000.
107.Oslo T21229, S. Trondelag	6,D	H	850-950.
108.Oslo C36714b, Oppland	3,5,A	F	800-850.
109.Oslo C39280, Telemark	3,D	?	?
110.Oslo C8301, Oppland	4,A	D or E	800-950.
111.Oslo C12009, Vestfold	4,5,A	H	850-950.
112.Oslo C29890, Vest-Agder	2,D	M	900-950.
113.Oslo C11850, Hedmark	2,D?	?	?
114.Oslo C29167, Hedmark	3,D	C	800-900.
115.Oslo C20317, Nordland	3,A	D or E	800-950.
116.Oslo C3210, Hedmark	1,A,c	C	800-900.
117.Oslo C39275, Oppland	3,D	M	900-950.
118.Oslo C52343, Telemark	4,D	M	900-950.
119.Oslo C37718, Oppland	2,4,5,A	Q	950-1000.
120.Oslo C52324a, Oppland	5,A	O	900-950.
121.Oslo C52324b, Oppland	5,A	Q	950-1000.
122.Oslo C25111a, Telemark	4,A	Q	950-1000.
123.Oslo C9959, Oppland	5,A	L?	850-950.
124.Oslo C29486a, Oppland	2,A,*	M	900-950.
125.Oslo C24408, Oppland	4,D,*	C	800-900.
126.Oslo C18175, Oppland	3,A	H	850-950.
127.Oslo C27454c, Telemark	4,A (1 st Sword)	Q	950-1000.
128.Oslo C27454c, Telemark	4,A (2 nd Sword)	?	?
129.Oslo C29277a, Telemark	3,4,A,*	M	900-950.
130.Oslo C23112a, Telemark	2,4,A	M	900-950.
131.Oslo C38144a, Telemark	2,4,A	?	?
132.Oslo C4618, Oppland	2,D	H?	850-950.
133.Oslo C22720a, Buskerud	1,A,*	C	800-900.
134.Oslo C1753, Telemark	3,A	M	900-950.

135.Oslo C37916, Aust-Agder	2,3,D	X	950-1050.
136.Oslo C53431, Telemark	2,A	H	850-950.
137.Oslo C28.352a, Telemark	1,A	T	950-1000.
138.Oslo C37955, Vestfold	2,5,D	Q	950-1000.
139.Oslo C25093a, Buskerud	3,A	C	800-900.
140.Oslo C29227a, Telemark	3,4,A,*	M	900-950.
141.Oslo C23112a, Telemark	4,A	M	900-950.
142.Oslo C38144a, Oppland	2,4,D	?	?
143.Oslo C22720a, Buskerud	3,A,*	C	800-900.
144.Oslo C37051, Aust-Agder	3,D	Y	950-1000.
145.Oslo C37916, Ostfold	3,D	K	800-950.
146.Oslo C28352a, Telemark	1,A	T	950-1000.
147.Oslo C37955, Vestfold	3,5,D	Q	950-1000.
148.Oslo C39278a, Telemark	4,A?	Z	1000-1050.
149.Oslo Ts6329b, Nordland	2,A	I	850-950.
150.Oslo C1554, Oppland	2,D	?	?
151.Oslo C1647, Vestfold	2,A,c	L	850-950.
152.Oslo C354, Ukjent fylke	2,D	?	?
153.Oslo C2560, Oppland	2,A,*	E	850-900.
154.Oslo C9704, Hedmark	5,A,c	?	?
155.Oslo C24193b, Oppland	3,A	C	800-900.
156.Oslo C19685, Oppland	5,A,*	?	?
157.Oslo C19686, Oppland	3,A	?	?
158.Oslo C22528a, Akershus	3,A	M	800-900.
159.Oslo C27391a, Buskerud	2,A	P	950-1000.
160.Oslo C27391b, Buskerud	2,5,A	?	?
161.Oslo T17462a, N. Trondelag	4,A	V	950-1000.
162.Oslo C57668 1, Vestfold	6,A,c	X	950-1050.
163.Oslo C14139, Vestfold	?,A,c	H?	850-950.

164.Oslo C23364, Telemark	2,A	X	950-1050.
165.Oslo C20955a, Vestfold	1,A	Special Type 2?	800-900.
166.Oslo C16157, Buskerud	1,A	R	950-1000.
167.Oslo C15916, Akershus	2,A,c	H	850-950.
168.Oslo C13458, Vestfold	2,A	O	900-950.
169.Oslo C36652a, Oppland	1,A	P	950-1000.
170.Oslo C35279a, Buskerud	3,A,*	M	900-950.
171.Oslo C30504a, Aust-Agder	2,A	M	900-950.
172.Oslo C30506a, Aust-Agder	2,A	I	850-950.
173.Oslo C20373a, Aust-Agder	2,4,A	H	850-950.
174.Oslo C3787, Akershus	3,A	M	900-950.
175.Oslo T234, S. Trondelag	1,A	M	900-950.
176.Oslo C58825, Hedmark	3,D	M	900-950.
177.Oslo S5768a, Rogaland	6,A	H	850-950.
178.Oslo C20317, Nordland	3,A	D or E	800-950.
179.Oslo C35119, Aust-Agder	4,5,D	H	850-950.
180.Oslo S5471, Rogaland	6,D	?	?
181.Oslo S5535, Rogaland	6,A	?	?
182.Oslo C23363, Oppland	2,A,c	M	900-950.
183.Oslo S5585, Rogaland	6,D,*	H	850-950.
184.Oslo S4289, Rogaland	4,A	D	800-950.
185.Oslo S5570, Rogaland	6,D	Q	950-1000.
186.Oslo S5569, Rogaland	6,D	?	?
187.Oslo S5569a, Rogaland	6,A,*	?	?
188.Oslo C12776, Vest-Agder	3,A,*	M	900-950.
189.Oslo C36010, Aust-Agder	2,A	?	?
190.Oslo C14732, Oppland	1,D	H	850-950.
191.Oslo T453, S. Trondelag	2,3,A	E	850-900.
192.Oslo T4919, N. Trondelag	3,A	H	850-950.

193.Oslo C14496, Buskerud	3,A,c	Y?	950-1000.
194.Oslo C5119, Hedmark	3,A,*	?	?
195.Oslo C5888, Hedmark	2,A	M?	900-950.
196.Oslo C64094, Hedmark	1,A,c	M	900-950.
197.Oslo C11014, Hedmark	1,A,c	K	800-950.
198.Oslo C35118, Hedmark	5,A,c	AE	1000-1050.
199.Oslo T12500, N. Trondelag	2,A,c	R	950-1000.
200.Oslo T6293, S. Trondelag	2,A	H	850-950.
201.Oslo T12113a, N.Trondelag	2,A,d,\$	Special 1	800-900.
202.Oslo T11870, N.Trondelag	4,A,\$	D or E	800-950.
203.Oslo S4262c, Rogaland	2,A	K	800-950.
204.Oslo C11318, Hedmark	1?,A,c	D or E	800-950.
205.Oslo C10737, Hedmark	2,A,c	Z	1000-1050.
206.Oslo T13145a, More og Romsdal	2,A	Y	950-1000.
207.Oslo T1404a, More og Romsdal	2,3,A,c,#	M	900-950.
208.Oslo T8257, More og Romsdal	3,A	L	850-950.
209.Oslo C2764, Oppland	6,A,c	K	800-950.
210.Oslo C598, Buskerud	1,A	?	?
211.Oslo C1648, Telemark	1,A	D or E	800-950.
212.Oslo T6549, More og Romsdal	2,A,d,*	?	?
213.Oslo C24338a, Vestfold	2,A	L	850-950.
214.Oslo C22237c, Buskerud	1,A,*	?	? Viking Period?
215.Oslo C29161, Vestfold	3,A	M	900-950.
216.Oslo C20188a, Oppland	1,A,*	?	?
217.Oslo S3667a, Rogaland	2,A,\$	Q	950-1000.
218.Oslo C16208, Buskerud	2,A,c	G	850-950?
219.Oslo C21660, Oppland	3,D	G	850-950?
220.Oslo C12749, Buskerud	4,D,*	G	850-950?
221.Oslo S12450b, Rogaland	4,A,*	H	850-950.

222.Oslo S2266a, Rogaland	3,A,c	V	950-1000.
223.Oslo T6235, S.Trondelag	2,5,A	S?	950-1000.
224.Oslo T506, S.Trondelag	2,3,A,c	M	900-950.
225.Oslo S2222a, Rogaland	3,A	H	850-950.
226.Oslo T3107, S.Trondelag	2,A	E or V	?
227.Oslo C5464, N.Trondelag	2,A	X	950-1050
228.Oslo T7758, S. Trondelag	3,A,*	C	800-900.
229.Oslo T11916b, S.Trondelag	2,A,d,\$	M	900-950.
230.Oslo T20749, N.Trondelag	2,D	H	850-950.
231.Oslo T20718, N.Trondelag	2,D	H	850-950.
232.Oslo T20715 1, N.Trondelag	6,A,*	?	?
233.Oslo C38508/1, Oppland	6,A	C	800-900.
234.Oslo T3726, N.Trondelag	3,D	X	950-1050.
235.Oslo T922, N.Trondelag	2,3,A,c	V or E	?
236.Oslo C28429a, Telemark	3,A	H	850-950.
237.Oslo T20636, N.Trondelag	4,5,D	B	800-900.
238.Oslo T20628 1, N.Trondelag	2,A	H	850-950.
239.Oslo T20593 1, Nordland	2,6,A	H	850-950.
240.Oslo T20558 1, S.Trondelag	2,D	H	850-950.
241.Oslo T20552, N.Trondelag	5,D,*	H	850-950.
242.Oslo T20548 1, S.Trondelag	6,A,c	H	850-950.
243.Oslo T6678, S.Trondelag	3,A,*	?	?
244.Oslo S6185a, Rogaland	1,A	O	900-950.
245.Oslo S10786, Rogaland	2,6,A,c	K	800-950.
246.Oslo S1823, Rogaland	2,6,D	X	950-1050.
247.Oslo C15010a, Vestfold	3,A	P	950-1000.
248.Oslo S3962a, Rogaland	2,6,A,\$	D	800-950.
249.Oslo S6076, Rogaland	2,D	X	950-1050.
250.Oslo W2584a, Rogaland	3,A,c	P	950-1000.

251.Oslo T20363 1, N.Trondelag	6,A,*	F	850-900?
252.Oslo T20362 1, N.Trondelag	3,A,c,\$	R	950-1000.
253.Oslo T19967a, N.Trondelag	2,6,A,c,*	C	800-900.
254.Oslo T19967a, S.Trondelag	6,A,*	C	800-900.
255.Oslo T19926a, S.Trondelag	4,A	E	850-900.
256.Oslo T19882a, N.Trondelag	6,A	?	?
257.Oslo T19880, N.Trondelag	2,D	X	950-1050.
258.Oslo T19878, More og Romsdal	3,5,D,*	B or C (Rygh 491)	800-900.
259.Oslo T19810, N.Trondelag	2,D	H	850-950.
260.Oslo T19752, N.Trondelag	3,D,*	C	800-900.
261.Oslo S4083a, Rogaland	6,A,c	H?	850-950.
262.Oslo C39281b, Telemark	1,A	AE	1000-1050.
263.Oslo C39281a, Telemark	1,A	AE	1000-1050.
264.Oslo C36657a, Oppland	3,A	I	850-950.
265.Oslo C36677, Buskerud	1,D	Q	950-1000.
266.Oslo C36655, Vestfold	3,4,D,*	H	850-950.
267.Oslo C24454a, Vestfold	1,A	C	800-900.
268.Oslo C24244a, Telemark	1,A	M	900-950.
269.Oslo S4689a, Rogaland	6,A	Q	950-1000.
270.Oslo C20187a, Vestfold	2,A	Special Type 2?	800-900.
271.Oslo C27269b, Vest Agder	6,A,c	O	900-950.
272.Oslo T7263, S.Trondelag	3,A,*	?	?
273.Oslo T19511a, N.Trondelag	2,A	Special Type 2?	800-900.
274.Oslo T19416, S.Trondelag	3,D	M	900-950.
275.Oslo T19396a, N.Trondelag	6,A,c	?	?
276.Oslo T19391, N.Trondelag	1,D	M	900-950.
277.Oslo T19301, S.Trondelag	2,D	M	900-950.
278.Oslo T19376, More og Romsdal	2,3,D	H	850-950.
279.Oslo T4945a, Rogaland	3,4,A	R	950-1000.

280.Oslo S2067, Rogaland	2,A	P	950-1000.
281.Oslo T19300, N.Trondelag	2,A,c	T	950-1000.
282.Oslo T19225, N.Trondelag	6,D	?	?
283.Oslo T19190, Nordland	2,A	H	850-950.
284.Oslo T19187, More og Romsdal	2,D	H	850-950.
285.Oslo T19179, N.Trondelag	2,3,D	C	800-900.
286.Oslo T19142a, N.Trondelag	3,A	X	950-1050.
287.Oslo T19138, Nordland	6,D	H	850-950.
288.Oslo T19114, Nordland	3,D	M	900-950.
289.Oslo T19136, S.Trondelag	2,D	P	950-1000.
291.Oslo T19040, N.Trondelag	2,D	H	850-950.
292.Oslo T19026a, S.Trondelag	6,A,c,\$	M	900-950.
293.Oslo T19013, S.Trondelag	2,D	X	950-1050.
294.Oslo T19010a, N.Trondelag	2,3,A,b,c	E	850-950.
295.Oslo T18969, N.Trondelag	3,A,c	T	950-1000
296. Oslo T1950c, Nordland	6,A,c	?	?
297.Oslo T18931a, S.Trondelag	2,4,A	H or I	850-950.
298.Oslo T18928, S.Trondelag	2,4,D	H	850-950.
299.Oslo T18862, N.Trondelag	2,D	?	?
300.Oslo T18848a, S.Trondelag	1,A,c,\$	M	900-950.
304.Oslo T18820a, S.Trondelag	6,A,c,\$ Pommel	B	800-950.
305.Oslo T18716, Nordland	3,D	K	800-950.
306.Oslo T18715, N.Trondelag	2,D	M	900-950.
307.Oslo T18704, N.Trondelag	2,D	X	950-1050.
308.Oslo T18593a, ?	3,A,c	M	900-950.
309.Oslo T18576, S.Trondelag	3,D,*	C	800-900.
310.Oslo T18553, N.Trondelag	2,3,A,c	H	850-950.
311.Oslo T18477, More og Romsdal	6,A	C	800-900.
312.Oslo T18430, N.Trondelag	2,D	H	850-950.

313.Olso T18303a, N.Trondelag	6,A	?	?
314.Oslo T18291, S.Trondelag	6,D	M	900-950.
315.Oslo T18229, N.Trondelag	2,3,4,D	?	?
316.Oslo T18194b, More og Romsdal	6,A	M	900-950.
317.Oslo T18194a, More og Romsdal	2,A	Q	950-1000.
318.Oslo T18129, N.Trondelag	2,D	?	?
319.Oslo T18055, More og Romsdal	6,D	?	?
320.Oslo T18027c, N.Trondelag	6,A	H	850-950.
321.Oslo T18027b, N.Trondelag	6,A	?	?
322.Oslo T18000a, Nordland	3,A,c,#	X	950-1050.
323.Oslo T17999, S.Trondelag	2,D	H	850-950.
324.Oslo T17989, ?	2,3,D	B	800-900.
325.Oslo T17964a, S.Trondelag	5,A	X	950-1050.
326.Oslo T17887, S.Trondelag	6,D	B	800-900.
327.Oslo T17883, S.Trondelag	2,3,D	B	800-900.
328.Oslo T17853a, N.Trondelag	6,A,*	H	850-950.
329.Oslo T178936, S.Trondelag	3,A*	B	800-900.
330.Oslo T17764a, N.Trondelag	2,A,c	?	?
331.Oslo T17735, N.Trondelag	3,D	B	800-900.
332.Oslo T17720, N.Trondelag	2,D	X	950-1050.
333.Oslo T17657, S.Trondelag	6,D	C	800-900.
334.Oslo T17578a, More og Romsdal	6,A	Q (Hilt Construct Only)	950-1000.
335.Oslo T17514, N.Trondelag	2,D	L	850-950.
336.Oslo T17477a, N.Trondelag	2,A	I	850-950.
337.Oslo T17448, S.Trondelag	2,D	X	950-1050.
338.Oslo T17409a, S.Trondelag	2,3,A,d,#	H	850-950.
339.Oslo T17372, S.Trondelag	2,D	M	900-950.
340.Oslo T17264, Nordland	3,4,A	H	850-950.
341.Oslo T17269a, S.Trondelag	2,A	Q	950-1000.

342.Oslo T17238, S.Trondelag	2,D	?	?
343.Oslo T17150, N.Trondelag	2,A,c,*, \$	Q	950-1000.
344.Oslo T17149a, More og Romsdal	3,A	N	950-1000.
345.Oslo T17144, S.Trondelag	2,A,*	R	950-1000.
346.Oslo T17118, S.Trondelag	3,4,A	E	850-900.
347.Oslo T16993, N.Trondelag	2,D	X	950-1050.
348.Oslo T16992a, N.Trondelag	2,3,A,c	B or C	800-900.
349.Oslo T16991a, N.Trondelag	2,A,d,*,#	H	850-950.
350.Oslo T16983a, S.Trondelag	2,4,A	X	950-1050.
351.Oslo T16950a, S.Trondelag	2,A,\$	Y	950-1000.
352.Oslo T16935a, S.Trondelag	6,A	K	800-950.
353.Oslo T16929, N.Trondelag	2,D	C	800-900.
354.Oslo T16867a, N.Trondelag	2,D	I	850-950.
355.Oslo T16699a, N.Trondelag	2,3,4,A,c	Y	950-1000.
356.Oslo T16611, S.Trondelag	2,D	C	800-900.
357.Oslo T16538, S.Trondelag	2,D,*	H	850-950.
358.Oslo T16447, More og Romsdal	2,A	M	900-950.
359.Oslo T16483, N.Trondelag	2,A	?	?
360.Oslo T16462, N.Trondelag	2,D,*	H	850-950.
361.Oslo T16437, S.Trondelag	2,D	X	950-1050.
362.Oslo T16432, S.Trondelag	3,A,\$	R	950-1000.
363.Oslo T16395b, More og Romsdal	2,A	Q	950-1000.
364.Oslo T16463, N.Trondelag	2,D	?	?
365.Oslo T16395, More og Romsdal	3,A	R	950-1000.
366.Oslo T16392a, Nordland	3,A,c,*	?	?
367.Oslo T16368a, Nordland	6,A,b,c	H	850-950.
368.Oslo T16358a, N.Trondelag	3,A,c	A	800-900.
369.Oslo T16338a, N.Trondelag	2,3,A,\$	H	850-950.
370.Oslo T16280a, N.Trondelag	2,A,#	B	800-900.

371.Oslo T16270a, N.Trondelag	2,A,*	R	950-1000.
372.Oslo T16261a, S.Trondelag	2,3,A	B	800-900.
373.Oslo T16260, S.Trondelag	2,A,#	H	850-950.
374.Oslo T16208a, More og Romsdal	6,A	M	900-950.
375.Oslo T16144a, N.Trondelag	6,A,c,\$	H	850-950.
376.Oslo T16143a, More og Romsdal	2,3,A,c	H	850-950.
377.Oslo T16142a, N.Trondelag	2,4,A,c	M	900-950.
378.Oslo T16141a, N.Trondelag	6,A,c,# (Multiple Burial)	H	850-950.
379.Oslo T16140a, N.Trondelag	2,3,4,A,c,# (Multiple Burial)	H	850-950.
380.Oslo T16139a, N.Trondelag	6,A,c,# (Multiple Burial)	?	?
381.Oslo T16134a, N.Trondelag	2,A,c,# (Multiple Burial)	V	950-1000.
382.Oslo T16092a, More og Romsdal	2,3,A	A	800-900.
383.Oslo T16054, N.Trondelag	6,A,c,#	L	850-950.
384.Oslo T15965a, N.Trondelag	2,A,c,\$	H	850-950.
385.Oslo T15963, N.Trondelag	2,A,c	I	850-950.
386.Oslo T15936, S.Trondelag	3,A	B or C (Rygh 490)	800-900.
387.Oslo T15888, N.Trondelag	2,D	C	800-900.
388.Oslo T15834, S.Trondelag	3,4,A,c	H	850-950.
389.Oslo T15832, N.Trondelag	3,A,c,*, \$?	?
390.Oslo T15825, S.Trondelag	2,A,c	H	850-950.
391.Oslo T15802, Nordland	3,A,*	H	850-950.
392.Oslo T15618, Nordland	2,D,*	H	850-950.
393.Oslo T15496, More og Romsdal	2,3,A	S	950-1000.
394.Oslo T15470, Nordland	4,A,c	B	800-900.
395.Oslo T15469, More og Romsdal	6,A	B	800-900.
396.Oslo T15454, More og Romsdal	3,A,\$	H	850-950.
397.Oslo T15302, N.Trondelag	6,D	C	800-900.
398.Oslo T15297a, Nordland	2,A,c,#	M	900-950.
399.Oslo T15260a, S.Trondelag	3,4,A	M	900-950.

400.Oslo T15248a, N.Trondelag	6,A,c,\$	X	950-1050.
401.Oslo T15228a, N.Trondelag	2,A,#	H	850-950.
402.Oslo T15215a, S.Trondelag	2,A,c,*	?	?
403.Oslo T15147a, N.Trondelag	4,A,c,*,\$	H	850-950.
404.Oslo T15139b, Nordland	2,3,A,*	?	?
405.Oslo T15139a, Nordland	3,A,*	?	?
406.Oslo T15134a, S.Trondelag	2,A,#,*	H	850-950.
407.Oslo T15115p, N.Trondelag	6,A,b,c	? (Pommel Only)	?
408.Oslo T15098a, S.Trondelag	6,A,#	M (Rygh 489)	900-950.
409.Oslo T15093a, Nordland	6,A,c,#	M (Rygh 489)	900-950.
410.Oslo T15090, N.Trondelag	2,A,#	?	?
411.Oslo T15088, N.Trondelag	2,A,\$	G	850-950.
412.Oslo T15018a, N.Trondelag	3,4,A,b,c	C	800-900.
413.Oslo T14989a, N.Trondelag	6,A,c,*,#	H	850-950.
414.Oslo T14979a, Nordland	2,A,#	M	900-950.
415.Oslo T14950a, More og Romsdal	2,A,*,\$	M	900-950.
416.Oslo T14939, N.Trondelag	2,A,*,\$	B or C (Rygh 491)	800-900.
417.Oslo T14932, S.Trondelag	6,D	X	950-1050.
418.Oslo T14820, S.Trondelag	6,A	?	?
419.Oslo T14727, S.Trondelag	3,A,c,*	B or C (Rygh 491)	800-900.
420.Oslo T14720a, S.Trondelag	2,6,A,\$	H	850-950.
421.Oslo T14717, N.Trondelag	2,3,A,c,\$	M	900-950.
422.Oslo T14613, N.Trondelag	6,A,c	O	900-950.
423.Oslo T14612a, More og Romsdal	6,A	?	?
424.Oslo T14579a, Nordland	2,3,A,b,c,\$	H	850-950.
425.Oslo T14555a, S.Trondelag	6,A,c?, #	M	900-950.
426.Oslo T144878a, Nordland	3,4,A,b?	H	850-950.
427.Oslo T14482, N.Trondelag	6,D	I	850-950.
428.Oslo T14473, N.Trondelag	3,4,A,c,# (Double Grave)	E	850-900.

429.Oslo T14434a, S.Trondelag	6,A,\$	H	850-950.
430.Oslo T14431a, N.Trondelag	6,A,b,c,#	H	850-950.
431.Oslo T14365, N.Trondelag	2,3,D	Special Type 1	800-900.
432.Oslo T14352a, More og Romsdal	6,A,\$	E	850-950.
433.Oslo T14351a, More og Romsdal	6,A,c,#	?	?
434.Oslo T14329a, N.Trondelag	3,A,d,\$	M or Q	900-1000.
435.Oslo T14327, N.Trondelag	3,D,*	H	850-950.
436.Oslo T14309a, Nordland	6,A,b,c	D	800-950.
437.Oslo T14296a, S.Trondelag	2,3,A,d,#	M	900-950.
438.Oslo T14272a, More og Romsdal	6,A,#	?	?
439.Oslo T14208a, More og Romsdal	2,A,\$	M	900-950.
440.Oslo T14177a, N.Trondelag	2,A,b,c	?	?
441.Oslo T14082a, S.Trondelag	6,A,c	H	850-950.
442.Oslo T14045b, More og Romsdal	6,A,#	Q	950-1000.
443.Oslo T14045a, More og Romsdal	6,A,#	H	850-950.
444.Oslo T14040b, More og Romsdal	6,A,c (Multiple Graves)	H	850-950.
445.Oslo T14039a, More og Romsdal	3,A,c,* (With No. 445)	H	850-950.
446.Oslo T14038b, More og Romsdal	3,A,c, (with No. 445...)	C	800-900.
447.Oslo T14038a, More og Romsdal	5,A,c,* (with No. 445...) (Rygh 498.)		?
448.Oslo T14001a, N.Trondelag	2,3,A,#	M	900-950.
449.Oslo T13989, S.Trondelag	3,A,*,#	C	800-900.
450.Oslo T13965, N.Trondelag	2,3,A,c,*,#	?	?
451.Oslo T13947, N.Trondelag	6,D	H	850-950.
452.Oslo T13936a, N.Trondelag	3,4,A,b,\$	H	850-950.
453.Oslo T13910a, N.Trondelag	2,A,c,#	H	850-950.
454.Oslo T13905a, More og Romsdal	2,4,A,*,\$	H	850-950.
455.Oslo T13896a, S.Trondelag	4,6,A,c,#	M	900-950.
456.Oslo T13791, N.Trondelag	6,A,c,#	E	850-900.
457.Oslo T13778a, Nordland	2,A,c,#	M	900-950.

458.Oslo T13776, N.Trondelag	2,A,\$	I	850-950.
459.Oslo T13758a, N.Trondelag	2,A,d,#	B or C (Rygh 490)	800-900.
460.Oslo T13727a, N.Trondelag	2,A,\$? (Rygh 503)	?
461.Oslo T13619, Nordland	3,4,A,*,#	H	850-950.
462.Oslo T13558b, S.Trondelag	3,A,*,#	(Rygh 498)	?
463.Oslo T13558a, S.Trondelag	2,A,#	H	850-950.
464.Oslo T13555a, N.Trondelag	2,A,c,#	M	900-950.
465.Oslo T13518a, N.Trondelag	6,A,b	H	850-950.
466.Oslo T13491b, N.Trondelag	2,A,d,#	H	850-950.
467.Oslo T13482, S.Trondelag	3,4,D,*	B or C (Rygh 491)	800-900.
468.Oslo T13439b, N.Trondelag	3,A,*,#	(Rygh 499)	?
469.Oslo T13439a, N.Trondelag	6,A,#	?	?
470.Oslo T13379a, N.Trondelag	2,3,4,A,*, \$	H	850-950.
471.Oslo T13334a, N.Trondelag	2,A,c,\$	O	900-950.
472.Oslo T13331a, N.Trondelag	3,A,b,*, \$?	?
473.Oslo T13211, S.Trondelag	2,A,\$	M	900-950.
474.Oslo T13202a, More og Romsdal	4,5,A,\$	U	950-1000.
475.Oslo T13150a, S.Trondelag	2,A,#	M	900-950.
478.Oslo T13148, N.Trondelag	6,A,c	?	?
479.Oslo T13050a, More og Romsdal	6,A,*,#	?	?
480.Oslo T12673a, N.Trondelag	6,A,*	H	850-950.
481.Oslo T12642, S. Trondelag	2,3,A,*	?	?
482.Oslo T12507, Nordland	6,D	X	950-1050.
483.Oslo T12472a, N.Trondelag	2,A,f,*, \$	F	850-950.
484.Oslo T12337a, N.Trondelag	2,4,A,c,\$	M	900-950.
485.Oslo T12334a, More og Romsdal	2,3,4,A	M	900-950.
486.Oslo T12316a, N.Trondelag	2,3,A,c,#	?	?
487.Oslo T12225a, S.Trondelag	3,4,A	Q	950-1000.
488.Oslo T12205a, N.Trondelag	2,3,4,A,c,#	K	800-950.

489.Oslo T12204, N.Trondelag	6,A,c	H	850-950.
490.Oslo T12199, More og Romsdal	6,A,c,#	M	900-950.
491.Oslo T12145, N.Trondelag	6,D	H	850-950.
492.Oslo T12081a, S.Trondelag	2,A	M	900-950.
493.Oslo T12080a, N.Trondelag	4,A,c,*, \$	H	850-950.
494.Oslo T12055a, More og Romsdal	2,3,A	H	850-950.
495.Oslo T11927a, N.Trondelag	6,A,c,#	?	?
496.Oslo T11940a, More og Romsdal	4,A,c,\$	R or S (Rygh 504)	950-1000.
497.Oslo T11916c, S.Trondelag	4,5,A,c,*, \$?	?
498.Oslo T11916a, S.Trondelag	1,A,c,\$	X (Rygh 509)	950-1050.
499.Oslo T11906b, Nordland	6,A,c,#	?	?
500.Oslo T11906a, Nordland	6,A,c,#	H	850-950.
501.Oslo T11880a, S.Trondelag	2,A,c,\$	N? (Rygh 503)	900-950.
502.Oslo T11870, N.Trondelag	6,A,\$?	?
503.Oslo T11766a, N.Trondelag	2,3,A,c,#	B or C (Rygh 490)	800-900.
504.Oslo T11631a, More og Romsdal	4,A	L (Rygh 505)	850-950.
505.Oslo T11528a, N.Trondelag	6,A,c,\$?	?
506.Oslo T11581, N.Trondelag	2,3,A,c	T?	950-1000.
507.Oslo T11580, N.Trondelag	5,A,c,*	?	?
508.Oslo T11577, N.Trondelag	3,4,A	H	850-950.
509.Oslo T11547, S.Trondelag	3,D,*	B or C (Rygh 491)	800-900.
510.Oslo T11537c, More og Romsdal	3,4,A,c,*	?	?
511.Oslo T11537a, More og Romsdal	3,A,c,#	Q or P	950-1000.
512.Oslo T11532, N.Trondelag	6,A,c	?	?
513.Oslo T11315a, More og Romsdal	3,A,*,#	?	?
514.Oslo T11220, N.Trondelag	2,3,D	Special Type 2 (Rygh 492)	800-900.
515.Oslo T11161, More og Romsdal	2,3,4,A	B or C (Rygh 490)	800-900.
516.Oslo T11023, S.Trondelag	2,3,A	H	850-950.
517.Oslo T11000, Troms	6,D	H	850-950.

518.Oslo T10688, N.Trondelag	6,A,c,\$	Rygh 503	?
519.Oslo T10656, N.Trondelag	2,3,A,c	Q or P (Rygh 508)	950-1000.
520.Oslo T10613, More og Romsdal	3,A,*	?	?
521.Oslo T10181, N.Trondelag	6,D	Q or P	950-1000.
522.Oslo T9289, More og Romsdal	2,3,A	M (Rygh 489)	900-950.
523.Oslo T9228, S.Trondelag	2,3,D,*	?	?
524.Oslo T9209, N.Trondelag	2,3,4,A,c	Rygh 495	?
525.Oslo T9207, N.Trondelag	2,3,A,c,*	?	?
526.Oslo T1182, S.Trondelag	2,A,c	Special A (Rygh 492)	800-900.
527.Oslo T8904, More og Romsdal	3,4,A,*	B or C (Rygh 491)	800-900.
528.Oslo T8727, S.Trondelag	6,A,c	?	?
529.Oslo T8692, N.Trondelag	2,A,c,*	B or C (Rygh 491)	800-900.
530.Oslo T8653, N.Trondelag	2,D,*	B or C (Rygh 491)	800-900.
531.Oslo T8570, N.Trondelag	3,D	Rygh 493	?
532.Oslo T8482, N.Trondelag	2,D	?	?
533.Oslo T8380, S.Trondelag	3,5,A	M (Rygh 489)	900-950.
534.Oslo T8369, N.Trondelag	2,D	Rygh 501	?
535.Oslo T8358, S.Trondelag	2,3,A,c	Rygh 499.	?
536.Oslo T8353, N.Trondelag	6,A,\$?	?
537.Oslo T8282, Nordland	2,3,A,c	B or C (Rygh 491)	800-900.
538.Oslo T8190, S.Trondelag	2,D	?	?
539.Oslo T8142, N.Trondelag	3,A,c,*	?	?
540.Oslo T8139, N.Trondelag	2,3,A,c	?	?
541.Oslo T7911, N.Trondelag	2,D,*	H	850-950.
542.Oslo T7701, N.Trondelag	2,3,A,c,*	?	?
543.Oslo T7590, Nordland	2,A,c,#	E	850-950.
544.Oslo T7464, N.Trondelag	2,3,A,c	Rygh 495	?
545.Oslo T7297, N.Trondelag	6,D	?	?
546.Oslo T7206, S.Trondelag	6,A,a	?	?

547.Oslo T7201, N.Trondelag	6,D	H	850-950.
548.Oslo T7175, N.Trondelag	2,3,D	H	850-950.
549.Oslo T7097, N.Trondelag	2,4,A,c	B or C (Rygh 490)	800-900.
550.Oslo T6945, S.Trondelag	3,A,c,*	B or C (Rygh 491)	800-900.
551.Oslo T6942, N.Trondelag	2,3,A,*	Rygh 493	?
552.Oslo T6919, N.Trondelag	3,4,A	H	850-950.
553.Oslo T6918, N.Trondelag	2,3,4,A	M (Rygh 489)	900-950.
554.Oslo T6907, N.Trondelag	3,A,*	Rygh 498	?
555.Oslo T6906, N.Trondelag	3,A	H	850-950.
556.Oslo T6779, More og Romsdal	2,3,D	H	850-950.
557.Oslo T6529, N.Trondelag	2,3,A,c.*	Rygh 498	?
558.Oslo T6499, S.Trondelag	6,A,c	?	?
559.Oslo T6360, More og Romsdal	2,3,D	H	850-950.
560.Oslo T6262, S.Trondelag	2,6,A	Special Type 2 (Rygh492)	800-900.
561.Oslo T6259, S.Trondelag	6,A,*	Rygh 498	?
562.Oslo T6257, S.Trondelag	2,3,A	M (Rygh 489)	900-950.
563.Oslo T6256, S.Trondelag	2,3,A	H (Rygh 494)	850-950.
564.Oslo T6253, S.Trondelag	2,3,A,*	B or C (Rygh 491)	800-900.
565.Oslo T6231, N.Trondelag	2,3,4,D	?	?
566.Oslo T6150, N.Trondelag	3,6,A,*	?	?
567.Oslo T6132, S.Trondelag	1,D (only blade intact)	B or C (Rygh 490)	800-900.
568.Oslo T6028, N.Trondelag	2,3,D	L (Rygh 505)	850-950.
569.Oslo T5827, N.Trondelag	6,A,c	?	?
570.Oslo T5827, N.Trondelag	6,A,c	?	?
571.Oslo T5821, N.Trondelag	6,A,c	H?	850-950.
572.Oslo T5239, More og Romsdal	3,A,*	B or C (Rygh 491)	800-900.
573.Oslo T5113, N.Trondelag	6,A	Rygh 503	?
574.Oslo T5106, Nordland	3,A,c,*	B or C (Rygh 491)	800-900.
575.Oslo T5105, Nordland	3,4,A,c,*	B or C (Rygh 491)	800-900.

576.Oslo T5069, N.Trondelag	6,D,*	B or C (Rygh 491)	800-900.
577.Oslo T5068, N.Trondelag	6,D	?	?
578.Oslo T5057, S.Trondelag	3,6,D	?	?
579.Oslo T5050, N.Trondelag	4,6,D	?	?
580.Oslo T5010, S.Trondelag	3,D,*	B or C (Rygh 491)	800-900.
581.Oslo T4970, S.Trondelag	3,A,c,*	Rygh 497.	?
582.Oslo T4875, More og Romsdal	6,A,c	H	850-950.
583.Oslo T4891, N.Trondelag	2,3,D	H	850-950.
584.Oslo T4612, More og Romsdal	3,4,A,c	H	850-950.
585.Oslo T4504, N.Trondelag	2,3,4,A,c	Q or P	950-1000.
586.Oslo T4485, N.Trondelag	6,A,c	?	?
587.Oslo T4342, More og Romsdal	3,4,A	?	?
588.Oslo T4331, More og Romsdal	6,A	S (Rygh 504)	950-1000.
589.Oslo T4004, S.Trondelag	2,3,A	?	?
590.Oslo T3982, S.Trondelag	3,4,D	M	900-950.
591.Oslo T3845, N.Trondelag	6,D	O	900-950.
592.Oslo T3841, N.Trondelag	6,D	T (Rygh 510)	950-1000.
593.Oslo T3810, S.Trondelag	6,D (Pommel)	?	?
594.Oslo T3804, N.Trondelag	2,3,4,D	?	?
595.Oslo T3792, N.Trondelag	6,A,c	C	800-900.
596.Oslo T3788, S.Trondelag	2,A,c	M	900-950.
597.Oslo T3766, S.Trondelag	2,6,D,*	B or C (Rygh 491)	800-900.
598.Oslo T3720, N.Trondelag	3,A,c,*	B or C (Rygh 491)	800-900.
599.Oslo T3712, N.Trondelag	3,4,A,c	H	850-950.
600.Oslo T3645, N.Trondelag	6,A,c	M	900-950.
600.Oslo T3499, N.Trondelag	6,A,c	L	850-950.
601.Oslo T3463, S.Trondelag	6,D	Q or P	950-1000.
602.Oslo T3400, N.Trondelag	2,3,4,D	?	?
603.Oslo T3375, N.Trondelag	3,4,A,c	H	850-950.

604.Oslo T3365, N.Trondelag	2,6,A,c	?	?
605.Oslo T3361, S.Trondelag	2,3,A,*	H	850-950.
606.Oslo T3334, S.Trondelag	3,A	T	950-1000.
607.Oslo T3276, S.Trondelag	2,3,A	E	850-900.
608.Oslo T3108, S.Trondelag	6,A,c	H	850-950.
609.Oslo T3106, S.Trondelag	2,3,A,c	M	900-950.
610.Oslo T3081, N.Trondelag	6,A,c	H	850-950.
611.Oslo T3052, N.Trondelag	6,A,c	H/I	850-950.
612.Oslo T3050, S.Trondelag	6,A,c	?	?
613.Oslo T2992, S.Trondelag	6,A	H	850-950.
614.Oslo T2967, N.Trondelag	3,4,A,*	?	?
615.Oslo T2879, N.Trondelag	6,A,c	A?	800-900.
616.Oslo T2864, More og Romsdal	6,A,c	M	900-950.
617.Oslo T2862, More og Romsdal	3,D	H	850-950.
618.Oslo T2791, N.Trondelag	2,3,A	M	900-950.
619.Oslo T2605, N.Trondelag	2,3,A,c,*	M	900-950.
620.Oslo T2518, More og Romsdal	6,A	Q or P	950-1000.
621.Oslo T2507, N.Trondelag	6,A	X	950-1050.
622.Oslo T2502, S.Trondelag	3,A	?	?
623.Oslo T2495, More og Romsdal	3,D,*	H	850-950.
624.Oslo T2494, More og Romsdal	6,A	?	?
625.Oslo T2420, N.Trondelag	2,3,A	M	900-950.
626.Oslo T2387, More og Romsdal	2,A,*	H?	850-950.
627.Oslo T2386, More og Romsdal	2,A	H	850-950.
628.Oslo T2385, More og Romsdal	3,A,*	?	?
629.Oslo T2349, S.Trondelag	6,A,c	?	?
630.Oslo T2302, S.Trondelag	3,D	?	?
631.Oslo T2253, N.Trondelag	6,A	?	?
632.Oslo T2212, S.Trondelag	3,4,A	H	850-950.

633.Oslo T2211, S.Trondelag	3,A	?	?
634.Oslo T2195, S.Trondelag	2,3,4,A	?	?
635.Oslo T2188, N.Trondelag	2,3,A	X	950-1050.
636.Oslo T2187, S.Trondelag	6,D	?	?
637.Oslo T2149, More og Romsdal	6,A,c	?	?
638.Oslo T2119, S.Trondelag	2,3,A	H	850-950.
639.Oslo T2112, S.Trondelag	5,A,*	?	?
640.Oslo T2094, N.Trondelag	6,A,c	?	?
641.Oslo T2049, N.Trondelag	2,6,A,c	?	?
642.Oslo T2033, S.Trondelag	2,3,D,*	?	?
643.Oslo T2018, N.Trondelag	3,4,A	H	850-950.
644.Oslo T1954, S.Trondelag	6,A,c	B	800-900.
645.Oslo T1694, N.Trondelag	2,A,c	?	?
646.Oslo T1694, N.Trondelag	3,4,A,c,*	C	800-900.
647.Oslo T1661, S.Trondelag	2,3,D	?	?
648.Oslo T1641, N.Trondelag	2,3,A,c	?	?
649.Oslo T1636, S.Trondelag	3,4,A,c	A	800-900.
650.Oslo T1628, N.Trondelag	3,6,A	M	900-950.
651.Oslo T1603, N.Trondelag	6,A	?	?
652.Oslo T1598, S.Trondelag	2,3,A,c	?	?
653.Oslo T1562, S.Trondelag	6,A	A? H?	9 th Century.
654.Oslo T1453, S.Trondelag	2,A,c	?	?
655.Oslo T1441, S.Trondelag	2,3,A,c	?	?
656.Oslo T1398, S.Trondelag	3,A	L?	850-950.
657.Oslo T1355, N.Trondelag	2,3,4,A,*	H?	850-950.
658.Oslo T1285, S.Trondelag	2,3,A,c	C	800-900.
659.Oslo T1268, N.Trondelag	2,3,A,c	H?	850-950.
660.Oslo T1250, N.Trondelag	2,3,4,A,c,*	H	850-950.
661.Oslo T1196, N.Trondelag	2,3,A,c	M	900-950.

662.Oslo T1142, N.Trondelag	2,6,A,c	H	850-950.
663.Oslo T1114, N.Trondelag	2,A	?	?
664.Oslo T1112, N.Trondelag	2,3,4,A	?	?
665.Oslo T1083, N.Trondelag	3,D	H	850-950.
666.Oslo T1072, N.Trondelag	2,3,A,c	H	850-950.
667.Oslo T1057, N.Trondelag	3,4,A,c,*	B	800-900.
668.Oslo T1054, N.Trondelag	2,3,A,c	?	?
669.Oslo T1014, N.Trondelag	6,D	?	?
670.Oslo T1005, N.Trondelag	3,4,A,c	M	900-950.
671.Oslo T948, N.Trondelag	3,4,D	L	850-950.
672.Oslo T921, Oppland	1,D	Q or P	950-1000.
673.Oslo T900, Ukjent Fylke	2,3,A	H	850-950.
674.Oslo T899, Ukjent Fylke	3,A,*	Q or P	950-1000.
675.Oslo T888, Ukjent Fylke	6,A (Pommel Only)	H	850-950.
676.Oslo T887, Ukjent Fylke	6,A	H	850-950.
677.Oslo T881, Ukjent Fylke	6,A (Pommel & Tang)	D or E	800-950.
678.Oslo T752, S.Trondelag	3,5,D	Q or P	950-1000.
679.Oslo T746, S.Trondelag	5,A,c	H	850-950.
680.Oslo T576, N.Trondelag	6,A,c	H	850-950.
681.Oslo T572, N.Trondelag	2,A,c	T	950-1000.
682.Oslo T567, N.Trondelag	2,A,c	M	900-950.
683.Oslo T566, N.Trondelag	2,A,c	L	850-950.
684.Oslo T6292, S.Trondelag	1,A,c	O	900-950.
685.Oslo T6291, S.Trondelag	2,A,c	M (Rygh 489)	900-950.
686.Oslo T547, S.Trondelag	2,3,4,A,c	D?	800-950.
687.Oslo T507, S.Trondelag	3,A,c	D or E	800-950.
688.Oslo T485, S.Trondelag	2,A	B	800-900.
689.Oslo T436, N.Trondelag	2,A,c	H	850-950.
690.Oslo T430, S.Trondelag	6,A,c	?	?

691.Oslo T421, S.Trondelag	6,A,c	L	850-950.
692.Oslo T400, N.Trondelag	2,D	D	800-950.
693.Oslo T395, N.Trondelag	2,A	K	800-950.
694.Oslo T394, N.Trondelag	2,3,A	?	?
695.Oslo T390, S.Trondelag	2,A,c,*	B or C (Rygh 491)	800-900.
696.Oslo T351, N.Trondelag	2,A	L	850-950.
697.Oslo T350, N.Trondelag	3,A	M	900-950.
698.Oslo T349, N.Trondelag	2,3,4,A	M	900-950.
699.Oslo T308, S.Trondelag	2,3,A	S	950-1000.
700.Oslo T305, S.Trondelag	6,A	X	950-1050.
701.Oslo T291, S.Trondelag	2,4,A	?	?
702.Oslo T289, S.Trondelag	2,A	H	850-950.
703.Oslo T232, N.Trondelag	2,A,c	H	850-950.
704.Oslo T231, N.Trondelag	2,A,c	M	900-950.
705.Oslo T204, N.Trondelag	2,3,A,c	H	850-950.
706.Oslo T754, S.Trondelag	2,3,D	Q or P	950-1000.
707.Oslo T754, S.Trondelag	2,3,D	D or E	800-950.
708.Oslo T891, Ukjent Fylke	6,A	N	900-950.
709.Oslo T880, Ukjent Fylke	6,A	?	?
710.Oslo T75, N.Trondelag	2,6,A,c	H	850-950.
711.Oslo T74, Ukjent Fylke	2,3,D	?	?
712.Oslo T73, S.Trondelag	2,3,D	H	850-950.
713.Oslo T72, Ukjent Fylke	2,D	M	900-950.
714.Oslo T71, Ukjent Fylke	2,3,D,*	Q or P	950-1000.
715.Oslo T70, Ukjent Fylke	2,3,D	D	800-950.
716.Oslo T69, Ukjent Fylke	2,D	D	800-950.
717.Oslo T66, S.Trondelag	2,D	H	850-950.
718.Oslo T63, More og Romsdal	6,A,c	?	?
719.Oslo T65, Ukjent Fylke	3,D	H	850-950.

720.Oslo C21398, Hedmark	2,4,A,c	AE	1000-1050.
721.Bergen B10161, ?	2,D	M	900-950.
722.Bergen B10162, ?	2,3,D,*	Rygh 498	?
723.Bergen B10169a, ?	3,5,D,*	Rygh 498	?
724.Bergen B10170a, ?	2,3,D,*	Rygh 498	?
725.Bergen B10170b, ?	2,D,*	Rygh 498	?
726.Bergen B10712, Sogn og Fjordane:			
Stryn	2,A,*	B or C	800-900.
727.Bergan B10847a, Hordaland: Etne	6,A,*	C	800-900.
728.Bergen B10715a, Sogn og Fjordane:			
Gloppen	2,3,D	M	900-950.
729.Bergen B11114, Sogn og Fjordane:			
Forde	3,D	M	900-950.
730.Bergen B11120a, More og Romsdal:			
Haram	2,A	H	850-950.
731.Bergen B11132a, More og Romsdal:			
Volda	6,A	H	850-950.
732.Bergen B11212, Sogn og Fjordane:			
Hornindal	2,D	M	900-950.
733.Bergen B11294, Hordaland: Kvam.	2,5,A,*	H	850-950.
734.Bergen B11327, Sogn og Fjordane:			
Styrn	2,3,D	L	850-950.
735.Bergen B11382, Sogn og Fjordane:			
Balestrand	2,4,A	E	850-900.
736.Bergen B11390, Sogn og Fjordane:			
Gloppen	3,A	V	950-1000.
737.Bergen B11398, Sogn og Fjordane:			
Stryn	2,A	V	950-1000.
738.Bergen B11469a, Sogn og Fjordane:			

Balestrand	5,A	O	900-950.
739.Bergen B11696b, Sogn og Fjordane:			
Balestrand	5,A	M	900-950.
740.Bergen B11470, Sogn og Fjordane:			
Gaular	1,A	X	950-1050.
741.Bergen B11484, Sogn og Fjordane:			
Gaular	1,A	M	900-950.
742.Bergen B11479a, Sogn og Fjordane:			
Gloppen	2,5,A	M	900-950.
743.Bergen B11484, Sogn og Fjordane:			
Sogndal	1,A	M	900-950.
744.Bergen B11485, Porsgrunn	2,3,D	L	850-950.
745.Bergen B11603a, Sogn og Fjordane:			
	5,A	H	850-950.
746.Bergen B11610a, More og Romsdal:			
Volda	4,A,*	C	800-900.
747.Bergen B12388/1, Sogn og Fjordane:			
Gloppen	5,A	M	900-950.
748.Bergen B12562/1, Sogn og Fjordane:			
Sogndal	2,A,*	?	?
749.Bergen B12388/1, Sogn og Fjordane:			
Gloppen	5,A,b,c,\$	M	900-950.
750.Bergen B12562/1, Sogn og Fjordane:			
Sogndal	2,A,*	?	?
751.Bergen 12570, Sogn og Fjordane:			
Luster	1,A,*	H	850-950.
752.Bergen B12572, Sogn og Fjordane:			
Styrn	2,4,D,*	Rygh 499	?
753.Bergen B12591, Sogn og Fjordane:			

Vik	1,A	K	800-950.
754.Bergen 13855/1, Sogn og Fjordane:			
Laerdal	1,A,*	M	900-950.
755.Bergen B13859a, Sogn og Fjordane:			
Ardal	2,A	M	900-950.
756.Bergen B14489/1/a, Sogn og Fjordane:			
Styrn	2,A,*	Rygh 498	?
757.Bergen B1542a, More og Romsdal:			
Vannylven	3,A	X	950-1050.
758.Bergen B4719/II/a, Hordaland:			
Ullensvang	2,A,*,\$	Rygh 498	?
759.Bergen 47321a, Sogn or Fjordane:			
Gloppen	4,A	?	?
760.Bergen B4844a, Sogn or Fjordane:			
Gloppen	2,A,*	Rygh 498	?
761.Bergen B5570, Hordaland: Meland			
3,5,A		?	?
762.Bergen B5696a, Hordaland: Bergen			
1,A,*		M	900-950.
763.Bergen B5731, Hordaland: Fusa			
2,A		Rygh 503	?
764.Bergen B5783, Sogn og Fjordane:			
Luster	1,A,*	B or C	800-900.
765.Bergen B5919, Hordaland: Voss			
3,5,D		?	?
766.Bergen B5938a, Sogn og Fjordane:			
Jolster	5,A	?	?
767.Bergen B6128a, More og Romsdal:			
Sykkylven	2,A	O	900-950.
768.Bergen B6135a, Hordaland: Radoy			
1,A		M	900-950.
769.Bergen B6149a, Hordaland: Voss			
2,5,A		M	900-950.
770.Bergen B6359a, Sogn og Fjordane:			

Hornindal	3,D,*	?	?
771.Bergen B6470a, Hordaland: Voss	3,A,*	M	900-950.
772.Bergen B6616a, Sogn og Fjordane:			
Gloppen	3,6,A,*	Special Type 2	800-900.
773.Bergen B6718a, Hordaland: Voss	5,A	O	900-950.
774.Bergen B6735a, Sogn og Fjordane:			
Gloppen	2,5,A	O	900-950.
775.Bergen B7534a, Hordaland: Kvinnhead	4,A	Rygh 493	?
776.Bergen B7742a, Hordaland: voss	5,A	Q	950-1000.
777.Bergen B8037, Sogn og Fjordane:			
Leikanger	4,A	M	900-950.
778.Bergen B8065, Hordaland: Osteroy	2,5,A	X	950-1050.
779.Bergen B8087, Sogn og Fjordane:			
Leikanger	3,4,A	M	900-950.
780.Bergen B8102a, Sogn og Fjordane:			
Vik	2,A,*	Rygh 498	?
781.Bergen B8101b, Sogn og Fjordane:			
Vik	6,A	H	850-950.
782.Bergen B8108, Sogn og Fjordane:			
Gloppen	2,3,D	F	850-900?
783.Bergen B8118a, Sogn og Fjordane:			
Hoyanger	3,A,b	?	?
784.Bergen B8135a, Sogn og Fjordane:			
Gloppen	2,3,A	H	850-950.
785.Bergen B8198a, Hordaland: Kvinnhead	2,3,A,*	H	850-950.
786.Bergen B8259, Sogn og Fjordane:			
Gloppen	1,A,*	Rygh 498	?
787.Bergen B8562, Sogn og Fjordane:			

Gloppen	2,3,A	B or C	800-900.
788.Bergen B8565, More og Romsdal:			
Volda	2,3,5,A	E	850-900.
789.Bergen B8371a, Sogn og Fjordane:			
Laerdal	3,5,A	L	850-950.
790.Bergen B8384a, More og Romsdal:			
Volda	3,4,A	K	800-950
791.Bergen B8446a, Sogn og Fjordane:			
Laerdal	3,A	H	850-950.
792.Bergen B7511, More og Romsdal:			
Sykklev	2,A	Y	950-1000.
793.Bergen B7534, Hordaland:			
Kninnherad	6,A	Rygh 493	?
794.Bergen B7711a, Hordaland: Voss			
	2,A	M	900-950.
795.Bergen B7739a, Sogn og Fjordane:			
Vik	2,A	M	900-950.
796.Bergen B6748a, Sogn og Fjordane:			
Eid	5,A	Special Type 2	800-900.
797.Bergen B8603a, Sogn og Fjordane:			
Stryn	2,3,A	C	800-900.
798.Bergen B8637a, Sogn og Fjordane:			
Gloppen	2,4,A	H	850-950.
799.Bergen B8668a, Sogn og Fjordane:			
Gloppen	1,A,*	Rygh 498	?
800.Bergen B9099a, Sogn og Fjordane:			
Stryn	5,A	?	?
801.Bergen B9087a, Sogn og Fjordane:			
Stryn	2,A,*	A	800-900.

802.Bergen B9092a, Sogn og Fjordane:

Gaular	2,A	P	950-1000.
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803.Bergen, B9189a, More og Romsdal:

Norrdal	5,A	M	800-900.
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804.Bergen, B9195a, Hordaland: Os	2,A,c	S	950-1000.
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805.Bergen, B9203a, Sogn og Fjordane:

Stryn	2,A	H	850-950.
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806.Bergen, B9257a, Hordaland: Etne	4,A	Q	950-1000.
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807.Bergen, B9478, Hordaland: Etne	2,3,A,c,*	M	900-950.
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808.Bergen, B9485a, Sogn og Fjordane:

Sogndal (Kaupang Grave 96)	1,A	M	900-950.
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809.Bergen, B9485b, Sogn og Fjordane:

Songdal (Kaupand Grave 96)	1,A	M	900-950.
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810.Bergen, B9503a, Sogn og Fjordane:

Gloppen	3,5,A	L	850-950.
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811.Bergen, B9503b, Sogn og Fjordane:

Gloppen	1,A	T	950-1000.
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812.Bergen, B9506/II/C, Sogn og Fjordane:

Stryn	2,3,5,A	M	900-950.
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813.Bergen, B9632a, More og Romsdal:

Sykkylven	4,A	H	850-950.
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814.Bergen, B9633a, More og Romsdal:

Volda	3,A	P	950-1000.
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815.Bergen, B9969a, Sogn og Fjordane:

Hyllestad	3,A	X	950-1050.
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816.Bergen, B9969b, Sogn og Fjordane:

Hyllestad	2,A,*	M	900-950.
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817.Aker, Vang Parish	2,A,c	S	950-1000.
818.Bale, Tjugum Parish	2,A,c	?	?
819.Grave I, Gjermundbu	2,3,A,c	S	950-1000
820.Grave II, Gjermundbu	3,A,c,#	Q	950-1000
821.Grave S400, Gulli	3,4,A,c	M	900-950.
822.Grave S376, Gulli	3,4,A,b,*	?	700-800.
823.Grave S1036, Gulli	6,A,b,#	L	850-950.
824.Grave S1199, Gulli	6,A,b,#	K	800-950.
825.Hellebost, Vik Parish	1,A,c	M	900-950.
826.Grave I, K/V, S.Bikjholberget, Kaupang	6,A,b,#	M	900-950.
827.Grave II, K/IV, S.Bikjholberget, Kaupang	2,4,A,b,c,#	X	950-1050.
828.Grave Ia, K/VI, S.Bikjholberget, Kaupang	3,A,b,#	C	800-900.
829.Grave III, K/V, S.Bikjholberget, Kaupang	2,3,A,b,c,#	H	850-950.
830.K/VIII, S.Bikjholberget, Kaupang	3,A,b,#	K	800-950.
831.K/IX, S.Bikjholberget, Kaupang	3,4,A,b,#	M	900-950.
832.Grave I, K/XII, S.Bikjholbegget, Kaupang	6,A,b,	?	?
833.Grave II, K/XII, S.Bikjholberget, Kaupang	4,A,b,	M	900-950.
834.K/XV, S.Bikjholbrget, Kaupang	2,3,A	Special 1	800-850.
835.K/XXV, S.Bikjholberget, Kaupang	6,A	D or E	800-950.
836.K/XX, S.Bikjholberget, Kaupang	2,A,d,#	C	800-900.
837.K/XXa, Kaupang	6,A,a,#	Mannheim	750-850.
838.Grave I, K/1950, N.Bikholberget, Kaupang	6,A	?	?

839.Grave II, K/1950, N.Bikjholberget,				
Kaupang	2,3,A	M		900-950.
840.Grave III, K/1950, N.Bikjholberget,				
Kaupang	2,3,A,	H		850-950.
841.Grave IV, K/1950, N.Bikjholberget,				
Kaupang	2,3,A	E		850-900.
842.Grave I, K/1952, N.Bikjholberget,				
Kaupang	2,3,A,b	M		900-950.
843.Grave II, K/1952, N.Bikjholberget,				
Kaupang	3,A,d,#	L		850-950.
844.Grave V, K/1953, N.Bikjholberget,				
Kaupang	2,3,A	M		900-950.
845.Grave VII, K/1953, N.Bikjholberget,				
Kaupang	2,A	H		850-950.
846.Haug 1, Lo	2,A,b,c,#	H		850-950.
847.Lo	6,A,*	?		?
848.Losfunn 1953, Kaupang	6,A,#	?		?
849.Grave I, K/1954, N.Bikjholberget,				
Kaupang	2,3,A	M		900-950.
850.Grave II, K/1954, N.Bikjholberget,				
Kaupang	3,A	M		900-950.
851.Grave III, K/1954, N.Bikjholberget,				
Kaupang	2,A	O		900-950.
852.Grave IV, K/1954, N.Bikjholberget,				
Kaupang	6,A	?		?
853.Haug 47, N.Kaupang, C4198	2,3,4,A,c	M		900-950.
854.Haug 109, N.Kaupang, C4202	2,3,A,c	M		900-950.
855.Haug 112, N.Kaupang, C4216	2,3,A,c	X		950-1050.
856.Haug 90, N.Kaupang, C4216	6,A,c	X		950-1050.

857.Haug 91, N.Kaupang, C4237	6,A,c	H	850-950.
858.N.Kaupang, 1859, C4070	4,5,A	?	?
859.Haug 6, S.Kaupang, C4293	2,3,A,c,#	H	850-950.
860.Kaupang 1859, C2270	3,4,A,d,#	H	850-950.
861.Lamoya, S.Kaupang, C15010	2,3A,d,#	Q	950-1000.
863.Lishushaugen	5,A,c,\$	H	850-950.
864.Ljones, Skjaestad	1,A,c,#	K	800-950.
865.Grave I, Mound 2, Myklebostand	3,5,A,b,c,\$	K	800-950.
866.Grave II, Mound 2, Myklebostand	2,3,A,a,c,#	M	900-950.
867.Os, Eid Parish	2,A,c	?	?
868.Sundalen, Dale Parish	2,A,c	H	850-950.
869.Vad, Stole Parish	2,A,c	R	950-1000.
870.Valle, Tune	3,6,A,b,c,#	?	?
871.Lirhus Haug	5,A,c,\$	C	800-900
872.Meling	6,A,c	?	?
873.Lundi Suldal	2,A,c	?	?
874.Ovstebo	?,A,c	E or D	800-950
875.Kirkus, Aardal	?,A,c	Q or R	950-1000
876.Vestly	?,A,c	X	950-1050
877.Ljones I Skjarstat	3,A,c,*	K	800-950.
878.Sor Brand	?,A	Rygh 501	?
879.Hedemarken	1,?	R	950-1000.
880.Berg Parish	3,?	O	900-950.
881.Hundstad	6,?	W	950-1000.
882.Tanum	6,?	?	?
883.Farmen	3,?	?	?
884.Nedre Store-Var	3,?	L?	850-950.
882.Hybbestad	3,?	L	850-950.
883.Gronneberg	3,?	L	850-950.

884.Vad	2,A,c	R	950-1000.
885.Dakstad	6,?	O	900-950.
886.Vangsnes	6,?	O	900-950.
887.Gravrak	1,?	K	800-950.
888.Gunnersby	2,?	?	?
889.Aker	2,A,c	S	950-1000.
890.Torstvet	2,?	?	?
891.Bale	2,A,c	?	?
892.Hellebost	?,A,c	H	850-950.
893.Visnes	?,A,c	H	850-950.
894.Sundalen	2,A,c	H	850-950.
895.Os	2,A,c	?	?
896.Hods	2,?	T?	950-1000.
897.Faret	2,3,A,\$	H	850-950.
898.Voll	2,3,A,#	O or R	900-1000.

Chapter 4: Sweden and Denmark

That the peoples of Sweden and Denmark also participated in the Viking Period expansion is well known. That archaeology is an important discipline in the study of that expansion is also well known. But the archaeology of these nations is different than Norway. A brief knowledge of the archaeological establishment of both Sweden and Denmark helps when discussing any object found, including swords.

Sweden

Any discussion of the history of Swedish archaeology begins with Oscar Montelius. His book *Antiquites Suedoises* (1), published in 1873 presents five swords dated to what he called the Third Iron Age. These swords can now be dated to the Viking Period.

Excellent as Montelius was, Hjalmar Stople mastered the method of archaeological excavation. Stople conducted the original work on Birka, meticulously digging and documenting some 1100 graves. As if that weren't enough, Stople also began work on mounds at Vendel with the same rigorous methods. Both these sites are still considered significant. Unfortunately, Stople died in 1905, leaving an important collection of work unpublished.

Stoples's work was eventually published by T.J Arne (2) and H. Arbman (3) in the 20th Century. The Early 20th Century was a very active time for Swedish Archaeologists. In the 1920s, the periodical *Fornvannen* began publication, which acted as a place for archaeologists to publish their work and debate topics within the profession. In the 1930s important sites such as Valsgarde were excavated. Archaeologists such as Arne, Arbman, Arwiddson, Stenberger, and Lindqvist established a movement that is active to this day. Martin Rundkvist and Charlotte Hedenstierna-Jonson are just two of many Swedish archaeologists finding and publishing new information.

Place	Scheme	Petersen Type	Date
1.Birka (Black Earth)	6,C	K	800-950.
2.Birka (Black Earth)	6,C	?	?
3.Birka (Black Earth)	6,C	N	900-950.
4.Birka (Black Earth)	6,C	H	850-950.
5.Birka (Black Earth)	6,C	H	850-950.
6.Birka (Black Earth)	6,C	?	?
7.Birka (Black Earth)	6,C (Antler Pommel)	C?	800-900.
8.Birka (Black Earth)	6,C (Antler Hilt/Guard)	?	?
9.Birka (Black Earth)	6,C	?	?
10.Birka (Black Earth)	6,C (Antler Hilt/Guard)	?	?
11.Birka (Black Earth)	6,C	Special Type 1	800-900.
12.Birka	?,C	H	850-950.
13.Birka	?,C	X	950-1050.
14.Birka	?,C	B	800-900.
15.Birka	6,C	Special Type	800-900.
16.Birka	6,C	H	850-950.
17.Grave 104, Birka	2,A,\$?	?
18.Grave 366, Birka	2,A,\$?	?
19.Grave 377, Birka	3,5,A,\$	X	950-1050.
20.Grave 426, Birka	3,4,5,A,\$	H?	850-950.
21.Grave 452, Birka	6,A,\$?	?
22.Grave 496, Birka	3,A,a,#	H	850-950.
23.Grave 514, Birka	4,A,a,#	H?	850-950.
24.Grave 520, Birka	4,A,a,#	Y	950-1000.
25.Grave 524, Birka	2,3,A,a,#	E	850-900.
26.Grave 542, Birka	3,A.a,#	H/I	850-950.

27.Grave 544, Birka	2,3,A,a,#	V	950-1000.
28.Grave 561, Birka	2,3,A,a,#	H	850-950.
29.Grave 581, Birka	3,A,a,#	V	950-1000.
30.Grave 624, Birka	3,A,a,#	M	900-950.
31.Grave 643, Birka	4,A,a,#	H	850-950.
32.Grave 644, Birka	4,A,a,#	H	850-950.
33.Grave 722, Birka	6,A,\$?	?
34.Grave 731, Birka	2,A,a,#	X	950-1050.
35.Grave 735, Birka	6,A,a,#	Y	950-1000.
36.Grave 736, Birka	6,A,a,#	H?	850-950.
37.Grave 750, Birka	4,A,a,#	H	850-950.
38.Grave 752B, Birka	6,A,a,#	Y	950-1000.
39.Grave 823A, Birka	2,3,5,A,a,#	X	950-1050.
40.Grave 834, Birka	?,A,a	X	950-1050.
30.Grave 832, Birka	2,3,4,A,a,#	?	?
41.Grave 842, Birka	3,A,a,#	H	850-950.
42.Grave 850, Birka	3,4,A,a,#	H	850-950.
43.Grave 855A, Birka	?,A,a,#	X	950-1050.
44.Grave 886, Birka	2,3,A,a,#	H	850-950.
45.Grave 914, Birka	6,A,a	?	?
46.Grave 942, Birka	4,A,a,#	Special Type	800-900.
47.Grave 944, Birka	3,4,A,a,#	H	850-950.
48.Grave 957, Birka	5,A,a,#	H	850-950.
49.Grave 997, Birka	2,3,A,c	?	?
50.Grave 1151, Birka	?,A,a,#	D or E	800-950.
51.Birka	?,A,#	E	850-900.
52.Satra, Uppland	?,D	H	850-950.
53.Adelson, Uppland	?,A	H	850-950.
54.Altuna, Uppland	?,B,R	?	?
55.Syndirge, Uppland	?,A,\$	H	850-950.

56.Norsta, Uppland	?,A,e	V	950-1000.
57.Villsberga, Uppland	2,D	H	850-950.
58.Landsberga, Uppland	?,A,\$	X	950-1050.
59.Ultuna, Uppland	?,A,b	L	850-950.
60.Ultuna, Uppland	2,A,\$	H	850-950.
61.Hamby, Uppland	4,5,A,\$	H	850-950.
62.Stora Angby, Uppland	?,A,\$	S	950-1000.
63.Angleby, Uppland	?,D	H	850-950.
64.Snesslinga, Uppland	2,3,D	H	850-950.
65.Grave 12,Kiplingeberg, Uppland	5,A,\$	H	850-950.
66.Grave 5, Kiplingeberg, Uppland	4,5,A,\$	H	850-950.
67.Grave 7, Kiplingeberg, Uppland	2,A,\$	H	850-950.
68.Tuna, Uppland	?,A,#	H	850-950.
69.Kiplingeberg, Uppland	2,A	?	?
70.Tuna, Uppland	?,D	X?	950-1050.
71.Ubby, Uppland	?,A	H	850-950.
72.Raa, Gnista, Uppland	?,A,\$	H	850-950.
73.Savja, Uppland	?,A,e,\$	H	850-950.
74.Soderby, Uppland	?,A,c,\$	X	950-1050.
75.Soderby, Uppland	?,A,c,\$	H	850-950.
76.Helgo, Uppland	2,D	B	800-900.
77.Ubby, Uppland	2,A,c	H	850-950.
78.Barby, Uppland	?,A	E	850-900.
79.Gamla Uppsala, Uppland	?,A,c	H	850-950.
80.Gamla Uppsala,			

Uppland	2,A,c	?	?
81.Valsgarde, Uppland	?,A,b,#	H	850-950.
82.Grave 12, Valsgarde,			
Uppland	?,A,b,#	V	950-1000.
83.Grave 13, Valsgarde,			
Uppland	?,A,b,#	A	800-900.
84.Grave 14, Valsgarde,			
Uppland	?,A,b,#	B	800-900.
85.Grave 15, Valsgarde,			
Uppland	?,A,b,#	V	950-1000.
86.Hagby, Uppland	?,D	H	850-950.
87.Tuna, Uppland	2,A,c	H	850-950.
88.Harby, Uppland	4,5,A,\$	E	850-900.
89.Hjalmunge, Uppland	?,B,L	E	850-900.
90.Overhassla, Uppland	2,A,\$?	?
91.Overhassla, Uppland	?,A,\$	H	850-950.
92.Barkarby, Uppland	?,A,\$	H	850-950.
93.Oleda, Uppland	?,D	H	850-950.
94.Lagga Parish, Uppland	2,A,\$	E	850-900.
95.Ormangen, Uppland	6,D	?	?
96.Lagga Parish, Uppland	?,A,\$	E	850-900.
97.Vasby, Uppland	6,A,e,\$	H	850-950.
98.Ekeby, Uppland	?,A,\$	E	850-900.
99.Ekeby, Uppland	?,A	H	850-950.
100.Vattholma, Uppland	?,A,\$	H	850-950.
101.Ullstamma,			
Uppland	?,D	H	850-950.
102.Soderby, Uppland	6,A,e,\$	A	800-900.
103.Grave 9,Nyby,			
Uppland	2,A,\$?	?

104.Langtora, Uppland	2,A,\$	H	850-950.
105.Langtora, Uppland	?,A,a,#	L	850-950.
106.Langtora, Uppland	6,A,a,#	H	850-950.
107.Brunna, Uppland	6,D	H	850-950.
108.Snattsta, Uppland	4,D	H	850-950.
109.Vasby, Uppland	3,5,A,\$	H	850-950.
110.Sorback, Uppland	2,D	?	?
111.Saby, Uppland	3,4,A,c,\$	H	850-950.
112.Valsta, Uppland	6,A,\$	Special Type 2	800-900.
113.Visteby, Uppland	5,D	H	850-950.
114.Henriksberg, Uppland	5,A,\$	H	850-950.
115.Velanda, Uppland	2,A,\$	C	800-900.
116.Mellersta, Uppland	6,A,\$?	?
117.Mellersta, Uppland	2,A,\$?	?
118.Handelsmannen, Uppland	6,D	Z	1000-1050.
119.Humlegarden, Uppland	6,D	Z	1000-1050.
120.Skogs-Tibble, Uppland	3,6,A	?	?
121.Testa, Uppland	?,A	S	950-1000.
122.Teast, Uppland	6,A	?	?
123.Osterhagarna, Uppland	4,A,c,\$	H	850-950.
124.Osterhagnarna, Uppland	4,A,c,\$	E	850-900.
125.Brunnby Osterhagarna, Uppland	3,A,\$	H	850-950.
126.Brunnby Osterhagarna,			

Uppland	2,A,\$	H	850-950.
127.Grafsta, Uppland	3,A,\$?	?
128.Grafsta, Uppland	?,A,e,\$	E	850-950.
129.Grafsta, Uppland	?,A,\$	H	850-950.
130.Grafsta, Uppland	?,A,\$	H	850-950.
131.Grafsta, Uppland	5,A,\$	H	850-950.
132.Grafsta, Uppland	5,A,\$	E	850-900.
133.Grafsta, Uppland	2,A	?	?
134.Eke, Uppland	6,A,\$	H	850-950.
135.Eke, Uppland	5,A	X	950-1050.
136.Haggeby, Uppland	2,A,c	?	?
137.Haggeby, Uppland	5,D	H	850-950.
138.Skattange, Uppland	2,A,c	H	850-950.
139.Skattange, Uppland	5,6,D	H	850-950.
140.Tuna, Uppland	?,A,e,\$	H	850-950.
141.Frescati, Uppland	2,6,A,\$?	?
142.Suanby, Uppland	?,D	H	850-950.
143.Broby, Uppland	3,D	H	850-950.
144.Ullbro, Uppland	2,A	X	950-1050.
145.Fyrisan, Uppland	?,B,R	B	800-900.
146.Fyrisan, Uppland	2,B,R	H	850-950.
147.Fyrisan, Uppland	2,B,R	?	?
148.Stora Barsta,			
Uppland	3,6,A	L	850-950.
149.Grave 4, Karby,			
Uppland	2,4,A,c,\$	H?	850-950.
150.Mound 7, Karby,			
Uppland	6,A,c	H	850-950.
151.Mound 10, Karby,			
Uppland	4,A,c,\$	H	850-950.

152.Laberga, Uppland	?,A	?	?
153.Hemmesta, Uppland	?,D	C	800-900.
154.Harsback, Uppland	?,D	H	850-950.
155.Finneranger,			
Uppland	3,5,A,\$	H	850-950.
156.Vastland Parish,			
Uppland	?,D	B	800-900.
157.Kroksta, Uppland	?,A,c	Special Type 1	800-900.
158.Kroksta, Uppland	2,4,5,D	H	850-950.
159.Granby, Uppland	5,A,e,\$	H	850-950.
160.Granby, Uppland	5,A,\$	H	850-950.
161.Vallby, Uppland	?,D	E	850-900.
162.Osterange, Uppland	?,A,\$	H	850-950.
163.Grave 3, Ettinga,			
Uppland	6,A,\$	H	850-950.
164.Grave 7, Ettinga,			
Uppland	2,A	?	?
165.Broby, Uppland	?,A	H	850-950.
166.Olsta, Uppland	2,A,c	H	850-950.
167.Fors, Gastrikland	5,6,A,e,\$	L	850-950.
168.Sjokalla, Gastrikland	?,A,c	?	?
169.Berg, Gastrikland	?,A	X	950-1050.
170.Berg, Gastrikland	?,A	X	950-1050.
171.Berg, Gastrikland	?,D	?	?
172.Byn, Gastrikland	?,D	H	850-950.
173.Byn, Gastrikland	?,D	H	850-950.
174.Byn, Gastrikland	5,D	H	850-950.
175.Byn, Gastrikland	?,A	N	900-950.
176.Byn, Gastrikland	?,A	Y	950-1000.
177.Sodra Ringvage,			

Gastrikland	?,A,\$	Y	950-1000.
179.Strombo, Gastrikland	?,A,c,\$	H	850-950.
180.Sorby, Gastrikland	2,?	?	?
181.Albo, Gastrikland	?,A,c,\$	Z	1000-1050.
182.Olbo, Gastrikland	?,A,c	H	850-950.
183.Olbo, Gastrikland	?,A,c	H	850-950.
184.Grave II, Ostreda,			
Gastrikland	3,A,c	H	850-950.
185.Ostreda, Gastrikland	5,6,A	?	?
186.Ostreda, Gastrikland	?,D	H	850-950.
187.Ostreda, Gastrikland	?,D	H	850-950.
188.Ostreda, Gastrikland	?,A,c,\$	W	950-1000.
189.Bjorke, Gastrikland	2,A,c	H	850-950.
190.Fors, Gastrikland	2,?	?	?
191.Fors, Gastrikland	?,A,c	H	850-950.
192.Hille, Gastrikland	2,?	?	?
193.Oppala, Gastrikland	2,?	H	850-950.
194.Trodje, Gastrikland	6,A,e,\$	Special Type 2	800-900.
195.Trodje, Gastrikland	4,5,A	L	820-950.
196.Norra Abyggeby,			
Gastrikland	?,A,c,\$?	?
197.Norra Abyggeby,			
Gastrikland	?,A,c,\$	Special Type 2	800-900.
198.Abyggeby,			
Gastrikland	?,D	H	850-950.
199.Ostanbyn,			
Gastrikland	?,D	E	850-900.
200.Ostanbyn,			
Gastrikland	?,D	X	950-1050.
201.Ulstra, Gastrikland	2,D	?	?

202.Abyggeby,				
Gastrikland	?,D	H		850-950.
203.Norrbergs,				
Gastrikland	2,4,?	Y		950-1000.
204.Norrbergs,				
Gastrikland	?,A,c,\$	F		850-900.
205.Lungon, Gastrikland	?,A,e,\$	B		800-900.
206.Torsaker Parish,				
Gastrikland	2,?	?		?
207.Sarsta, Gastrikland	2,D	?		?
208.Arsunda Parish,				
Gastrikland	4,?	?		?
209.Arsunda Parish,				
Gastrikland	4,?	H		850-950.
210.Sorby, Gastrikland	?,A	E		850-900.
211.Sorby, Gastrikland	?,A,c,\$	Y		950-1000.
212.Arsunda Church,				
Gastrikland	5,6,A,c	?		?
213.Byn, Gastrikland	2,?	H		850-950.
214.Finnas, Gastrikland	5,A,c,\$	K		800-950.
215.Kungsgarden,				
Gastrikland	?,D	H		850-950.
216.Kungsgarden,				
Gastrikland	?,D	B		800-900.
217.Nassja, Gastrikland	4,?	H		850-950.
218.Gavlean, Gastrikland	?,A,c,\$	X		950-1050.
219.Gavlean, Gastrikland	?,A,c,4	Y		950-1000.
220.Gavlean, Gastrikland	4,5,D	B		800-900.
221.Noreland,				
Gastrikland	6,A,c,\$?		?

222.Noreland,			
Gastrikland	?,A,c,\$?	?
223.Noreland,			
Gastrikland	4,?	H	850-950.
224.Jarvsta, Gastrikland	?,A,c,\$	H	850-950.
225.Jarvsta, Gastrikland	?,A,c,\$	H	850-950.
226.Kungahall, Bohuslan	6,B,R	Z	1000-1050.
227.Hakeby, Bohuslan	?,A,c,\$	O	900-950.
228.Raftotangen,			
Bohuslan	?,A,c,\$	E	850-900.
229.Lilla Askeron, -			
Bohuslan	?,A,\$	H	850-950.
230.Bohuslan	?,D	E	850-900.
231.Leksand Parish,			
Dalarna	2,A	H	850-950.
232.Svenden, Dalarna	?,D	X	950-1050.
233.Foskvallen,			
Dalarna	?,D	B	800-900.
234.Krakberg, Dalarna	?,D	M	900-950.
235.Krakberg, Dalarna	2,A	?	?
236.Lindanget, Dalarna	?,A	Q	950-1000.
237.Lindanget, Dalarna	?,A	Q	950-1000.
238.Lindanget, Dalarna	3,A	X	950-1050.
239.Bispberg, Dalarna	?,A,#	?	?
240.Bengtsarvet,			
Dalarna	3,A,c,\$	Z	1000-1050.
241.Bengtsarvet,			
Dalarna	5,A,c,\$	Z	1000-1050.
242.Utanmyra,			
Dalarna	?,A,c,\$	V	950-1000.

243.Storsands Fjorden,			
Dalarna	?,B,L	?	?
245.Tunsta, Dalarna	6,A	H	850-950.
246.Vattangen,			
Dalsland,	?,D	Q	950-1000.
247.Tydie Parish,			
Dalsland,	6,?	Z	1000-1050.
248.Halland	4,?	F	850-900.
249.Falkenberg, Halland	6,B,R	?	?
250.Sylsjon, Harjedalen	3,A,\$	H	850-950.
251.Vik, Halsingland	?,A,\$	E	850-900.
252.Jamtland	2,?	?	?
253.Jamtland	2,?	?	?
254.Jorman, Jamtland	?,A,\$	S	950-1000.
255.Barvattnet,			
Jamtland	?,A,\$	M	900-950.
256.Risnas, Jamtland	?,A,*,\$	H	850-950.
257.Dalsvallen, Jamtland	?,A,\$	V	950-1000.
258.Enan, Jamtland	?,D,*	?	?
259.Klocka, Jamtland	?,D	X	950-1050.
260.Rosta, Jamtland	?,A,c,#	V	950-1000.
261.Ode, Medelpad	6,A,c,\$	H	850-950.
262.Sangis,			
Norrbatten	?,A,*,\$?	?
263.Grave 7, Jagarbacken,			
Narke	2,A,c,\$?	?
264.Grave 6b, Jagarbacken,			
Narke	2,A	M	900-950.
265.Jargarbacken,			
Narke	2,A	H	850-950.

266.Jagarbacken,				
Narke	6,A	?	?	
267.Sandby, Narke	5,D	X	950-1050.	
268.Mosjobotten,				
Narke	6,B,L	H	850-950.	
269.Grave 4, Husaberget,				
Narke	2,3,A,\$	H	850-950.	
270.Grave 7, Husaberget,				
Narke	5,A,\$	H	850-950.	
271.Arlov, Skane	?,A,#	H	850-950.	
272.Bosarp, Skane	2,A	X	950-1050.	
273.Travdora. Skane	?,D	B	800-900.	
274.Hammarsjon, Skane	?,D	H	850-950.	
275.Rya, Skane	?,D	O	900-950.	
276.Lund, Skane	6,C	Z	1000-1050.	
277.Kallby, Skane	2,A	A	800-900.	
278.Hagestad, Skane	?,D	H	850-950.	
279.Vikhogsvagen,				
Skane	?,D	H	850-950.	
280.Storakopinge,				
Skane	6,D	D	800-950.	
281.Vrangback, Skane	6,A,e	?	?	
282.Oppmunnsjon,				
Skane	?,B,L	D	800-950.	
283.Dyback, Skane	2,B,R	?	?	
284.Lackalanga, Skane	6,A,\$?	?	
285.Varenddsqtan,				
Smaland	6,A,c,\$?	?	
286.Bredaryd. Smaland	2,A,c,\$	E	850-900.	
287.Hagby, Smaland	2,D	B	800-900.	

288.Markestand,				
Smaland	3,B,R	V		950-1000.
289.Norsberg, Smaland	2,A,c	H		850-950.
290.Slotts fjorden,				
Smaland	2,B,L	?		?
291.Lanna, Smaland	6,D	H		850-950.
292.Broby, Smaland	4,A,e	Y		950-1000.
293.Ljungby, Smaland	?,D	V		950-1000.
294.Ljungby Parish,				
Smaland	2,A	H		850-950.
295.Ljungby Parish,				
Smaland	6,A	B		800-900.
296.Ljungby Parish,				
Smaland	?,A	B?		800-900.
297.Ljungby Parish,				
Smaland	?,A	H		850-950.
298.Ljungby Parish,				
Smaland	?,A,e,#	H		850-950.
299.Ljungby Parish,				
Smaland	?,A	B		800-900.
300.Navelsjon, Smaland	?,B,L	H		850-950.
301.Voxtorp Parish,				
Smaland	2,A	K		850-950.
302.Grave 6,Enehagen,				
Smaland	6,A,c,\$?		?
303.Grave 12,Enehagen,				
Smaland	?,A,c,\$	X		950-1050.
304.Grave 23, Enehagen,				
Smaland	6,A,c,\$?		?
305.Mosse Jossagard,				

	Smaland	6,A,c,\$	H	850-950
306.	Mosse Jossagard,			
	Smaland	6,A,c,\$	Z	1000-1050.
307.	Kejstad,			
	Sodermanland	6,?	H	850-950.
308.	Rafsta,			
	Sodermanland	2,D	H	850-950.
309.	Soderby,			
	Sodermanland	5,A,c,\$	H	850-950.
310.	Djalonus,			
	Sodermanland	2,?	Q	950-1000.
311.	Vrena,			
	Sodermanland	?,A	V	950-1000.
312.	Lideby,			
	Sodermanland	2,3,A,c	H	850-950.
313.	Lideby,			
	Sodermanland	2,3,A,c	E	850-900.
314.	Norrby,			
	Sodermanland	?,B,L	S	950-1000.
315.	Karlby,			
	Sodermanland	?,A,c,\$	H	850-950.
316.	Linga,			
	Sodermanland	?,A,c,\$	H	850-950.
317.	Linga,			
	Sodermanland	2,A,c,\$	D	800-950.
318.	Sodertajlje,			
	Sodermanland	?,A	Z	1000-1050.
319.	Brumby,			
	Sodermanland	5,A,c,\$	H	850-950.
320.	Back, Varmland	2,B,R	?	?

321.Harnas, Varmland	?,D	Z	1000-1050.
322.Arback, Varmland	?,B,R	B	800-900.
323.Skillinsmark Parish, Varmland	6,?	Z	1000-1050.
324.Tingshagen, Vastergotland	5,D	Special Type	800-900.
325.Ho, Vastergotland	2,3,A,e,#	M	900-950.
326.Krogstorp, Vastergotland	6,D	B	800-900.
327.Kvattak, Vastergotland	?,A,e,#	H	850-950.
328.Nossan, Vastergotland	?,B,R	B	800-950.
329.Ingelstrop, Vastergotland	2,?	B	800-950.
330.Nibble, Vastmanland	2,A,\$	H	850-950.
331.Bonsta Vastmanland	4,5,A	H	850-950.
332.Strobohog, Vastmanland	?,A,c	H	850-950.
333.Kvalsta, Vastmanland	4,A,\$	Y	950-1000.
334.Skasta, Vastmanland	2,B,L	V	950-1000.
335.Asby, Vastmanland	3,A,e,\$	H	850-950.
336.Fornebyas, Vastmanland	?,A	Z	1000-1050.

337.Kaplanbacken,				
Vastmanland	2,D	?		?
338.Gruffet,				
Vastmanland	2,4,A,e,\$	H		850-950.
339.Aby, Vastmanland	2,A,\$	H		850-950.
340.Lilla Djarbo,				
Vastmanland	2,4,A	?		?
341.Overnag,				
Vastmanland	?,D	H		850-950.
342.Ingelsta,				
Vastmanland	5,A,c,\$	H		850-950.
343.Backa,				
Vastmankland	5,A,c\$	H		850-950.
344.Gallsutter,				
Angermanland	?,D	X		950-1050.
345.Holm,				
Angermanland	?,A,c	H		850-950.
346.Boda Kronopark,				
Oland	6,A,b,#	?		?
347.Skarlov, Oland	2,D	?		?
348.Skarlov, Oland	2,D	?		?
349.Skarlov, Oland	2,D	?		?
350.Skarlov, Oland	2,D	?		?
351.Grondal, Oland	6,D	?		?
352.Klinta, Oland	?,A,c,\$	Special Type		800-900.
353.N. Kninnby, Oland	3,D	H		850-950.
354.Fornas Churchyard,				
Ostergotland	2,?	?		?
355.Aska, Ostergotland	?,D	X		950-1050.

356. Aska, Ostergotland ? ,D	H	850-950.
357. Ullevi, Ostergotland ? ,A,c	Special Type 2	800-900.
358. Stangebros, Ostergotland 6,D	W	950-1000.
359. Ruda, Ostergotland ? ,A	H	850-950.
360. Fridhem, Ostergotland 6,A,c	H	850-950.
361. Halterstad, Ostergotland ? ,B,R	?	?
362. Fiskby, Ostergotland ? ,B,R	H	850-950.

Sources:

Androschuk, F. *Viking Swords. Swords and Social Aspects of Weaponry in Viking Age Societies*. Stockholm: Historiska Museet (2014) 287-293, 329-470.

Arbman, H. *Birka I. Die Gräber. Text*. Uppsala, Sweden: Almqvist & Wiksells (1943).

Arbman, H. *Birka I. Die Gräber. Tafeln*. Uppsala, Sweden: Almqvist & Wiksells (1940.)

Summary:

Condition:

1. Intact:	0
2. Incomplete:	84
3. Corroded:	36
4. Broken:	32
5. Bent:	35
6. Fragmentary:	64

Unknown: 143

Single-Edged Swords: 3

Combined Conditions:

2,3--Incomplete/Corroded: 10

5,6--Bent/Fragmentary: 4

3,5--Corroded/Bent:	3
4,5--Broken/Bent:	3
2,4--Incomplete/Broken:	2
3,6--Corroded/Fragmentary:	2
All Others:	6

Context:

A. Burials/Graves:	233
Cremation Graves:	112
Inhumation Graves:	40
a. Chamber graves:	29
b. Boat Graves:	7
c. Burial Mounds:	67
d. Stone (Cairns):	15
B. Bodies of Water:	21
Rivers:	13
Lakes, Pond, etc.:	8
C. Settlements:	17
D. Stray Finds:	71
Unknown:	19

Petersen Types:

Special Type: (800-900):	4
Special Type 1 (800-900):	2
Special Type 2 (800-900):	4
Type A (800-900):	3
Type B (800-900):	18
Type C (800-900):	3
Type D (800-950):	3
Type D or E (800-900):	1

Type E (850-900):	20
Type F (850-900):	2
Type H (850-950):	146
Type K (800-950):	3
Type L (850-950):	5
Type M (900-950):	5
Type N (900-950):	2
Type O (900-950):	2
Type Q (950-1000):	4
Type S (950-1000):	4
Type V (950-1000):	12
Type W (950-1000):	2
Type X (950-1050):	21
Type Y (950-1000):	10
Type Z (1000-1050):	12
Unknown:	71

51 swords and parts of swords, for instance, have been found in Birka. 115 were found in Uppland, and 58 in Gastrikland. 14 from Dalarna are listed; 22 from Smaland; 13 from Sodermanland; 23 from Vastmanland. These numbers could reflect population centers, but they could also reflect where archaeologists investigated.

Once again, Type H swords dominate what has been found with 146. 80 Type Hs were found in Birka and Uppland, which geographically are neighbors. Gastrikland had 21. Dalarna had 2. Narke had 3. Skane had 4. Smaland had 7. Sodermanland had 6. Vastmanland had 5, and Ostrogotland had 4. Type H swords were well dispersed. Some of these Type H swords were probably imported.

Other notable types of swords are B, E, V, X, Y, and Z. Sword Types E, V, and Z all had decorated hilt constructions. Types B, X, and Y didn't have decoration on their hilt constructions (5). Adding up all this, there were 44 decorated hilt constructions, and 49 undecorated hilt constructions—just about

even. Taking the times when these sword types circulated, the Early Viking Age or the Late Viking Age, speculation about the changing aesthetics in conjunction with changing social/political classes can only be the subject of speculation.

Turning to the continued interest in Type L swords, there are five listed. Three in Uppland, and two in Gastrikland. One Type L is from a boat grave at Ultuna. All five swords were found in districts that bordered the Baltic Sea. Here the Type L might be an object of trade.

The majority of swords were found in graves. The amount of swords of unknown context, 19, is small. 26 of the 29 chamber graves listed are from Birka. Five of the seven boat/ship burials are from Valsgarde. One boat burial is from Ultuna, Uppland. Another is from the Island of Oland. 15 swords were found in stone cairn burials. Finding three different burial forms in Sweden dated to the Viking Period suggests a complexity of culture. Nothing was monolithic, and different traditions possibly collided during the time. The boat/ship graves of Valsgarde and elsewhere suggest a dynastic practice, where the chamber graves of Birka suggest a more “urban” practice.

But these chamber graves and boat/ship burials are the exception, rather than the rule, speaking archaeologically. 112 cremation burials are listed. 67 grave mounds are also listed. Little else is known about many of these graves. The study of swords within Swedish Viking Period graves can only point towards a conclusion, but not validate it.

Denmark

Danish archaeology owes much to J.A.A. Worsaae. His promotion of the Three Age System is considered part of the foundation of the entire discipline. His influence cannot be overstated, and his work is discussed above.

S. Muller and his work *Vor Oldtid* (4) built upon Worsaae's legacy. But modern Danish archaeology can be attributed to Johannes Brondsted. He published widely, and contributed a great deal to the study of the Viking Period. His longest lasting work is the article, "Danish Inhumation Graves of the Viking Age" (5) published in 1936. It is used here.

There are a great many Danish archaeological works concerning the Viking Period, in both settlement and burial archaeology. For settlements the works on Trelleborg, Frykat, Aggersborg, and Ribe come to mind. For burials and graves, Ramkou's work on cremation burials (6), and Pedersen's work on equestrian graves are excellent examples (7). Finally, with the discovery of Viking Period ships underwater at Roskilde, more information than ever is now available than ever.

The subject of the emporium at Hedeby/Haithabu (8) requires separate consideration. The site may have been Danish during the Viking Period, but Hedeby was excavated and documented by German archaeologists. Notable German archaeologist H. Jankuhn excavated Hedeby under the authority of the German Government in the 1930s (9). After World War II, the examination of objects from the site was (eventually) conducted by M. Muller-Wille (10), and indeed, the examination of swords and sword part was conduct by the German A. Geibig. The reason for the German presence at Hedeby was that the area was annexed by them in the 19th Century.

The Hedeby cemeteries, where swords would be expected to be found, are described by S. Eisenschmidt (11). Six cemeteries are presented: two north of the semi-circular that enclosed the town; three within the rampart; and one very large cemetery south of the rampart. In all some 1350 burials have been excavated, Eisenschmidt states that there many, many more—possibly 10,000.

As stated above, the sword found in an around Hedeby were examined and classified by A. Geibig, who applied his own typology to these weapons. Geibig published two articles about the Hedeby swords. The first published in 1989 is a general catalog (12). The second article was published

in 1999 and is about the swords from the port or harbor (13). The differences between the two articles will be noted by date and place in the list below.

Location	Scheme	Petersen Type	Date
1.Sword 1, Hedeby Port	2,3,4,B,C	Mannheim	750-850.
2.Sword 2, Hedeby Port	3,B,C	H/I	850-950.
3.Sword 3, Hedeby Port	2,3,B,C	H	850-950.
4.Sword 4, Hedeby Port	3,B,C	N? X?	950-1000.
5.Sword 5, Hedeby Port, 1999	2,3,B,C	N? X?	950-1000
6.Sword 6, Hedeby Port, 1999	2,3,B,C	D or E	800-900.
7.Sword 7, Hedeby Port, 1999	1,B,C	Y	950-1000.
8.Sword 8, Hedeby Port, 1999	6,B,C	Y	950-1000.
9.Sword 9, Hedeby Port, 1999	6,B,C	M?	900-950.
10.Sword 11, Hedeby Port, 1999	6,B,C	L	850-950.
11.Sword 12, Hedeby Port, 1999	3,B,C	L	850-950.
12.Sword 1, Hedeby, 1989	6,A,\$	H?	850-950.
13.Sword 3, Hedeby, 1989	6,C	?	?
14.Sword 4, Hedeby, 1989	6,C	?	?
15.Sword 5, Hedeby, 1989	3,A,a,b,#	Special Type 2	800-900.
16.Sword 6, Hedeby, 1989	2,3,A,a,#	N? V?	?
17.Sword 7, Hedeby, 1989	6,C	H?	850-950.
18.Sword 8, Hedeby, 1989	6,C	?	?
19.Sword 11, Hedeby, 1989	6,D	?	?
20.Sword 12, Hedeby, 1989	2,3,A,a,b.#	K	800-950.
21.Sword 13, Hedeby, 1989	3,A,a,b,#	K	800-950.
22.Sword 14, Hedeby, 1989	6,C	?	?
23.Sword 15, Hedeby, 1989	6,C	L?	850-950.
24.Sword 16, Hedeby, 1989	6,C	X?	950-1050.
25.Sword 17, Hedeby, 1989	6,D	X?	950-1050.

26.Sword 18, Hedeby, 1989	6,C	X?	950-1050.
27.Sword 21, Hedeby, 1989	6,D	R or S	950-1000.
28.Sword 22, Hedeby, 1989	2,3,A	S	950-1000.
29.Sword 23, Hedeby, 1989	2,6,A	S	950-1000.
30.Sword 24, Hedeby, 1989	6,C	?	?
31.Sword 25, Hedeby, 1989	6,C	?	?
32.Sword 26, Hedeby, 1989	6,D	S	950-1000.
33.Sword 27, Hedeby, 1989	2,3,4,D	E	850-950.
34.Sword 28, Hedeby, 1989	3,A	D or E	800-900.
35.Sword 29, Hedeby, 1989	6,D	X?	950-1050.
36.Sword 31, Hedeby, 1989	3,A	X	950-1050.
37.Sword 32, Hedeby, 1989	6,D	P	950-1000.
38.Sword 35, Hedeby, 1989	6,C	?	?
39.Sword 36, Hedeby, 1989	6,C	L? Q?	?
40.Sword 37, Hedeby, 1989	6,C	?	?
41.Sword 43, Hedeby, 1989	6,C	H?	850-950.
42.Sword 44, Hedeby, 1989	6,C	?	?
43.Sword 45, Hedeby, 1989	6,C	?	?
44.Sword 46, Hedeby, 1989	6,C	?	?
45.Sword 47, Hedeby, 1989	6,C	?	?
46.Sword 48, Hedeby, 1989	6,D	This find is a highly decorated hilt/guard of no type.	
47.Kammerhoj	2,A,a,c,#	V	950-1000.
48.Grave 1, Hald	2,A,a,c,#	X	950-1050
49.Grave 2, Hald	2,A,c,#	X	950-1050.
50.Farso	3,A,a,c,#	X	950-1050.
51.Laastrup	2,A,a,c,#	X	950-1050.
52.Herson	6,A,a,c,#	?	?
53.Roum	2,A,c,#	?	?
54.Kolind	6,A,#	X	950-1050.
55.Smollerup	6,A,c,#	?	?

56.Fly	1,A,a,c,#	X	950-1050.
57.Fly I	3,A,a	H	850-950.
58.Ravnholt	3,A,a,d,#	U	950-1000.
59.Broager	2,3,4,A,a,d,#	X	950-1050.
60.Grave I, Ketting	2,A,a,d,#	U	950-1000.
61.Grave 1, Stengard	2,5,A,a	V	950-1000
62.Grave 3, Stengard	3,A,a,#	V	950-1000.
63.Grave 2, Norre Longlse	2,3,A,#	V	950-1000.
64.Hoby	2,3,A,d,#	X	950-1000.
65.Errindlev	3,A,a,d,#	V	950-1000.
66.Herlafmagle	2,3,A,d,#	Q	950-1000.
67.Magleo	2,A,c,#	S	950-1000.
68.Frolande	2,3,A,a,d,#	S	950-1000.
69.Bodehoj	?,A,c	?	?
70.Kirkemosgard	3,A	H	850-950.
71.Maestelso Mark	2,3,A,c	E	850-950.
72.Busdorf 1	?,A,c	?	?
73.Busdorf 2	?,A,c	?	?
74.Vrangaback	6,A,c	?	?
75.Rya	6,A	O	950-1000.
76.Petersdal	?,A,*,#	?	?
77.Lerchesminde	6,A,c	?	?
78.Horby Faeggehus	2,3,A,e,#	A	800-900.
79.Magleo 1	2,A,c,#	S	950-1000.
80.Frolev	2,A	?	?
81.Mollebanken	3,4,A,#	K	850-950.
82.Flintingegard	6,A,b	?	?
83.Rosenland	1,A	T	950-1000.
84.Hjalby, Kirkebakke	2,A	?	?
85.Daeholm Mark	6,A	?	?

86.Near Aalborg	2,6,?	Q	950-1000.
87.Naesby	4,A	H	850-950.
88.Tastum Mark	6,A,#	H	850-950.
89.Lushoj/Smollerup	?,A,#	?	?
90.Bollanko	?,A,#	?	?
91.Brandstrup I	3,A,a	R	950-1000.
92.Torshoj	?,A,a	?	?
93.Veggevslev	2,3,A	M	900-950.
94.Agernvej/Grimstrup	3,4,A,a	H/I	850-950.
95.Rends	2,A	X	950-1050.
96.Melsgard/Oksbol	?,A,a	?	?
97.Kettingskov/Lokkerled	?,A,#	?	?
98.Sottrup	?,A	?	?
99.Kasmusmolle/Ullerup	?,A	?	?
100.Arnbol	3,A	A	800-900.
101.Quern-Scheersberg	4,A	?	?
102.Boel, Chamber I	2,3,A,a	V	950-1000.
103.Grave 4, Norderbrarup	2,3,6,A,a,#	D or E	800-900.
104.Grave 1A, Suderbrarup	2,3,A,a	V	950-1000.
105.Tolk	6,A,a	?	?
106.Mound 34, Grave I, Nebel-Steennodde	?,A,c	?	?
107.Mound 37, Grave I, Nebel-Steennodde	5,A,c,\$?	?
108.Mound 41, Grave II, Nebel-Steennodde	5,A,c,\$?	?
109.Mound 49, Nebel-Steennodde	5,A,c,*, \$?	?
110.Mound 70, Sword I Nebel-Steennodde	5,A,c,\$?	?

111.Mound 70, Sword II,			
Nebel-Steennodde	5,A,c,\$?	?
112.Mound C,			
Nebel-Steennodde	?,A,c,\$?	?
113.Nebel-Bergam	6,A,\$?	?
114.Nebel-Bergam	6,A,\$?	?
115.Grave VIII, Goting-Gratberg 4,A,#,\$?	?
116.Westerland	?,A,\$?	?
117.Mound b, Wasterbergem	6,A,c,\$?	?
118.Keitum	?,A,\$?	?
119.Arlov	?,A,a	?	?
120.Onsvala	?,A	?	?
121.Venestad	?,A	?	?
122.Stora Kopinge	?,A	?	?
123.Bosarp	3,A,a,#	X	950-1050.
124.Kallby	2,3,A,#	?	?
125.Lackalanga	6,A	?	?
126.Hjarno	?,A,"b",e,\$?	?
127.Fohr	2,3,6,A,\$	E?	850-950.
128.Fohr	5,A,\$?	?
129.Ullerup, Sonderberg	3,A	M?	900-950.
130.Leck	6,D	?	?
131.Fedderingen	3,D	H	850-950.
132.Brekendorf	3,D	X	950-1050.
133.Imprecise Location	2,6,D	O	950-1000.
134.Imprecise Location	2,3,D	N	950-1000.

Sources:

Brondsted, J. "Danish Inhumation Graves of the Viking Age." *Acta Archaeologica*. (1936) 6-228.

Eisenschmidt, S. *Kammergraber der Wikingerzeit in Altdanemark*. Bonn, Germany: Dr. Rudolf Habelt GmbH (1994) ISBN: 3774926646.

Geibig, A. "Zur Formenvielfalt der Schwerter und Schwertfragmente von Haithabu." *Offa*. Band 46 (1989) 223-260.

Geibig, A. "Die Schwerter aus dem Hafen von Haithabu" In: *Das Archäologische Fundmaterial VI*. Neumunster, Germany: Wachholtz Verlag (1999) 10-91. ISBN: 352901933X.

Müller-Wille, M. "Krieger und Reiter im Spiegel früh- und hochmittelalterlicher Funde Schleswig-Holsteins." *Offa*. Vol. 34 (1977) 40-74.

Pedersen, A. *Dead Warriors in Living Memory*. Copenhagen: National Museum of Denmark (2014). ISBN: 9788776748401.

Ramskou, T. "Viking Age Cremation Graves in Denmark." *Acta Archaeologica*. (1950) 137-182.

Summary:

Condition:

1.(Intact):	3
2.(Incomplete):	37
3.(Corroded):	39
4.(Broken):	7
5.(Bent):	7
6.(Fragmentary):	46
Unknown:	19

Combinations:

2/3--Incomplete/Corroded:	16
2/3/4--Incomplete/Corroded/Broken:	3
2/6-- Incomplete/Fragmentary:	2
3/4--Corroded/Broken:	2
2/3/6--Incomplete/Corroded/Fragmentary:	1
Single-Edged Swords:	2

Context:

A.Graves/Burials:	90
a.Chamber	28

b.Boat/Ship	4
“b” Pseudo-boat:	1
c.Mound:	24
d.Flat:	7
e.Stone:	1
Combined Forms:	
a,b--Chamber/Boat:	3
a,c--Chamber/Mound:	6
a,d--Chamber/Flat:	4
Cremation Burials:	15
Inhumation Graves:	35

B/C: Water/Settlement (Harbor at Hedeby): 11

C: Settlement: 18

D: Stray 13

Petersen Types:

Mannheim (750-850):	1
Special Type 2 (800-900):	1
Type A (800-900):	2
Type D or E (800-950):	11
Type K (800-950):	3
Type L (850-950):	3
Type M (900-950):	3
Type N (950-1000):	1
Type O (950-1000):	2
Type Q (950-1000):	1
Type R (950-1000):	1
Type S or R (950-1000):	1
Type S (950-1000):	6

Type T (950-1000):	1
Type U (950-1000):	2
Type V (950-1000):	7
Type X 950-1050):	16
Type Y (950-1000):	2
Unknown:	61

The above list was difficult to compile. The information for many of the entries was found in multiple sources. One source would include the Petersen Type; another source would have more information on the burial. A third source would have an illustration of the weapon, so the condition of the sword was clearer.

With Denmark three numbers are of note. The first is the number of swords of unknown type—61. The second is the number of sword in fragmentary condition—46. The third is the total number of swords—134.

26 of the 61 swords of unknown type are fragmentary. 12 of that 26 are from Hedeby. A fragmentary condition does not explain the 35 swords listed of unknown type. The explanation for this significant number is that the authors of the sources had different interests in mind when conducting research and writing publication. That a sword was found in a chamber grave is noted. The type and condition of that weapon is of lesser importance.

Also, these 26 fragments of swords does not take the other 20 (for a total of 46) in account. The most obvious cause for swords fragmenting is corrosion. If an iron sword is placed in burial of porous soil, it will rust. Eventually the iron will rust into a reddish stain. Another possible reason for swords, or at least parts of swords, being found as fragments, is the retro-fitting of guards, pommels and handles. The retro-fitting of these parts is a speculative conclusion of archaeology. The fragments found in the

various emporia, such as Hedeby, suggest the possibility of owners “customizing” their weapons with new guards, pommels and additions to the handle. The purpose here is show more wealth and thus more power belonging to the owner. The obvious fragment that suggests this retro-fitting is Item 46 in the above list. The hilt/guard was cast and is highly decorated. Why and how it became a stray find is unknown, but the object shows the possibilities of what was done.

Yet, the most interesting number from Denmark is the total number of swords. For being a native country of Scandinavian “Viking” 134 is low. The numbers become even more interesting when the number of graves containing sword is compared. Denmark had 90. Sweden had 233. This difference is not for the lack burials and graves in Denmark, but for the lack of sword in these Danish graves. For instance, the graveyard at Lindholm Hoje has burials dated to the before the period and during the Viking Period. No graves contained sword, and in fact, with the exception of one grave, no weapons were found (14). These numbers suggest that the Danes of the period had better uses for their weapons, or different ways of burying their dead.

Turning again to a continued interest in Type L swords, three of them are listed above. All of them were found at Hedeby, but none are from graves. Two were found in the harbor—one fragment and one incomplete sword. The third Type L fragment was found in the settlement. It may have belonged to a sword that was possibly retro-fitted. A possible fourth Type L fragment is also listed, but the object may have also belonged to a Type Q sword. This shows Type L swords as being possible items of trade, rather than gifts.

Lastly the form of grave for entry 126, Hjarno, needs to be explained. The burial is listed as boat grave, but with quotations marks around it. In the summary a “psuedo-boat grave” is listed. This is the burial at Hjarno. The psuedo-boat grave is a burial in the shape of a boat or ship, but does not contain a boat. The “boat” is usually outlined with large stones, which entry 126 is also considered a burial with

stones. Many of the burials at Lindholm Høje have this type (15).

Observations:

When including Denmark and Sweden in the same chapter, a comparison between Birka and Hedeby is inevitable. Both places were emporia and trading centers. Both emporia had a good number of sword fragments found in the settlement area. Both have graveyards—about 1160 for Birka and 1350 for Hedeby.

But when it comes to graves containing swords, the similarities end. Birka has 35 graves with swords. Hedeby has 5, but has one of the most spectacular graves of the period. This is the boat-chamber grave, which contained three swords. This grave had a chamber below a ship, all buried inside the rampart that made the border of the emporia. Birka had some important chamber graves, many with swords and other valuable objects in them, but, really nothing like the one at Hedeby.

The differences here are obvious. What caused the differences is another matter. If only Birka and Hedeby contained burials like chamber graves and boat/ship grave, then a comparison as a matter of power would be easy. But Birka is not the only Swedish location to contain prestigious burials (with or without swords), and Hedeby is not the only Danish location to contain prestigious burials (with or without swords). The possible expression of power through burial practices must first compare Birka with the rest of Sweden, and Hedeby with the rest of Denmark.

To compare Sweden with Denmark is another matter. That Denmark has less burials with swords than Sweden suggests a difference of attitude with swords. Also, the notable lack of swords in Denmark suggests a difference in power structures than in Sweden. Of course, first the Viking Period power structures of both nations must be understood first. Burials with swords (and other objects) can contribute a great deal, but these weapons burials cannot tell the entire story.

Notes:

1. Montelius, O. *Antiquies Suedois*. Stockholm: P.A. Norstedt and Soner (1873).
2. Culin, S. "Hjalmar Stolpe." *American Anthropologist. New Series*. Vol. 8, #1 (1906) 150-156. This scholarly obituary has a bibliography at the end of the article.
3. Arne, T.J. and H. Stolpe. *Graffaltet vid Vendel*. Stockholm: K.L. Beckmans Boktryckeri (1912)
4. Arbman, H. *Birka I. Die Graber. Text*. Uppsala, Sweden: Almqvist & Wiksells (1943).
5. Muller, S. *Vor Oldtid. Danmarks Forhistoriske Archaeologi*. Copenhagen: Det Nordiske Forlag (1897).
6. Brondsted, J. "Danish Inhumation Graves of the Viking Age." *Acta Archaeologica* (1936) 6-228.
7. Ramskou, T. "Viking Age Cremation Graves in Demark. A Survey." *Acta Archaeologica* (1950) 137-182.
8. Pedersen, A. *Dead Warriors in Living Memory*. Copenhagen: National Museum of Denmark (2014). ISBN: 9788776748401.
9. The current word for settlements like Hedeby, Birka and others is "emporium." I believe the use was started by Chris Wickham or Ian Hodges.
10. Jankuhn, H. *Haithabu, eine Germanische Stadt der Fruhzeit*. Neumunster in Holstein K. Wachholtz (1937). This book is Jankuhn's first on Hedeby. His book on the graves of Hedeby, *Die Ausgrabungen in Haithabu. 1937-1939* was published in 1943 by the SS Ahnenerbe.
11. Muller-Wille, M. and H. S. Eriksson. *Hedeby, en sohandelsstad i vikingetiden*. Copenhagen: (1967).
Muller-Wille, M. "Berichte uber die Ausgrabungen in Haithabu, Band 1-3." *Zietschrift der Gesellschaft fur Schleswig-Holsteinische Geschichte*. 95 (1970) 256-259.
12. These two citations are the first publication of Muller-Wille concerning Hedeby. There are more. Look on www.mueller-wille.de for a very full list of this archaeologist's works.
13. Eisenschmidt, S. "The Viking Age Graves from Hedeby." In: *Viking Settlements and Viking Society*. S. Sigmundsson (ed.): Reykjavik: University of Iceland (2011) 83-102.
14. Geibig, A. "Zur Formenvielfalt der Schwerter und Schwertfragmente von Haithabu." *Offa*. Band 46 (1989) 223-260.
15. Giebig, A. "Die Schwerter aus dem Hafen von Haithabu" In: *Das Archaologische Fundmaterial VI*. Neumunster, Germany: Wachholtz Verlag (1999) 10-91. ISBN: 352901933X.
16. Ramskou, T. *Lindholm Hoje Gravpladsen*. Copenhagen: F. Hendriksens Eftf. (1976).
17. Ramskou, Ibid. *Lindholm*.

Chapter Five: The Baltic

Consisting of Denmark, Sweden, Gotland, Poland, the territory once called Prussia, Lithuania, Latvia, Estonia, and Finland, there are a variety of nationalities living around the Baltic Sea. These cultures and sub-cultures require consideration before examining any source of information. The Baltic Sea Nationalities have *archaeologies*, not an archaeology, and so present a complicated task. While the term Viking Period can be used with Denmark and Sweden, there are other considerations with the other nations living around this northern sea. These considerations, along with a large sample of objects, require a separate chapter.

Gotland

Gotland is a large island in the Baltic Sea, and was possibly the richest location in the area during the Viking Period. The island's position and size within the sea made it a useful port and trading partner. Archaeology certainly testifies to the wealth of Gotland during the Early Middle Ages, and can arguably prove the possible sovereignty of the island during that period.

However, Gotland has been under the control of the Swedish Government since the mid-17th Century. Thus the Archaeology of Gotland was conducted by Swedish archaeologists. While excavations are still ongoing (1), the dominant source for the Viking Period is *Der Wikingerzeit Gotlands* by L. Thalin-Bergmann (2). This work is immense with seven books in four volumes. Using this source takes time and patience. Furthermore, in the United States very few institutions own a full set. As such, I have been able to access only a couple of volumes obtained through interlibrary loan (3).

Place	Scheme	Petersen Type	Date.
1.Grave 9, Ihre/Ire	5,A,#	?	?
2.Grave 14, Ihre/Ire	?,A,*,\$,#	?	?
3.Grave 15, Ihre/Ire	?,A,#,*	?	?

4.Grave 17, Ihre/Ire				
SHM20550:169	?,A,\$	H?		850-950.
5.Grave 23, Ihre/Ire				
SHM20550:172	2,A,\$?		?
6.Grave 24, Ihre/Ire	?,A	?		?
7.Grave 25, Ihre/Ire	2,A,\$	H		850-950.
8.Grave 28, Ihre/Ire	?,A,\$?		?
9.Grave 31, Ihre/Ire				
SHM20826:364	?,A,\$,*	?		?
10.Grave 34, Ihre/Ire (No.1)	2,3,4,A,\$	A		800-900.
11.Grave 34, Ihre/Ire (No.2)	2,3,4,A,\$	A?		800-900.
12.Grave 37, Ihre/Ire				
SHM20550:175	2,3,A,\$	H		850-950.
13.Grave 50, Ihre/Ire	2,3,5,A,\$	H		850-950.
14.Grave 51, Ihre/Ire (No.1) (GO75)				
SHM20550:174a	2,3,A,\$	B		800-900.
15.Grave 51, Ihre/Ire (No.2)				
SHM20550:174b	2,A,\$	H		850-950.
16.Grave 61, Ihre/Ire				
GFC9322:38-40	2,3,A,\$	D		800-950.
17.Grave 64, Ihre/Ire	4,5,A	N		900-950.
18.Grave 112, Ihre/Ire				
GFC9322:310-321	3,A,#	X		950-1050.
19.Grave 113, Ihre/Ire				
GFC9285:125-140	3,A,#	L		850-950.
20.SHM 16905,				
Moor Martebomyr	?,A	Mannheim		750-850.
21.SHM 20682,				
Moor Martebomyr	?,A	H		850-950.
23.SHM 17444, Smiss	6,A	?		?

24.GFC 1703-10, Hogbro	?,A,*	?	?
25.SHM 1256, Sandegarde	2,A	H	850-950.
26.SHM 4745, Mafrids, Vastergarn	2,3,A	H	850-950.
27.Levide	6,A	?	?
28.GFC 3706, Allkvie, Vallstena	2,A	?	?
29.GFC 849, Bjarge, Vallstena	?,A,*	?	?
30.SHM 5604:20, Bjarge, Vallstena	?,A,#	C	800-900.
31.Grave 156A-B, Bjarge, Vallstena	2,4,A	?	?
32.SHM 5083, Gudings	4,A	?	?
33.SHM 5485, Gudings, Vallstena	6,A	?	?
34.GFC 977, Gudings, Vallstena	?,A,*	?	?
35.SHM 20502, Gudings, Vallstena	2,A	?	?
36.SHM 2776, Vallstena	2,A,*	C? H?	?
37.GFC 4778	3,6,A	?	?
38.GF Dept. C 973	2,?	H	850-950.
39.GF Dept. C 975	?	H	850-950.
40.GF Dept. C 978	?,*	?	?
41.GF Dept. C 979	?,*	?	?
42.SHM 11106, Broa, Hogbro	3,4,5,A	?	?
43.SHM 10746, Broa, Hogbro	6,A	?	?
44.SHM 11106, Broa, Hogbro	2,3,A	H	850-950.
45.Grave 1, Broa, Hogbro,			

SHM19734:3C	2,3,4,A	H	850-950.
46.Grave 2, Broa, Hogbro,			
SHM19734:3C	2,3,A	H	850-950.
47.SHM 20517:17, Broa, Hogbro	3,4,5,A	H	850-950.
48.SHM 20826:363 (GO92), Ire	2,3,4,5,A	Special Type 2	800-900.
49.SHM 20550:187, Ire	2,3,5,A	H	850-950.
50.GFC 10167, Visby	2,3,4,A	?	?
51.GFC 4778, Grave 1			
Lammelanda	3,A	Special Type 1	800-900.
52.Grave 2, Lammelanda	3,A	Special Type 2	800-900.
53.SHM7900A, Grave 1, Helvi	3,A	D	800-950.
54.GFC 12036, Grave 2, Helvi	1,A	D	800-950.
55.Gr 156/92, Lilla Bjarge	3,A	D	800-950.
56.SHM 20826: 351, Ire	3,A	Special Type 1	800-900.
57.GFC 6788, Vate	3,A	?	?
58.SHM 20825:357, Ire	2,4,A	H	850-950.
59.SHM14623, Bjarge			
Vallstena	3,A	C	800-900.
60.SHM 17291:2, Gauthem	3,A	H	850-950.
61.GF Dept C 977, Vallstena	3,A,*	?	?
62.GFC 10038, Boge	2,3,4,D	?	?
63.Martebo	3,4,A	H?	850-950.
64.SHM 20263, Halla	3,A	D	800-950.
65.SHM 907, Hogran	3,4,A	H	850-950.
66.GF Dept 974, Visby	2,3,A	H	850-950.
67.Grave 369, Ire	2,A	M	900-950.
68.SHM 2363, Hejnum	3,A	H	850-950.
69.SHM 6532, Hogram	3,A	M	900-950.
70.GFC 8016	3,4,A	N	900-950.
71.SHM 20502, Vallstena	3,A	N	900-950.

72.SHM 13462, Fordhem	2,A	Q	950-1000.
73.SHM 20826: 372, Ire	6,A	A	800-900.
74.GFB 1915, Sanda	6,A	?	?
75.SHM 1256, Sanda	3,A	H	850-950.
76.SHM 11125, Roma	2,4,A	H	850-950.
77.SHM 7871:130, Grotlingbo	2,A	H	850-950.
78.SHM 20826:369, Ire	2,A	?	?
79.SHM 12773:2, Barlingbo	2,A	H	850-950.
80.SHM 8787, Boge	3,A	A	800-900.
81.SHM 2309, Hungvar	3,6,A	?	?
82.Logsta	2,A	?	?
83.SHM 10498	6,A	C	800-900.
84.SHM 14065, Val	6,A	?	?
85.SHM 12529, Hemse	6,A	?	?
86.SHM 14851:21, Tringstade	6,A	?	?
87.Fole	6,A	?	?
88.SHM 20823:364, Ire	3,5,A	?	?
89.Grave 1, Barlingbo, Lillmyr	3,4,5,A,*	H	850-950.
90.Barlingbo, Lillmyr	3,5,A	N	900-950.
91.Barlingbo, Lillmyr	4,5,A	H	850-950.
92.Barlingbo, Lillmyr	3,5,A	Special Type 2	800-900.
93.Barlingbo, Lillmyr	3,5,A	N	900-950.
94.SHM 20517:22 (GO64)	6,D	A	800-900.
95.SHM 16905 (GO112), Burge	3,D	Special Type 2	800-900.
96.GO 183	3,?	Special Type 2	800-900.
97.GO 40, Gardese	3,?	H	850-950.
98.SHM5604:20 (GO141), Bjare	3,A,#	B	800-900.
99. (GO87), Ire	3,A,	E	850-950.
100.SHM7571:235 (GO33), Endre	2,3,5,D	H	850-950.

101.SHM8900 (GO35), Valve	6,A,#	?	?
102.SHM2304 (GO67), Austers	2,A	H	850-950.
103.SHM17291:1 (GO39), Gardsee	3,?	H	850-950.
104.SHM19735:25 (GO55), Broe	3,4,5,A	H	850-950.
105.SHM20550: 184 (GO80), Grave 184, Ire	3,A	H	850-950.
106.SHM14065 (GO137), Kalstade	6,A	?	?
107.SHM11125 (GO121), Hogbro	6,D	H	850-950.
108.SHM20856:369 (GO95) Grave 369, Ire	1,A,\$	H	850-950.
109.SHM6532 (GO108), Alands	3,A,#	H	850-950.
110.SHM12292 (GO118), Aner	3,D	H	850-950.
111.GO118, Smiss	3,A,\$	H	850-950.
112.GO126, Sandegarde	3,4,C?	H	850-950.
113.GO127, Sandegarde	3,4,C?	H	850-950.
114.GO128, Sandegarde	2,3,4,C?	?	?
115.GO155, Norrgarde	3,D	H	850-950.
116.GO135, Mafrids	3,D	H	850-950.
117.GO69, Grante	3,D	H	850-950.
118.GO13, Lillmyr	2,3,A	?	?
119.GO37, Fardhem	3,?	Q	950-1000.
120.GO17, Pilgards	?,A,\$	N	900-950.
121.GO139, Levide	6,C	N	900-950.
122.GO138, Levide	6,A	N	900-950.
123.GO177	6,?	Z	1000-1050.
124.GO103, Ire	3,A,#	V	950-1000.
125.GO152, Norregarde	3,C	X	950-1050.

Sources:

Androschuk, F. *Viking Swords. Swords and Social Aspects of Weaponry in Viking Age Societies*. Stockholm: The Swedish History Museum (2014) 293-329.

Stenberger, M. "Das Graberfeld bei Ihre im Kirchspiel Hellvi auf Gotland." *Acta Archaeologica* Volume 32 (1961 or 1962) 1-134.

Thunmark-Nylen, L. *Die Wikingerzeit Gotlands. Volumes III, IV*. Stockholm: Vitterhets Historie och Antikvitets Akademien.

Summary:

Condition:

1 (Intact): 2

2 (Incomplete): 35

3 (Corroded): 66

4 (Broken): 23

5 (Bent): 15

6 (Fragmentary): 20

Unknown: 16

Combined Conditions:

2,3--(Incomplete/Corroded): 8

2,3,4--(Incomplete/Corroded/Broken): 6

3,4--(Corroded/Broken): 4

2,4--(Incomplete/Broken): 3

2,3,5--(Incomplete/Corroded/Bent): 3

3,5--(Corroded/Bent): 3

Other Combinations: 9

Single Edged Swords: 11

Context:

A.Burials/Graves: 102.

Inhumation Graves: 10

Cremation Graves: 16

B.Water: 0

C. Settlement: 5

D.Stray: 9

Petersen Type:

Mannheim Type (750-850): 1

Special Type 1 (800-900): 2

Special Type 2 (800-900): 5

Type A (800-900): 5

Type B (800-900): 2

Type C (800-900): 3

Type D (800-950): 5

Type E (850-900): 1

Type H (850-950): 42

Type L (850-950): 1

Type M (900-950): 1

Type N (900-950): 8

Type Q (950-1000): 2

Type V (950-1000): 1

Type X (950-1050): 2

Type Z (1000-1050): 1

Unknown: 40

The dominance of Type H swords is a surprise. The amount of untyped sword is not a surprise. 43 other swords of various types make up the last third of the list.

Considering that many believe Type H swords were imported from Frankish Europe, finding so many on Gotland fits in with idea that the island was a trading center. However, the list above is incomplete. Looking at Androshchuk's catalog (4), many swords were not included because of the lack

of information about them. Furthermore, having been unable to fully use Thunmark-Nylen's immense work gives rise to doubts.

That most of the swords were found in burials is not surprising, even if information about those graves is hard to obtain. Viking Period graves and burials come in a variety of forms, and the cataloging scheme takes that into account. For Gotland that documentation is most likely in Thunmark-Nylen's work, which is hard to obtain, at least here in the US.

Still, there is some interesting numbers here. The 15 bent swords attract my attention, since they are again in the minority. The single Type L sword was a surprise to see. The 66 corroded swords as the dominant condition is interesting in metallurgical terms. What swords can be examined, and what swords can't, due to their condition?

Poland

The Archaeology of Early Medieval Poland: Discoveries—Hypotheses—Interpretations (5) written by A Buko discusses the vast interest Polish Archaeologists have in the Viking Period. The first chapter of this useful book presents the history of Polish archaeology and why it is concerned with the Early Middle Ages. The intent of Polish archaeologists is to discern the Slavic origins of Poland. The Early Middle Ages is important because of the formation of the Piast Kingdom—the first Polish Kingdom—in the 960s.

After briefly describing the efforts of 17th and 18th Century Poles interested in ancient monuments, Buko turns to the 19th Century. In 1818 A. Czarnocki published *On the Pre-Christian Slavs* (), and in 1824 W. Sarowieki published *Investigations of the Origins of the Slavic Nations* (). These books are considered to mark the beginning of Polish archaeology.

Though there was a great deal of political upset during the 1830s, by the late 19th and early 20th Centuries archaeology was established in Poland. W. Demtrykiewicz became the State Conservator and also a professor at Cracow University. The Society of the Friends of Science created a museum in 1909. In 1914, J. Kostrezwski was made the museum's custodian.

Polish archaeologists continued their work after World War I. But in the 1930s they expanded their activities in order to compete and answer German archaeologists, who questioned the Slavic claim to the land. Settlement strongholds were investigated and publish. One of these settlements was Gniezno, which is dated to the 8th Century. Much was published, and, according to Buko, W. Sarnowska published a work on medieval swords (6).

World War II devastated Poland, but archaeologists managed to work. Two or three changes, however, occurred. The first was the introduction of Marxist ideology into the profession. The second change was the preparation for the 1000th anniversary of the Polish State. The third was the formation of the Directorate of the Research on the Origins of the Polish State, which formed the Institute of the History of Material Culture at the Polish Academy of Sciences. With these changes A. Nadolski was able to publish *Studia nad Uzborzeniem Polskim w I, XI, I XII Wieku* in 1954 (7).

Studia is a general book about arms and armor from the 10th, 11th, and 12th Centuries. Nadolski included 83 swords here and uses Petersen's Typology where applicable. But the author also adds an "Alpha" type which is an extension of Type X swords. Some Alpha Type swords are dated to the 11th century and some are dated to the 12th. Most of the swords, with a couple of early exceptions, are dated within the parameters of the work.

In 1973 M. Glosek published *Znaki i Napisy na Mieczach S'Redniowieznch w Polska* (8). This work includes 91 swords dated to the 10th, 11th and 12th Centuries. Glosek is particularly interested in

inscribed sword blades. However, Glosek refutes Nadolski claim that these swords were of local manufacture.

Finally, L Marek published *Early Medieval Swords from Central and Eastern Europe* in 2005 (9). Poland is well represented in this work, which is more general in its geographical scope. The author shows interest in VLFBERHT inscribes blades and states that more work needs to be done. Marek also presents evidence for “Petersen Type T—Piast Sword” where the hilt construction is a variation of the original type.

Work on swords and Early Medieval Archaeology continues to the present day. Many of these scholar have uploaded their publication on the internet, making them available to a wider audience (10). The efforts of the archaeometallurgist J. Hosek has been presented in Chapter 1 (11). There are others: A. Janowski (12) and L. Gardela (13) to name only two. The tradition of interest in the Early Middle Ages in Poland continues and could redefine how Eastern Europe and Viking Period is seen.

Location	Scheme	Petersen Type	Date.
1.Lake Lednica	1,B,L	H	850-950.
2.Lake Lednica	1,B,L	Mannheim	750-950.
3.Lake Lednica	3,4,B,L	X- Alpha	1000-1100.
4.Lake Lednica	6,B,L	X-Alpha	1000-1100.
5.Lake Lednica	2,B,L	X-Alpha	1000-1100.
6.Lake Lednica	2,3,B,L	?	?
7.Lake Lednica	3,B,L	X	950-1050.
8.Lake Lednica	3,B,L	X	950-1050.
9.Lake Lednica	2,B,L	?	?
10.Giecz	6,C	?	?
11.Grave 558, Cedynia, Groby	1,A,a,#	X	950-1050.
12.Grave 1120, Cedynia, Groby	1,A,a,#	X	950-1050.
13.Grave 1, Barwino	2,3,A,#	X	950-1050.

14.Gehsdorf	2,3,4,A	X	950-1050.
15.Gorschendorf	2,A	?	?
16.Kepsko	2,A	D	800-950.
17.Zidoro	?,A	Z	1000-1050.
18.Grave 5, Neppermin	3,A	X	950-950.
19.Grave 6, Neppermin	2,3,A	X	950-1050.
20.Grave 38, Usadel	3,A,a,#	X	950-1050.
21.Grave 100, Usadel	2,3,A	?	?
22.Grave 135, Uznam	1,A,a,#	X	950-1050.
23.Grave 55, Wusterhausen	3,A,#	X	950-1050.
24.Grave 112, Wusterhausen	4,A,#	X	950-1050.
25.Grave 364, Kaldus	?,A,a,#	?	?
26.Libice	3,A,#	?	?
27.Raymno	1,D	E?	850-900.
28.Grave E864/I	3,4,A,a,#	Z	1000-1050.
30.Truso	6,C (Pommel Top)	N? X?	?
31.Truso	6,C (Pommel Top)	H	850-950.
32.Truso	6,C (Guard/Hilt)	D	800-950.
33.Truso	6,C	X?	950-1050.
34.Truso	6,C (Guard/Hilt)	B	800-900.
35.Truso	6,C (Pommel Top)	H/I	850-950.
36.Truso	6,C (Pommel Top)	H	850-950.
37.Truso	6,C (Pommel)	?	?
38.140a Jedlice/Augusthot	6,D	?	?
39.140b Jedlice/Augusthot	6,D	?	?
40.Lipiany	1,C	S	950-1000.
41.Gorzow Wielkopol/Landesberg	?,D	X	950-1050.
42.Santok/Zantoch	6,B	Y	950-1000.
43.Santok/Zantoch	?,D	Z	1000-1050.
44.Krajnik Dolny	1,B,R	X	950-1050.

45.Grave 26, Pohansko	2,3,A	X	950-1050.
46.Grave 65, Pohansko	3,A	H	850-950.
47.Grave 118, Pohansko	3,A	H	850-950.
48.Grave 174, Pohansko	3,A	X	950-1050.
49.Grave 257, Pohansko	3,A	X	950-1050.
50.Barwino, Slupsk	?,A	X	950-1050.
51.Biechow	?,A	?	?
52.Bochen	?,A	?	?
53.Brzesc Kajawski	3,A	Z	1000-1050.
54.Chadzyno	?,A	?	?
55.Chualborzyce	?,A	?	?
56.Cieharow	?,A	X-Alpha	1000-1100.
57.Cieplz	?,A	Z	1000-1050.
58.Czerchow	?,C	X	950-1050.
59.Czersko	1,C	T—Piast	950-1050.
60.Czersko Polske	1,B	T—Piast	950-1050.
61.Domanikow	?,D	M	900-950.
62.Gnieszno	?,A	X-Alpha	1000-1100.
63.Gnieszno	?,C	T—Piast	950-1050.
64.Goclowo	3,B,R	Mannheim	750-850.
65.Goclowo	1,B,R	K	800-950.
66.Grodziec	3,A	X	950-1050.
67.Gromice, Plock	?,A	M	900-950.
68.Kacice, Pultask	?,D	T	950-1000.
69.Karsznice	?,A	R	950-1000.
70.Koden	?,B,R	Z	950-1000.
71.Konskie	3,A	X	950-1050.
72.Konskie	?,A	Z	950-1000.
73.Korzybie, Plonsk	?,A	X	950-1050.
74.Krajnik Dolny	?,A	X	950-1050.

75.Kwiatkowice	?,D	X	950-1050.
76.Kwidzyn	?,B,R	Y	950-1000.
77.Liszkowo	?,C	X	950-1050.
78.Lubiatowo	3,D	B	800-900.
79.Lubomia	?,C	X	950-1050.
80.Lutomiersk	2,3,A	S	950-1000.
81.Lutomiersk	?,A	X	950-1050.
82.Lutomiersk	?,A	X	950-1050.
83.Lubki, Plock	?,D	X	950-1050.
84.Machow	3,D	Special Type 2	800-900.
85.Mala Wies	?,D	X-Alpha	1000-1100.
86.Marszowice	3,D	X	950-1050.
87.Miedzyrzecz	?,C	T—Piast	950-1050.
88.Morzewo	3,B,R	S	950-1000.
89.Ostrowaz, Konin	?,A	X	950-1050.
90.Ostrowo, Mogilno	3,D	H/I	850-950.
91.Ostroznic	?,D	Z	1000-1050.
92.Pawlowko, Czluhow	?,A	?	?
93.Pilchowo, Plock	?,A	?	?
94.Grave 16, Pokrzywnica	?,A	Z	1000-1050.
95.Grave 6, Pokrzywnica	?,A	X—Alpha	1000-1100.
96.Grave 19, Pokrzywnica	?,A	X—Alpha	1000-1100.
97.Grave 23, Psary, Opoczno	?,A	X	950-1050.
98.Grave 13, Psary, Opoczno	?,A	X	950-1050.
99.Rzeczkw	?,A,c	X	950-1050.
100.Szczecin	?,B,R	H	850-950.
101.Szczecin	1,B,R	Y	950-1000.
102.Szczecin	?,B,R	X	950-1050.
103.Szczecin	?,B,R	X	950-1050.
104.Winary. Plock	?,B,R	X—Alpha	1000-1100.

105. Szczecin Bay	?,B,L	?	?
106. Złotorya	?,A	T	950-1000.
107. Zalecino	?,B,L	X	950-1050.
108. Zydowo, Słupsk	3,A	Z	1000-1050.
109. Wovienen	2,3,A	?	?
110. Oder River	1,B	T	950-1000.
111. Awechen	2,3,D	T	950-1000.
112. Strezgocice	2,3,D	D/E	800-900.
113. Lutowo/Lutow	2,3,D	S	950-1000.
114. Reczyno, Plock	2,3,D	X—Alpha	1000-1100.
115. Psary	2,3,A,#	X—Alpha	1000-1100.
116. Wysoka	2,3,A	X—Alpha	1000-1100.

Sources:

Bierman, F. "Medieval Elite Burials in Eastern Mecklenburg and Pomerania." *Antiquity* Volume 82 (2008) 87-98.

Buko, A. *Bodzia a Late Viking-Age Elite Cemetery in Central Poland*. Boston, Massachusetts: Brill (2015).

Gorecki, J. "Waffen und Reiteraustungen von Ostrow Lednicki—zur Geschichte des Frühen Polnischen Staates und Seines Heeres." *Zeitschrift für Archäologie des Mittelalters* (2001) 41-86.

Jagodzinski M.F. *Truso. Legenda Bałtyku. The Legend of the Baltic Sea*. Elbląg, Poland: Instytucja Kultury Miasta Elbląg (2015).

Jankowski, A. and P.N. Kotowicz, A. Michalak. "Jeszcze o Mieczu z Radykna." *Acta Militaria Mediaevalia* IV. Krakow, Poland: (2008) 167-188.

Jankowski, A. "Early Medieval Chamber Graves on the Southern Coast of the Baltic Sea." *Der Wadel um 1000* (2009). ISBN 9783941171459.

Jankowski, A. "Groby 558 i 1120 z Cedynina tle Wczesnosredniowiecznych Zachodniopomorskich Pochowkow z Mieczami." In: *Civitas Cedene* Stowarzyszenie Historyczno-Kultural, "Terra Incognita" et al (2014) ISBN 9788393394258.

Marek, L. *Early Medieval Swords from Central and Eastern Europe*. Wrocław, Poland: University of Wrocław (2005) 126-135.

Pudło, P. and G. Zabinski. "Analiza Formalna Mieczny ze Zbierow Museum Pierwszych Piasotw na Lednicy." In: *Miecze Sredniowieczne z Ostrowa Lednickiego I Giecha*. A. Wynwa, P. Sankeiwica, P. Pudło (eds.) Biblioteka Studiow Lednickich (2011) 19-38. The author would like to express his deepest thanks to G. Zabinski for providing this work.

Staatliche Museen zu Berlin. *SMB Database Online*. <http://www.smb-digital.de/eMuseumPlus>.

Volkman, A. "Die Schwertfund des Unteren Oder—und Waithegebiets—Insignien Einer Spatslawischer Elits." *Ethnographische Zeitschrift* 3/2008 (2009).

Zabinski, G. and J. Stepinski, M. Biborski. *Technology of Sword Blades from the La Tene Period to the Modern Age. The Case of What is Now Poland*. Oxford, England: Archaeopress (2014) 24-48. ISBN: 9781784910280.

Summary:

Condition:

1.(Intact): 13

2.(Incomplete): 18

3.(Corroded): 34

4.(Broken) 2

5.(Bent) 0

6.(Fragmentary) 13

Unknown: 48

Combined Conditions:

2/3--(Incomplete & Corroded): 12

¾--(Corroded & Broken): 2

Context:

A.Graves & Burials: 45

a.Chamber Graves: 6

c.Mounds: 1

Inhumation Graves (#): 11

B.Bodies of Water: 27

L. Lakes, Ponds, Bogs: 11

R. Rivers: 11

C.Settlement Finds: 16

D. Stray Finds: 19

Petersen Types:

Mannheim Type (750-850): 2

Special Type 2 (800-900): 1

Type B (800-900): 2

Type D (800-950): 2

Type E (850-900): 2

Type H (850-950): 8

Type K (800-950): 1

Type M (900-950): 2

Type R (950-1000): 1

Type S (950-1000): 4

Type T (950-1000): 4

Type T-Piast (950-1050): 4

Type Y (950-1000): 3

Type X (950-1050): 38

Type X—Alpha (1000-1100): 12

Type Z (1000-1050): 10

Unknown: 19

Looking at the 27 swords found in bodies of water, the assumption that all these swords were ritually sacrificed may not hold. Five of swords from Lake Lednicki (Entries 3,4,5, 7, and 8) were possibly lost during battle since they were found a conical helmet, mail-armor, 123 axeheads, and a great many spearheads (14).

The six swords found in chamber graves suggest a Scandinavian presence, but does not confirm it. While there are other chamber graves found in Poland, this form of burial is not exclusive to Scandinavian/Viking burial practices. Swords, since they are not necessarily from Scandinavia, do not by themselves signify a Viking presence. While there were most likely Scandinavians in Poland during the Viking Period, the size and purpose of that presence is a matter of debate.

The amount of Type X and their derivative Type X-Alpha swords—50 in all—is overwhelming. The approximant date of these swords, 950 to 1050 and 1000 to 1100, coincide with the rise and expansion of the Piast Dynasty. It should be noted that all Type X-Alpha swords dated to the 12th Century were not included here, but the finding of Late Viking Period swords, notably 10 Type Z swords (which are highly decorated), suggests not only the possibility of increased trade, but a developing hierarchy. The formation of a kingdom such as the Piasts would be the cause of this influx of weapons.

Prussia/East Prussia/Kaliningrad

That part of Poland once called Prussia, East Prussia, has been a contested territory for centuries. Many nationalities have occupied and colonized the area. The Poles have claimed it. The Russians have claimed it. Kaliningard is Russian. The Lithuanians have claimed it. The Germans have claimed it, which is why many archaeological finds from this general area have been stored in a museum in Berlin and is accessible on their online database (15). This is SMB Database.

Possibly the most prominent early medieval finds on the SMB Database are from Linkuhnen/Linkunai/Rzevskoe archaeological site (16). Located near the river Memel and near the Lithuanian border, Linkuhnen is a multi-period cemetery dating back to the Roman Age and ending in the 11th Century (17). The site was excavated by German archaeologists from 1928 to 1939. The Viking Period is, apparently, well represented, but the results of this excavation were never published. This neglected site has undergone something of a resurrection and a publication is, hopefully, planned (18).

According to C. Jahn 162 Viking Period swords were recovered from Linkuhnen (19). However, the SMB Database only presents a few of these weapons. Still the database has other Viking Period swords from the territory that are of interest. There are two lists below. The first is regular list presenting location, cataloging scheme, Petersen Type, and date. The second list does not have the

specific location of each sword, other than Prussia. The reason for this departure is the condition of these swords. A great many of them are bent in a particular way.

List 1: Swords with provenance:

Location	Scheme	Petersen Type	Date
1.Pr 10708, Grave 185, Linkuhnen	3,A	?	?
2.Pr 7430, Grave126B, Linkuhnen	5,A	H	850-950.
3.Pr 7431, Linkuhnen	5,D	H	850-950.
4.Grave 185, Linkuhnen	5,A	H	850-950.
5.Pr 9080, Grave 131, Linkuhnen	6,A	E	850-900.
6.PM 1939,249, Linkuhnen	2,D	?	?
7.PM VII,425,12751, Grave 181, Linkuhnen	6,A	?	?
8.PM VII,425,12951, Grave 6 Linkuhnen	6,A	?	?
9.Pr 9047, Grave 35, Linkuhnen	2,5,A	?	?
10.PM VII,425,12751, Grave 171, Linkuhnen	5,A	H/I	850-950.
11.Pr 272, Linkuhnen	3,5,D	K	800-950.
12.Pr 23, Grave 225, Linkuhnen	3,A	H	850-950.
13.PM 1939: 371, Linkuhnen	3,D	T or Y	950-1000.
14.Pr 9092, Linkuhnen	5,D	Z	1000-1050.
15.PM VIII, 93,554, Linkuhnen	5,D	H	850-950.
16.PM VIII, 425, 12731, Grave 171 Linkuhnen	3,A	H	850-950.
17.Pr 303a, Grave 53, Linkuhnen	6,A	T	950-1000.
18.PM 1939: 379, Linkunen	6,D	?	?
19.PM III,278,2094, Lobertshof	2,3,A,*	M	800-950.

20.PM III,52,739, Lobertshof	2,3,A	H	850-950.
21.PM III,78,848, Lobertshof	1,A	Y	950-1000.
22.PM III,260,292, Wiskiauten	1,A,	H	850-950.
23.PM III,261,2022, Wiskiauten	2,A	V	950-1000.
24.Pr 11211, Wiskauten	2,A	V	950-1000.
25.Pr 2, Wiskauten	3,A	V	950-1000.
26.Pr 11280, Wiskauten	1,?	E	850-900.
27.PM V,167,1970,Grave 1895, Viehof	2,A	P? T? Z?	950-1000.
28.PM V,168,1970, Grave 1895, Viehof	2,5,A	T	950-1000.
29.PM V,167/169,7970, Grave 4, Viehof	6,A	?	?
30.PM V,46,6628, Viehof	3,5,D	?	?
31.Pr 14, Grave 18, Viehof	3,A	X	950-1050.
32.Pr V,169,7998, Viehof	2,3,D	Y	950-1000.
33.OPM 11724, Dollkeim	2,5,A	T	950-1000.
34.OPM 11725, Dollkeim	2,3,A	T	950-1000.
35.OPM 11729, Dollkeim	2,3,A	T?	950-1000.
36.Pr 347, Awechen	2,3,D	T	950-1000.
37.PM 1939: 44, Grave 1, Bledau	2,3,A	T	950-1000.
38.PM 1939: 49, Grave 2, Bledau	2,3,A	T	950-1000.
39.PM 1938: 165, Schulstein	2,3,D	T	950-1000.
40.PM V,300,841, Grave 3d, Schulstein	2,3,A	S	950-1000.
41.PM III,49,3017, Ragnit	1,A	T	950-1000.
42.PM V,96,7872, Tilsit	2,5,D	V	950-1000.
43.PM 1928-1070, Zophen	3,D	?	?
44.Pr 9, Nastronjnen	2,3,D	?	?
45.PM 1938, Wovienen	2,3,A	?	?
46.PM V,144,7726, Preussisch-Bahnau	3,A	?	?

Summary, List 1:

Condition:

1.(Intact): 4
2.(Incomplete): 20
3.(Corroded): 20
4.(Broken): 0
5.(Bent): 12
6.(Fragmentary) 6

Combined Conditions:

2,3--(Incomplete/Corroded): 12
2,5--(Incomplete/Bent) 4
3,5--(Corroded/Bent) 2

Context:

A.Graves/Burials: 31
D.Stray Finds: 14
Unknown: 1

Petersen Types:

Type E (850-900): 2
Type H (850-950): 9
Type M (900-950): 1
Type S (950-1000): 1
Type T (950-1050): 1
Type V (950-1000): 4
Type X (950-1050): 1
Type Y (950-1000): 2
Type Z (1000-1050): 1
Unknown: 14

List 2: Swords Without Context/Provenance:

Museum Catalog Number	Condition	Petersen Type	Date.
1.Pr 9078	5	B	800-900.
2.Pr 266	2,5	H	850-950.
3.Pr 502	6	H	850-950.
4.Pr 8967	5	H	850-950.
5.Pr 9070	5	H	850-950.
6.Pr 7071	5	H	850-950.
7.Pr 9072	5	H?	850-950.
8.Pr 9073	5	H	850-950.
9.Pr 9074	5	H	850-950.
10.Pr 9079	2,3	H	850-950.
11.Pr 9080	2,5	B	850-950.
12.Pr 9091	2,3	H	850-950.
13.Pr 10739	2,5	H	850-950.
14.Pr 10817	2,3,*	?	?
15.Pr 10752	6	E	850-900.
16.Pr 8763	2,5	?	?
17.Pr 8760	2,3,5	?	?
18.Pr 8929	2,3,5	?	?
19.Pr 8930	5	?	?
20.Pr 8931	5	?	?
21.Pr 8943	3,5	?	?
22.Pr 9043	2,5	?	?
23.Pr 9048	2,3,4,5	?	?
24.Pr 9065	2,3,4,5	?	?
25.Pr 9066	2,5	?	?
26.Pr 8943	2,3,5	?	?
27.Pr 8767	2,5	?	?
28.Pr 8949	2,3,*	?	?
29.Pr 8953	5	?	?

30.Pr 8954	5	?	?
31.Pr 8946	5	?	?
32.Pr 9014	5	?	?
33.Pr 9025	5	?	?
34.Pr 9075	5	?	?
35.Pr 9100	5	?	?
36.Pr 9101	5	?	?
37.Pr 9102	5	?	?
38.Pr 9103	5	?	?
39.Pr 9117	2,3	?	?
40.Pr 35	3	?	?
41.Pr 34	3	?	?
42.Pr 33	2	?	?
43.Pr 10753	2	H	850-950.
44.Pr 28	3,5	?	?
45.Pr 10815	2,3	?	?
46.Pr 9076	5	M	900-950.
47.Pr 10749	2,3	?	?
48.Pr 10794	2,3	?	?
49.Pr 10753	2	E	850-900.
50.Pr 10825	2,4	?	?
51.Pr 10794	2,3	?	?
52.Pr 8762	2,5	?	?
53.Pr 8960	5	?	?
54.Pr 9054	3,5	?	?
55.Pr 8770	5	?	?
56.Pr 8771	5	?	?
57.Pr 8772	2,5	?	?
58.Pr 8773	5	?	?
59.Pr 8761	5	?	?

60.Pr 8956	5	X	950-1050.
61.Pr 8087	5	X	950-1050.
62.Pr 9088	3,5	X	950-1050.
63.Pr 9089	2,3	X	950-1050.
64.Pr 9099	2	X	950-1050.
65.Pr 1196	2	X	950-1050.
66.Pr 9077	6	S	950-1000.
67.Pr 10751	2,3	T	950-1000.
68.Pr 256	2,3	V	950-1000.

Source

Staatliche Museen zu Berlin. *Smb Database*. <http://www.smb-digital.de/eMuseumPlus>.

Summary:

Condition:

- 1.(Intact): 0
- 2.(Incomplete): 32
- 3.(Corroded): 23
- 4.(Broken): 3
- 5.(Bent): 42
- 6.(Fragmentary): 3

Combined Conditions:

- 2,3-- (Incomplete/Corroded): 12
- 2,5-- (Incomplete/Bent): 8
- 3,5-- (Corroded/Bent): 4
- 2,4-- (Incomplete/Broken): 1
- 2,3,5--(Incomplete/Corroded/Bent): 3
- 2,3,4,5--(Incomplete/Corroded/Broken/Bent): 2

Petersen Types:

Type B (800-900): 2

Type E (850-900): 2

Type H (850-950): 12

Type M (900-950): 1

Type S (950-1000): 1

Type T (950-1050): 1

Type V (950-1000): 1

Unknown: 43

The 18 swords listed here from Linkuhnen is not representative of all that was found in that cemetery. Still, the swords from List 1 suggest earlier activity in the Southern Baltic when compared to the list from Poland. Most of the swords from Poland are Type X, and so dated to the Late Viking Age. But many of the swords from List 1 can be dated to the Early and Middle Viking Age. The differences in these lists suggest that the Piast Dynasty was not only organized power in the area during the Early Middle Ages.

In List 2 the regular conditions of this work are not included. The context of these weapons is completely missing. However, the condition of many of the swords in the list—bent—needs discussion. The swords were bent very differently than in previous examples. Until now most bent swords had one bend in the blade. The 42 swords of List 2, however, had multiple bends in the blade. Some swords were even bent into a spiral. This indicates that the swords were not owned by Scandinavians. What culture owned these swords is matter for continued research, but it can be said that while the Scandinavians/Vikings had a presence in Southern Baltic, they were not the only ones fighting there.

The Eastern Baltic

“The Eastern Baltic” is a rhetorical convenience. What happened in Lithuania, Latvia, and Estonia during the Viking Period is not so convenient to understand. As archaeologist M. Magi states (20):

“The present Baltic States in particular have often been left out of discussions of Viking Age communications and sea routes. The Cold-War Era border running along the Baltic Sea created a situation where Baltic archaeologists faced several constraints induced by the Soviet system...”

The Soviet Union blocked the efforts and publications of the archaeologists of the Baltic States.

The dissolution of the Soviet Union removed these constraints. As a result, V. Kazakevicius published *IX-XIII Baltu Kalvigjai* in 1996 (21). Using Petersen’s typology where possible, this book presents swords found in the area from the 9th to the 13th Centuries.

The author also noticed a variation with the decoration of some Type T swords. These Type T swords are designated Type T—Curonian, and were most likely of Baltic manufacture (at least the hilt Construction). “Curonian” swords are noted in the list below.

Tomsons also examines the Curonian Type T sword (22). He dated the type to from the 11th to the 13th Centuries. He also, more importantly, examined the decoration found on the hilt-constructions. Some constructions have complicated plant designs where others have animal heads. Tomson then compares examples of the decorations found on the Curonian Type Ts with examples to similar Scandinavian arts, and finds a change from exported hilt-constructions to a native manufactured hilt-constructions.

<u>Location</u>	<u>Scheme</u>	<u>Petersen Type</u>	<u>Date.</u>
1.Grave 1, Vistula, Lithuania	5,A,\$	X	950-1050.
2.Grave 10, Vistula, Lithuania	3,5,A,c,\$	X	950-1050.

3.Grave 22, Vistula, Lithuania	3,5,A,\$	X	950-1050.
4.Grave 16, Vistula, Lithuania	3,5,A,\$	Z	1000-1050.
5.Vistula, Lithuania	5,?	T	950-1000.
6.Grave 5, Vistula, Lithuania	5,A,\$	Y	950-1000.
7.Grave 13, Vistula, Lithuania	3,5,A,	X	950-1050.
8.Grave 15, Vistula, Lithuania	5,A	X	950-1050.
9.Grave 21, Vistula, Lithuania	5,A	X	950-1050.
10.Kanama, Estonia	3,A	B	800-900.
11.Saaremaa, Estonia	3,D	V	950-1000.
12.Saaremaa, Estonia	2,D	V	950-1000.
13.Saare-Jann, Estonia	3,D	Z	1000-1050.
14.Salme I, Estonia	6,A	A	800-900.
15.Palakala Hoard, Estonia	3,D	H/I	850-950.
16.Palakala Hoard, Estonia	3,D	H	850-950.
17.Ovi, Estonia	6,A	Z	1000-1050.
18.Bankus Muiza, Lithuania	3,A,*,\$?	?
19.Palanga, Lithuania	3,A,*,\$?	?
20.Stragnai, Silate District, Lithuania	6,A	B	800-900.
21.Bikanenai, Silate District, Lithuania	6,A	B	800-900.
22.Laivai, Kretinga District, Lithuania	3,A	B	800-900.
23.Durbes Sauskauci, Liepaja District, Lithuania	?,A	B	800-900.
24.Grobina, Smukumi, Liepaja District, Lithuania	4,5,A,\$	B	800-900.
25.Nieman PNC 105	2,3,6,A	E	850-900.

26.Nieman PNC 110	2,A	H	850-950.
27.Nieman PNC 111	2,3,A	H	850-950.
28.Nieman PNC 112	3,A	M	900-950.
29.Nieman PNC 113	3,A	E	850-900.
30.Nieman PNC 114	2,3,A	X	950-1050.
31.Nieman PNC 115	2,3,A	H	850-950.
32.Nieman PNC 116	3,A	E	850-900.
33.Nieman PNC 121	2,A	E	850-900.
34.Nieman PNC 122	2,3,A	E	850-950.
35.Nieman PNC 124	2,3,A	M?	900-950.
36.Nieman PNC 128	3,A	K	800-950.
38.Nieman PNC 129	3,A	K	800-950.
39.Nieman PNC 133	2,3,A	Y	950-1000.
40.Nieman PNC 148	3,A	E	850-900.
41.Nieman PNC 149	3,A	E?	850-900.

Sources:

Budvydas, U. "About Some Aspects of Scalvian Armaments, on the Basis of Investigations in Viesvile Cemetery." *Archaeologia Baltica* 8 (2007) 205-213.

Kazakevicius, V. "One One Type of Baltic Sword in the Viking Period." *Archaeologia Baltica* 2 (1997) 117-140.

Kulakov, V. *Nieman Amber Route in the Viking Age (Title translated from the Russian)*. Kaliningrad: GBUK (2012). ISBN: 9785903920174.

Tvauri, A. *The Migration Period , Pre-Viking Age, and Viking Age in Estonia*. Tartu, Estonia: Tartu University Press (2012). ISBN: 9789949199365.

Summary:

Condition

1.Intact:	0
2.Incomplete:	10
3.Corroded:	26
4.Broken:	1

5.Bent: 10
6.Fragmentary: 5
Unknown: 0

Combined Conditions:

2,3--(Incomplete/Corroded): 6
3,5--(Corroded/Bent) 4
4,5--(Broken/Bent): 1
2,3,6--(Incomplete/Corroded/Fragmentary): 1
Single-Edged Swords: 2

Context:

A.Burial/Graves: 34
 c.Burial Mounds: 1
 Cremations: 7
 Inhumations: 0

B. Bodies of Water: 0
C. Settlements: 0
D.Stray Finds: 5

Petersen Types:

Type A (800-900): 1
Type B (800-900): 6
Type E (850-900): 7
Type H/I (850-950): 6
Type K (800-950): 2

Type M (900-950):	4
Type T (950-1000):	1
Type V (950-1000):	2
Type X (950-1050):	7
Type Y (950-1000):	2
Type Z (1000-1050):	3
Unknown:	2

41 swords are not much to analyze. Also, the nine swords from Vistula can arguably be placed not in Lithuania and the Eastern Baltic, but in the Southeastern Baltic. All of the swords from Vistula are bent, which is a characteristic of the Southeast as has been discussed above.

This leaves 32 swords, spread across the geographical area of the Eastern Baltic. Latvia, which is between Estonia and Lithuania, is not represented. Very little, then, can be said about because the three nationalities are of primary consideration. The lack of information about Latvia wasn't due lack of trying—it was due to lack complete information.

Two sources about Latvia have been found. The first, by A. Vilcane (23) states, "The cemeteries of Aglonas Kristapini (grave 280) and at Skeltovas Bruveri (grave 40) have each produced a find of a double-bladed sword in a grave with horse-trappings." The paragraph that follows describes the swords, but does not give their condition or their type. Considering the article, which was about graves with horse equipment, this is disappointing.

The second source is B. Nerman's *Skandinavien und Dem Ostbaltikum* (24) published in 1929. The book lists swords mostly by Petersen Type, but does not describe the context of the finds. Nerman lists the swords included as from "Estland"—Estonia—or "Lettland"—Latvia—and compares these with known swords from Scandinavia. Listed here:

"Estland" Estonia:

2 Type B (800-900)

3 Type H (850-950)

2 Type Z (1000-1050)

A pommel and hilt/guard (possibly Type T); 2 hilts/guards, both decorated.

“Lettland” Latvia:

1 Type B (800-900)

2 Type H (850-950)

3 “Saertyp”—Special Type. (800-900)

1 Type Q (950-1000)

1 Type S (950-1000)

1 Type T (950-1000)

1 Type N or X (?)

1 Type Z (1000-1050)

1 unknown.

A few other swords and sword-parts are listed as from the Eastern Baltic (1 Type P), but nothing more exact as that. The condition of most these weapons is corroded.

Not much more can be said about these swords, but that there was a Scandinavian presence in the Eastern Baltic is beyond doubt. The influence on the Scandinavians who went there and came back home is another question. Certainly some of the people who went there for trade came back very wealthy. What effect this trade had on places like Sweden or Denmark is a matter that requires further study of not only weapons.

Finland

With Finland in the Viking Period you wonder where to start. I have read that Finnish archaeologists place the Viking Period into the middle of their Late Iron Age. This Age begins with the

Merovingian Period, goes to the Viking Period, and ends with the Crusade Period. The Finnish Late Iron Age ends about 1300, when the people converted to Christianity.

Location	Scheme	Petersen Type	Date.
1.Grave 15, Luistari	2,3,4,A,d,#	Y	950-1000.
2.Grave 17, Luistari	3,A	?	?
3.Grave 52, Luistari	2,3,A,d,#	?	?
4.Grave 90, Luistari	3,A,d	Y	950-1000.
5.Grave 208, Luistari	2,3,6,A,d	Y? T?	950-1000.
6.Grave 281, Luistari	3,A,d	X	950-1050.
7.Grave 283, Luistari	2,A,d,#	?	?
8.Grave 348, Luistari	3,A,#	X	950-1050.
9.Grave 378, Luistari	3,A,d,*,#	?	?
10.Grave C2, Kjuloholm	1,A,d,#	X	950-1050.
11.Grave C3, Kjuloholm	1,A,d,#	X	950-1050.
12.Grave C17, Kjuloholm	3,5,A,d,#	T	950-1000.
13.Grave CA, Kjuloholm	1,A,d,#	X	950-1050.
14.Grave CD, Kjuloholm	?,A,d,#	?	?
16.Grave CI, Kjuloholm	1,A,d,#	T	950-1000.H
17.Grave CK, Kjuloholm	?,A,d,#	?	?
18.KM287, Aland	1,A,c,\$	H/I	850-950.
19.KM293, Aland	2,A,c,\$	H/I	850-950.
20.KM369, Hameenlinna	3,A	Y	950-1000.
21.KM370, Hameenlinna	3,A	V	950-1000.
22.KM708, Hameenlinna	2,D	V	950-1000.
23.KM1120:1, Eura	2,3,A	H	850-950.
24.KM1174:2, Kokemaki	2,A,d,\$	S	950-1000.
25.KM1174:3, Kokemaki	2,3,4,A,d,\$	Z	1000-1050.
26.KM1822:1, Eura	3,4,D	H/I	850-950.

27.KM1869:81, Hameenlinna	2,3,A,d,\$?	?
28.KM1996:73, Lempaala	2,D	L or Z	?
29.KM2022:1, Vehman	2,4,A,e	?	?
30.KM2345:1, Loppi	2,3,A,d,\$	E	850-900.
31.KM2361, Eura	2,3,D	N	900-950.
32.KM2508:124, Padasjurri	3,4,D	Y	950-1000.
33.KM2548, Laitla	2,3,A,d,\$	Q	950-1000.
34.KM2548:277, Laitla	2,A,d,\$	H	850-950.
35.KM2548:839, Laitla	2,3,A,d,\$?	?
36.KM2767, Valkeakoski	2,D	?	?
37.KM2886:10, Valkeakoski	2,D	?	?
38.KM2979:8, Mynamaki	2,D	Z?	1000-1050.
39.KM2986:4, Tampere	2,D	?	?
40.KM3052:2, Mynamaki	2,D	R	950-1000.
41.KM3131:6, Akau	2,D	X	950-1050.
42.KM3301:1, Valkeakoski	3,D	V	950-1000.
43.KM3383:2, Padasjoki	2,D	?	?
44.KM3423, Vesilahti	2,4,A,d,\$	H	850-950.
45.KM3575:1, Laitila	2,3,A,e	B	800-900.
46.KM3601:2, Hollola	2,5,A,d,\$?	?
47.KM3699:3, Nousiainen	2,D	T2	950-1050.
48.KM4254, Lempaala	2,3,D	S	950-1000.
49.KM4566:12, Turku	3,4,A,d,\$	Y	950-1000.
50.KM4633:15, Eura	2,3,A,#	V	950-1000.
51.KM4633:165, Eura	2,3,A,#	H	850-950.
52.KM4423:1, Urjala	2,3,D	X	950-1050.
53.KM5334:1, Eura	2,3,D	Mannheim	750-850.
54.KM5395:1, Mynamaki	2,3,A	H	850-950.
55.KM5865:1, Vahakyro	2,3,A	B	800-900.
56.KM5868:80, Sastamala	2,A,d,\$	H/I	850-950.

57.KM5890:1, Lieto	3,A,d,\$	Y	950-1000.
58.KM5960:3, Hameenlinna	2,3,5,A,\$?	?
59.KM6066:1, Tampere	2,4,D	?	?
60.KM6196:1, Aland	2,5,A,b,c	E	850-900.
61.KM6227:1, Sastmala	2,3,A,d,\$	Z	1000-1050.
62.KM6245A:1, Kangasala	2,A,c,\$	V	950-1000.
63.KM6482, Turku	2,5,D	B	800-900.
64.KM6503:20, Hattula	2,A,e	?	?
65.KM6689:2, Sysma	2,3,5,D	?	?
66.KM6746:49, Turku	3,5,A,d	Special Type 1	800-900.
67.KM6753:51, Turku	3,5,A,d	H	850-950.
68.KM7011, Kemionsaari	3,D	Y	950-1000.
69.KM7220:2, Nousiainen	2,D	B	800-900.
70.KM7472:2, Vehmaa	3,A,e	H	850-950.
71.KM7752:1, Salo	3,A,d,\$	E	850-900.
72.KM7961:1, Mynamaki	2,D	V	950-1000.
73.KM8120:1, Hattala	2,A,e	X	950-1050.
74.KM8602:130, Grave Cl, Koylio	2,A,#	T2	950-1050.
75.KM8896:25, Rassepori	2,3,D	H	850-950.
76.KM8911:91, Mynamaki	2,A,d,\$?	?
77.KM9142:8, Nousiainen	2,A,#	?	?
78.KM9164:2, Eura	2,4,A,#	X	950-1050.
79.KM9164:3, Eura	4,A,#	S/R	950-1000.
80.KM9243:1, Saavo	1,D	H/I	850-950.
81.KM9389:1, Salo	2,A	?	?
82.KM9562:1, Lieto	2,3,A,#	T2	950-1050.
83.KM9778, Kokemaki	3,4,D	C	800-900.
84.KM9832, Laitila	2,D	H	850-950.
85.KM10349:1, Nousiainen	2,3,A,c,\$	B	800-900.

86.KM10372:1, Karkijoki	2,D	?	?
87.KM10390:2, Vesilahti	2,A,d,\$	Z	1000-1050.
88.KM10390:3, Vesilahti	2,3,A,d,\$	V	950-1000.
89.KM10390:5, Vesilahti	2,3,A,d,\$	V	950-1000.
90.KM10413, Lieto	2,3,D	H	850-950.
91.KM10906:1, Nousiainen	4,D	H	850-950.
92.KM11063:283, Eura	3,A	N	950-1000.
93.KM11198, Lempaala	2,3,A,e	?	?
94.KM11242, Kangasala	2,3,D	Z	1000-1050.
95.KM11859:1, Mynamaki	2,3,5,A,d,\$	H/I	850-950.
96.KM12687:1, Turku	3,A,#	T2	950-1050.
97.KM13419:1, Turku	3,D	E	850-900.
98.KM419:2, Turku	3,D	H	850-950.
99.KM13839,			
Grave 12, Poytya	2,3,A,#	Z	1000-1050.
100.KM13962:322,			
Grave 33, Poytya	3,A,#	Special Type 2	800-900.
101.KM14196:69,			
Grave 48, Poytya	2,3,A,#	X	950-1050.
102.KM15175:1, Tampere	3,A,\$	V	950-1000.
103.KM15181:2, Akau	2,A,d,\$	Z	1000-1050.
104.KM15467, Raisio	2,D	H	850-950.
105.KM16279, Hameenlinna	2,D	H	850-950.
106.KM17208:375,			
Grave 43, Tampere	3,4,A,#	Z	1000-1050.
107.KM17208:561,			
Grave 12, Tampere	3,A,d,#	T2	950-1050.
108.KM17208:588.			
Grave 12a, Tampere	3,A,#	T2	950-1050.
109.KM17777:1, Hatalla	3,D	AE	1000-1050.

110.KM18402:1, Hameenlinna	3,A,#	H	850-950.
112.KM20127, Kokemaki	3,D	X	950-1050.
113.KM122106:23, Uusikaupunki	3,A,d,\$	X	850-950.
114.KM22964:3, Laitila	3,5,A,d,\$	Mannheim	750-850.
115.KM23607:490, Eura,			
Grave 740, Luistari	3,A,#	H	850-950.
116.KM26301, Poytya	3,D	H	850-950.
117.KM27141:1, Hameenlinna	3,D	R	950-1000.
118.KM30870:1, Asikkala	3,A,d,\$	V	950-1000.
119.KM30985:1, Salo	5,A	H	850-950.
120.KM31017:1, Sysma	2,3,4,D	T2	950-1050.
121.KM31550:1, Jamsa	3,5,D	V	950-1000.
122.KM37257, Palane	2,D	Z	1000-1050.
123.HM3047, Nokia	2,3,D	H	850-950.
124.LinM26, Kanjasala	2,D	E	850-900.
125.SatM10330, Kiaulinen	2,3,D	Y	950-1000.
126.SatM12563, Kokemaki	2,3,D	O	950-1000.
127.TMM14105, Salo	3,D	H	850-950.
128.AL336:292, Grave 12, Saltvik	3,4,A,c	B	800-900.
129.AL337:106, Grave 30, Saltvik	3,4,A,c	Mannheim	750-850.
130.AL337:229, Grave 64, Saltvik	3,4,A,c	H	850-950.
131.AL337:528,			
Grave 123, Saltvik	3,4,A,c	Special Type 2	800-900.
132.AL345:113,			
Grave 70, Saltvik	2,3,A,c	Special Type 2	800-900.

Sources:

Cleve, N. *Skelettgravfalten pa Kjuloholm I Kjulo. Vol. 2: Vikingatid och Korstagstid*. Helsinki: Finska Fornminnesforeningen (1978).

Lehtosalo-Hilander, Pirkko-Liisa. *Luistari I. The Graves*. Helsinki: Vammalan (1982).

Moilanen, M. *Marks of Fire, Value and Faith. Swords with Ferrous Inlays in Finland During the Late Iron Age (ca. 700-1200 AD)*. Turku, Finland: The Society for Medieval in Finland (2015) 348-426.

Summary:

Condition:

- 1.(Intact): 6
- 2.(Incomplete): 75
- 3.(Corroded): 80
- 4.(Broken): 18
- 5.(Bent): 12
- 6.(Fragmentary): One
- ?(Unknown): Two

Combinations:

- 2,3 (Incomplete/Corroded): 37
- 3,5 (Corroded/Bent): 8
- 3,4 (Corroded/Broken): 9

Context:

- A.Graves/Burials 83
 - b. Boat/Ship: One
 - c. Mounds: 10
 - d. Flat: 40
 - e. Stone 6
 - #. Inhumation: 28
 - \$. Cremation: 30
- B.Water Zero
- C.Settlement Zero
- D.Stray 47

? Unknown Zero

Petersen Types.

Mannheim: 3

Special Type 1: One

Special Type 2: 3

Type AE: One

Type B: 6

Type C: One

Type E: 5

Type H/I 26

Type N: 2

Type O: One

Type Q: One

Type R/S 5

Type T: 2

Type T2: 7

Type V: 11

Type X: 12

Type Y: 8

Type Z: 9

Unknown: 26

M. Moilanen states that some 300 swords found in Finland are dated to the Viking Period (26).

Finding sources of information has been a frustrating experience. Work continues to find more sources.

Another source of information I've found is J. Leppaaho's *Spateisenzeitliche Waffen aus Finnland* (26). What I have seen of this source is limited—only the photographs of the swords and the

briefest description of them. The condition and Petersen Type only can be discerned. The context of the finds is not included.

Location	Condition	Petersen Type	Date.
1.NM6853, Kaarina	Corroded	H	850-950.
2.NM9778, Kokemake	Corroded	B	800-900
3.NM8120, Tyrvanto	Intact	X	950-1050.
4.NM8219, Kalanti	Incomplete/Corroded	?	?
5.NM9164, Eura	Corroded	X	950-1050.
6.NM2886, Saaksmaki	Incomplete/Corroded	?	?
7.NM2033, Parierstange	Corroded	X	950-1050.
8.NM11840, Tyrvaa	Intact	X	950-1050.
9.NM6923, Sakkola	Incomplete/Corroded	?	?
10.NM9562, Lieto	Corroded	T?	950-1000.
11. 26, Kangasala	Corroded	E	850-950.
12. 1914, Kangasala	Corroded	Z	1000-1050.
13.NM3383, Padasjoki	Incomplete/Corroded	?	?
14.NM4254, Lempaala	Incomplete/Corroded	R or S	950-1000.
15.NM2979, Mynamaki	Corroded	Z?	1000-1050.
16.NM9142, Nouiainen	Incomplete/Corroded	?	?
17.NM11198, Lempala	Incomplete/Corroded	?	?
18.NM6245, Kangasala	Incomplete	H?	850-950.
19.NM2986, Messukyla	Incomplete	?	?
20.NM2767, Saaksamki	Incomplete	?	?
21.NM12563, Kokemaki	Corroded/Fragmentary	?	?
22.NM369, Vanaja	?	Y	950-1000.
23.NM5868, Karkka	?	H/I	850-950.
24.NM2361, Eura	?	M	900-950.
25.NM3699, Nousainen	?	D	800-950.
26.NM9297, Nousainen	Incomplete/Corroded	?	?

27.NM10833, Maaria	Corroded	T	950-1000.
28.NM1174, Kokemaki	Corroded	T	950-1000.
29.NM10842, Maaria	Incomplete	T	950-1000.
30.NM8723, Koylio	Fragmentary	T	950-1000.
31.NM3090, Hameelinna	Fragmentary	T	950-1000.
32.NM13204, Lieto	Fragmentary	T	950-1000.
33.NM2886, Vesilahti	Intact	Z	1000-1050.
34.NM6320, Padasjoki	Corroded	T	950-1000.
35.NM2487, Kakisalmi	Corroded	T?	?
36.NM8338, Kokemaki	Intact	E or D	800-900.

Another source of information is C.A. Nordman's essay about weapons in B. Thordeman's *Vaaben* published in 1943 (27). However, the discussion of Viking Period swords (from page 46 to 57) is only introductory and does not present much detail. It certainly isn't a catalog.

As such Finland as far as Viking Period swords are concerned remains a quandary to those people interested in weapons. This is not to say that swords are completely forgotten, but rather archaeological scholarship has had other interests concerning Finland during the period. Subjects like silver jewelry and the trade of it have caught the attention of many.

With swords, the 132 out of a possible 300 can only suggest a conclusion. Were swords items of trade? Were swords "diplomatic gifts" to native chieftain? Were swords a necessary item for the Scandinavian traders to bring in order to defend themselves? Were they all three?

More importantly, can the context of these swords' discovery answer the questions above? The nature of the relationship between the native "Finns" and the visiting "Vikings" needs greater study before even attempting to find an answer.

Observations

The study of the Baltic area during the Viking Period is a problem. Some nations, like Sweden, Denmark, Poland, and Lithuania have good sources. Other nations, such as Finland and the Southeast area, seem to have poor sources or no sources at all. The situation is not due to a lack of scholarship. Rather the situation's problem can be divided into three parts.

First, the availability of information is limited and incomplete. Second, some information has not been fully documented and published. Third, the history of the Baltic, especially Finland and the Eastern Baltic, is different than much of the rest of Europe. This affects the dating of swords and other objects.

The availability of sources may seem petty to those with university affiliations, but to others the problem is not only obtaining any source but finding enough time to read that source. Thunmark-Nylen's *Die Wikingerzeit Gotlands* is an example. A further explanation of the work's availability is discussed in Note Number 3 in this chapter, but suffice to say that only a few institutions own the entire work, and for sensible reasons they are not willing to loan it.

Die Wikingerzeit Gotlands is at least available, even in a limited way. Other sources haven't even been published, which the second element of the problem. The most obvious example here is the Southeastern Baltic, specifically Linkuhnen—or whatever the place is called. The full results of the archaeological excavation conducted by the Germans in the 1920s and 1930s have only now gained the attention of scholars. The reason for this omission is probably nationalistic. The region is claimed by four nationalities, and even Linkuhnen is only one of a few names for this location.

But Linkuhnen is only an obvious example of politics interfering with the study of the past. The dissolution of the Soviet Union allowed for the publication and distribution of a great deal of information from Eastern Europe. Much of that information is now available on the internet. Such information has not been fully adsorbed by non-Eastern European scholars.

The third problem in the Baltic is history. Finland and the Eastern Baltic did not convert to Christianity until the 14th Century. In practical terms it also means that swords, other weapons, and other items were buried with the dead well after the 11th Century. This continuation of paganism also confuses those interested in swords. Is a sword from the Viking Period or later? Scholars have taken great pains to differentiate one sword from another based upon changes in stylistic forms upon the hilt-construction. The changes can be not so obvious, and it is possible that errors are made.

Given these three problems can any conclusion be made about Viking Period Swords found in the Baltic? Right now, I suspect that only a few people can answer that question. Furthermore, the problem as presented here is not a priority for scholars of the Baltic Sea during the Viking Period and the Middle Ages. More study is required.

Notes

1. For instance, the work of Dan Carlsson. Reports on his efforts are available of academia.edu. An example of his work is *Pavikan 2014*, which is a report on a 2013 excavation.
2. Thalin-Bergmann, L. *Die Wikingerzeit Gotlands*. Stockholm: Almqvist & Wiksells (1995-2006).
3. I searched OCLC—aka The WorldCat—for *Die Wikingerzeit Gotlands*. Fourteen libraries have holdings, but only three have the entire work of seven oversized books—University of Wisconsin, Harvard, and Yale. As an experienced interlibrary loan librarian of more than 25 years, I seriously doubt any of these libraries will loan the whole work. *Gotlands* is simply too big to ship. I have seen part of the work, but that is all.
4. Androshchuk, F. *Viking Swords. Swords and Social Aspects of Weaponry in Viking Age Societies*. Stockholm: The Swedish History Museum (2014) 293-329.

5. Buko, A. *The Archaeology of Medieval Poland: Discourses, Hypotheses, Interpretations*. Boston, Massachusetts: Brill (2008).
6. Buko, A. "Chapter 1." Ibid.
7. Nadolski, A. *Studia nad uzbrojeniem polskim w X, XI i XII wieku*. Acta Archaeologica Universitatis Lodzensis, (1954).
8. Glosek, M. *Znaki i Napisy na Mieczach Średniowieczach w Polsce*. Wrocław, Poland: (1973).
9. Marek, L. *Early Medieval Swords from Central and Eastern Europe. Dilemmas of an Archaeologist and a Student of Arms*. Wrocław, Poland: Wydawnictwo Uniwersytetu Wrocławskiego (2005). ISBN: 8322926243.
10. The growing availability of Polish Archaeological information is mostly due to the internet. The best place I've found for this is academia.edu. The author's listed below have many of their works (articles and books) there.
11. J. Hosek is an archeometallurgist with an extensive resume. An example of his work is, "Mece 11—13 století z území Moravy." *Archaeologia Historica* (2013).
12. A. Janowski is an archaeologist specializing in the Middle Ages. An example of his work is *Groby Komorowe w Europie Środkowo-Wschodniej. Problemy Wybrane*. Szczecin, Poland: (2015). There is certainly much more by this scholar.
13. L. Gardela is an archaeologist specializing in Viking Period graves, especially deviant burials. An example of his work is "Amazons in the Viking World. Between Myth and Reality." *Medieval Warfare* Volume VIII. A book on Viking women warriors is in the works. Gardela has an extensive resume of work.
14. Gorecki, J. "Waffen und Reiteraustungen von Ostrow Lednicki—zur Geschichte des Frühen Polnischen Staates und Seines Heeres." *Zeitschrift für Archäologie des Mittelalters* (2001) 41-86.
15. Staatliche Museen zu Berlin. *Smb Database*. <http://www.smb-digital.de/eMuseumPlus>.
16. *Smb Database*. Ibid.
17. Jahn, C. "The Resurrection of Linkuhnen (Rzevkoe/Linkuna): A New Perspective on a Roman Iron Age to Viking Age Cemetery in the Lower Memel (Nemuna) Region." *Archaeologia Baltica* Volumes 21-22 (2015) 71-89. It should be noted that Jahn has published another article about the fibulas found at Linkuhnen. Both these articles can be found on academia.edu. I have heard that the author is doing more work on Linkuhnen.
18. Jahn. Ibid.

19. Jahn. Ibid.
20. Magi, M. "Chapter 4. Bound for the Eastern Baltic: Trade and Centers AD 800-1200." In: *Maritime Societies of the Viking and Medieval World* J. Barrett and S. Gibbon (eds.) Florence, Kentucky: Maney Publishing (2015) 41-61.
21. Kazakevicius, V. *IX-XIII a. Baltu Kalavijai*. Vilnius, Lithuania: Alma Littera (1996).
22. Tomsons, A. "Symbolism of Medieval Swords from the Territory of Latvia During the 11th-13th Centuries." *Acta Universitas Lodziensis*. Volume 29 (2012) 145-161.
23. Valcane, A. "Tenth—11th Century Warrior Burials with Horse Trappings in the Laggallian Area." *Archaeologia Baltica* 8. (2007) 273-282.
24. Newman, B. *Skandinavien und dem Ostbaltikum in der Jungeren Eisenzeit*. Stockholm: Akademiens Forlag (1929).
25. Moilanen, M. "Marks of Fire, Value and Faith. Swords with Ferrous Inlay in Finland During the Late Iron Age (700-1200)." *Archaeologia Medii Aevi Finlandiae* XXI (2015). This work is more a book than an article. It is available online, but obtaining the book is very useful.
26. Leppaaho, J. *Spateisenzeitliche Waffen aus Finnland Schwertinschriften und Waffenverzierungen des 9.—12. Jahrhunderts*. Helsinki: Finska Fornminnesforeinges Tidskrift (1964).
27. Thordeman, B. *Vaaben*. A. Bonnier (1943). This publication is also Volume 12 of *Nordisk Kultur*.

Chapter 6: Eastern Europe

Eastern Europe in the Viking Period was not only a matter of Scandinavians traveling south to Constantinople to fight for the Byzantine Emperor. While Byzantium was a significant influence, there were also the Piasts (the Poles), the Magyars, the Bulgarians, the Romanians, and the Slavs. Like the Baltic States, archaeology here is not so much an archaeology, but rather archaeologies.

There is also a matter of geography. The Eastern European country of Poland also has a Baltic coast, and so was included in the previous chapter. Conversely, an argument can be made include Staraya Lagoda as a settlement near the Baltic Sea, but it is included here as part of the Russian/Ukrainian section. Poland is a separate nation. Lagoda is part of Russia. Modern political divisions tend to complicate matters. In the Viking Period when the Scandinavians and others sailed the Baltic and the rivers that led into what is now Russia and the Ukraine did not have to consider the political divisions of our time.

Modern politics did affect the countries that are of concern in this chapter. The Soviet Union dominated the scholarship of Eastern Europe since World War II. L. R. Lozny describes the ideological elements in East European archaeology during the Communist/Soviet era (1). Each country formed an “institute of archaeology” (under various names) that decided archaeological priorities. These priorities mostly concerned themselves with Slavic origins and establishments.

Much was reinterpreted. The Scandinavian presence within Eastern Europe was seen as having a minor role in the history of the Slavic states. Inevitably this down playing of non-Slavic influences made for the loss of information. Fortunately, with the dissolution of the Soviet Union, new and more information has been made available.

Russia/Ukraine

Before the Bolshevik Revolution of 1917, archaeology was a matter for the nobility and the highly educated. This is not to say, at least according L. Klejn (2), that “Marxist Archaeology” didn’t exist before 1917. However, after the Revolution, Marxist-Leninist Archaeology was established as part of the new regime with the formation of the Russian Academy of the History of Material Culture. This academy was eventually re-named the National Academy of the History of Material Culture, but only after Marxist ideas were promoted in the universities, older archaeologists were purged, and Stalin centralized his power.

Under this new ideology of “dialectic materialism” or “dialectic history,” archaeology became an auxiliary discipline to historical studies. Archaeology was supposed to examine and prove “the means of production,” rather than the cultural elements of a time and place. However, under Stalin’s great terror, archaeologists suffered greatly, since they were considered part of the intelligentsia. It was not until the death of Stalin and his denunciation by Khrushchev in 1956, that archaeologists could investigate all that was there.

Obviously, the history of archaeology in Russia from 1917 to 1956 cannot be fully described in one paragraph. That history is frightening, but with Viking Period swords, the time after 1956—called “The Thaw.”—is of interest. This is because from 1956 to the present day, the work of A. N. Kirpicnikov dominates the study of Early Medieval Russian arm and armor.

Kirpicnikov’s great work is the three volume *Drevnerusskoe Oruzhie* (3). Swords are contained in Volume 1 of the work. The author lists over 100 swords, but not all of the sword are of European origin. Some other swords, called “sabres” because they are single-edged and occasionally curved, are from Eurasia and Asia.

While *Drevnerusskoe Oruzhie* is important, it is not Kirpicnikov's only work on swords. He has been interested in inscribed sword blades, especially VLFBERHT inscriptions, for some time. An example of this endeavor is a collaboration with L. Thalin-Bergmann and I Jansson of Sweden (4). To find the suspected inscription, the blade is mechanically ground and then treated with a standard chemical reagent. This brings out the inscription so it can be recorded and compared with other blades and their inscriptions.

Kirpicnikov's work serves a beginning to the continued study of Arms and Armor. His study of Viking Period swords has left a useful legacy that allows for expanded investigation.

Place	Scheme	Petersen Type	Date
1.Grave Dn4, Gniozdovo	3,A,a,c,#	V	950-1000.
2.Grave C-2, Gnezdovo	3,4,5,A,c,\$	D	800-950.
3.Grave C-15, Gnezdovo	3,A,c,\$	E	850-900.
4.Grave L-13, Gnezdovo	3,4,A	E	850-900.
5.Grave L-35, Gnezdovo	3,4,A,c,\$	H/I	850-950.
6.Grave L-6, Gnezdovo	6,A,\$	H/I	850-950.
7.Grave Lb-1, Gnezdovo	2,5,A,\$	H/I	850-950.
8.Barrow 2, --C41, Gnezdovo	6,A,c,\$	V	950-1000.
9.Grave Dn-86, Gnezdovo	2,6,A,c	V	950-1000.
10.Grave Dn-88, Gnezdovo	2,3,A,c,\$	Y	950-1000.
11.Grave Dn-55, Gnezdovo	6,A,c	?	?
12.Gnezdovo	6,D	B	800-900.
13.Gnezdovo	2,6,C	E	850-900.
14.Gnezdovo	2,3,A,c	H/I	850-950.
15.Gnezdovo	6,C	H/I	850-950.
16.Gnezdovo	6,C	H/I	850-950.
17.Gnezdovo	3,4,A,a,#	V	950-1000.
18.Gnezdovo	6,D	X	950-1050.

19.Gnezdovo	6,C	X	950-1050.
20.Gnezdovo	2,3,A	Y	950-1000.
21.Gnezdovo Fort	6,C	Special Type 2	800-900.
22.Gnezdovo	3,A,\$	M	900-950.
23.Gnezdovo	1,A	?	?
24.Gnezdovo Fort	6,C	?	?
25.Dnieprostroi	1,B,R	T	950-1000.
26.Dnieprostroi	1,B,R	R or S	950-1000.
27.Dnieprostroi	1,B,R	R or S	950-1000.
29.Dneiprostroii	3,B,R	T	950-1000.
30.Riurik	?,C	Z	1000-1050.
31.Zalakhtov'e	5,A	E	850-900.
32.Novgorod Province	?,A	E	850-900.
33.Pirkinskoe	?,A,c	H	850-950.
34.Village of Seliakoshchinio	?,A,c,\$	S	950-1000.
35.Gorka Nikolskoes	2,3,A,c,\$	Y	950-1000.
36.Bor	2,3,A,c	B	800-900.
37.Along the Pasha River	?,D	?	?
38.Kumbita	?,A,c	V	950-1000.
40.Ust-Rybezhaa	3,A,b,c	E	850-900.
41.Shchukoovshching	?,A,c,\$	Z?	1000-1050.
42.Grave 48, Vakhrushevo	4,5,A,c	V?	950-1000.
43.Grave 50, Vakhrushevo	?,A	V	950-1000.
44.Grave 55, Zaozere	?,A,c,\$	T	950-1000.
45.Grave 56, Zoazere	?,A,c,\$	S	950-1000.
46.Grave 58, Zalishchik	?,A,c,\$	H/I	850-950.
47.Mound 1, Mikhayloskoe	3,4,5,A,c	D	800-950.
48.Grave A7, Kyivs	?,A,a,#	?	?
49.Grave A12, Kyivs	1,A,a,#	X	950-1050.
50.Starya Lagoda	3,D	I	850-950.

51.Grave 6, Complex V,				
Starya Lagoda	1,A,c	V		950-1000.
52.Grave 6, Complex VI,				
Starya Lagoda	2,4,A,c	S		950-1000.
53.Bryli, Belarus	6,C	H		850-950.
54.Vitebsk, Belarus	?,D	H		850-950.
55.Around Vitbsk, Belarus	6,D	H		850-950.
56.Polatsk, Belarus	?,D	V		950-1000.
57.Garadzilava	5,A,a	V		950-1000.
58.Garkovichy	6,?	V		950-1000.
60.Hrodna	6,C	Y		950-1000.
61.Fvanopal	6,C	?		?
62.Vaukavysk	6,C	?		?
63.Cimliandkara	?,C	E		850-900.
64.Charlapora	?,A,c	S		950-1000.
65.Grave VII, Kashina	?,A,c	V		950-1000.
66.Grave CXII, Leonova	3,A,c	S		950-1000.
67.Grave 18, Mikhailovskoe	?,A,c	E		850-900.
68.Grave 34, Mikhailovskoe	1,A,c	V		950-1000.
69.Mikhailovskoe	?,A,c	V		950-1000.
70.Grave 10, Mikhailoveskoe	?,A,C	X		950-1050.
71.Novgorod	?,C	T1		950-1050?
72.Novgorod	?,C	X		950-1050?
73.Novgorod	?,C	Z		1000-1050.
74.Grave 5, Novoselki	?,A,c	B		800-900.
75.Grave 4, Novoselki	?,A,c	H		850-950.
76.Grave 13. Novoselki	?,A,c	H		850-950.
77.Podbolote	?,A	H		850-950.
78.Priadozte	?,A,c	H		850-950.
79.Rostov	3,A,c	E		850-900.

80.Rostov	?,A,c	E	850-900.
81.Ruchi/Ruchyi	3,A,c	U	950-1000.
82.Petersburgskaia	3,A,c	H	850-950.
83.Petersburgskaia	?,A	H	850-950.
84.Petersburgskaia	?,A,c	Z	1000-1050.
85.Seliakovshchona	?,A,c	S	950-1000.
86.Shukovshchina	?,A,c	Z	1000-1050.
87.Grave CXVI, Vakhrysheva	2,A,c	V	950-1000.
89.Grave CXVI, Vakhrysheva	3,A,c	T2	950-1050.
90.Grave 1, Zaliushchik	?,A,c	H	850-950.
91.Grave 6, Zaozere	?,A,c	T2	950-1050.
92.Grave 6, Zaozere	?,A,c	S	950-1000.
93.Dnieper Rapids	1,B,R	T	950-1000.
94.Dnieper Rapids	2,B,R	?	?
95.Dnieper Rapids	1,B,R	R or S	950-1000.
96.Pidgirci, Ukraine	6,A,c,#	S	950-1000.
97.Pidgrici, Ukraine	3,4,A,c,#	V	950-1000.
98.Sestovitsy, Ukraine	1?,A,a,#	V	950-1000.
99.Sestovitsy, Ukraine	1?,A,a,#	H	850-950.
100.Kiev, Ukraine	3,A,#	Y	950-1000.
101.Kiev, Ukraine	3,A,#	T	950-1000.

Sources

Arne, T. J. *La Suede et L'Orient*. Uppsala, Sweden: K.W. Appelbergs Boktryckeri (1914).

Arne, T. J. "Skandinavische Holzkammergrabber aus der Wikingerzeit in der Ukraine." *Acta Archaeologica* Volume 2 (1931) 285-302.

Avdusin, D. A. and T. A. Puskina. "Three Chamber Graves at Gniozdovo." *Fornvannen* Volume 83 (1988) 20-33.

Ivankin, V. G. "Kyivs Burial Monuments of X Century." *Stratum Plus* #5 (2011) 1-43.

Karger, M. K. *Drevnii Kiev. Tom I*. Leningrad, USSR: Izd-vo Akademii nauk SSR (1958).

Komar, A. V. "Swords from Dnieprostoi (On the History of Find Made in 1928)." In: *Rus in the 9th—12th Centuries: Society, State, Culture*. N. A. Makarov and A. E. Leotiev (eds.) Moscow: Drevnosti Severa (2014) 47-61.

Liwoch, R. and M. Muller-Wille. ">Druzhin< Graves Dating to the Time Around AD 1000 in Pidgrici (Western Ukraine)." *Archaeologisches Korrespondenzblatt* Volume 42, #3 (2012) 421-437.

Marek, L. *Early Medieval Sword from Central and Eastern Europe. Dilemmas of an Archaeologist and a Student of Arms*. Wroclaw, Poland: Wydawnictwo Uniwersytetu Wroclawskiego (2005).

Ravdonikas, V. I. *Die Normannen Der Wikingerzeit und das Ladogagebiet*. Stockholm: Pa Akademiens Forlag (1930).

Stalsberg, A. "Scandinavian Relations with Northwestern Russia During the Viking Age: the Archaeological Evidence." *Journal of Baltic Studies* Volume 13, #3 (1982) 267-295.

Summary:

Condition:

1. (Intact): 11
2. (Incomplete): 12
3. (Corroded): 24
4. (Broken): 8
5. (Bent): 6
6. (Fragmentary): 19

Unknown: 36

Combined Conditions:

2,3— (Incomplete/Corroded): 4

3,4,5—(Corroded/Broken/Bent): 2

Context:

1. Burials/Graves: 63
 - a. Chamber Graves: 7
 - b. Boat Graves: 1
 - c. Burial Mounds: 48

Inhumations: 10

Cremations: 12

2. Bodies of Water: 7

--Rivers: 7

3. Settlement: 15

4. Stray: 7

Unknown: 1

Petersen Types:

Special Type 2 (800-900): 1

B (800-900): 3

D (800-950): 2

E (850-900): 10

H/I (850-950): 20

M (900-950): 1

R/S (950-1000): 9

T (950-1000): 9

U (950-1000): 1

V (950-1000): 17

X (950-1050): 5

Y (950-1000): 4

Z (1000-1050): 5

Unknown: 8

The 36 swords of unknown condition is troubling. That 11 swords are in intact condition is surprising. Not much can be derived.

Looking at contexts, there is no surprise that most of the swords were found in burials. The exact form of all 63 is not fully known. This is troubling as well. Comparing forms of graves/ burials with other geographical areas would be useful. However, it is hardly useful to compare the seven chamber graves and one boat grave with the many chamber graves found in Denmark, or more importantly, Poland.

That seven swords were found in rivers requires notice. Komar (5) points out that some of these swords found as part of a sunken boat in a river. They were not sacrifices.

Finally there are the Petersen Types. The 10 Type E swords continue a trend seen in the Eastern Baltic States. The 9 Type T swords also continue a trend also from the Eastern Baltic, and may possibly be dated to beyond Petersens' and Androschuk's general scheme (6). The 20 Type H/I swords make a good argument for evidence of trade. However, the 17 Type V swords are of interest, along with the 9 R/S Type swords. These numbers stick out. Type R/S swords have highly decorated hilts and pommels—they would have been noticeable. Type V swords also have decorated hilts and pommels.

While it is most likely that these 26 Type V and Type R/S swords were luxury trade items, another possibility exists. These swords could be diplomatic gifts. A decorated sword could have been a gift sent by other kingdoms set up an alliance. With a series of kingdoms rising the Russia/Ukraine area during the Viking Period, the possibility of expanding influence and ideology, not the mention increased trade, was very great. A sword would have been an impressive gift.

Eastern Europe

With the exception of Austria, the countries of Eastern Europe were all part of the Warsaw Pact of the Cold War. Their archaeology was nominally influenced by the Soviet Union. But there were differences. Hungary, for instance was not archaeologically interested in the Middle Ages (7), where Poland (discussed in Chapter 5) most definitely was interested. Other countries, such as the former Czechoslovakia had an archaeological establishment (8), which was usually supported by the apparatus responsible to the State. Most of the participants of the Cold War Era at least acknowledged "Soviet Archaeology," but seem to think it of little importance.

Place	Scheme	Petersen Type	Date.
1.Hainbach, Austria	?,A	K?	800-950.
2.Hohenburg, Austria	3,A	Mannheim	750-850.
3.Kerschberg-Dieachdorf, Austria	?,A	K	800-950.
4.Sierminghofen, Austria	?,A	?	?
5.St. Georgen, Austria	?,B,R	?	?
6.Grave 1, Biskupija-Crkvina, Croatia	3,A,d,#	K	800-950.
7.Grave 6, Biskupija-Cikvina, Croatia	2,3,A,d,#	K	800-950.
8.Grave 8, Biskupija-Cikvina, Croatia	3,A,d,#	K	800-950.
9.Cirkovljan-Diven, Croatia	3,A,d,#	K	800-950.
10.Kninsko Polje-Gagine, Croatia	3,4,A	K	800-950.
11.Koljane, Croatia	2,3,A,d,#	K	800-950.
12.Mogorjela, Croatia	3,A	K	800-950.
13.Podgradina-Resturica, Croatia	3,A	K	800-950.
14.Zadvarje-Poletnica, Croatia	3,A	K	800-950.
15.Broški Drenovac, Croatia	?,A	X	950-1050.
16.Medvedicka, Croatia	?,A	Special Type 1	800-900.
17.Grave 322, Nin Zdrijac, Croatia	3,A,#	H	850-950.
18.Abesti, Romania	1,D	V	950-1000.
19.Northern Dobrudja, Romania	2,D	D?	800-950.
20.Northern Dobrudja, Romania	2,D	E?	850-950.
21.Gradeshnitsa, Bulgaria	2,3,D	Z	1000-1050.
22.Opaka, Bulgaria	3,D	K	800-950.

23.Southeastern Bulgaria	2,3,D	H	850-950.
24.Pacuial lui Soare, Bulgaria	6,C	R or S	950-1000.
25.Grave 90, Mikulcice	3,A,d,#	K	800-950.
26.Grave 265, Mikulcice	3,A,d,#	H	850-950.
27.Grave 280, Mikulcice	4,A,d,#	X	950-1050.
28.Grave 341, Mikulcice	3,A,d,#	X	950-1050.
29.Grave 375, Mikulcice	2,A,d,#	X	950-1050.
30.Grave 425, Mikulcice	3,A,d,#	N	900-950.
31.Grave 438, Mikulcice	3,A,d,#	X	950-1050.
32.Grave 500, Mikulcice	3,A,d,#	X	950-1050.
33.Grave 580, Mikulcice	2,3,4,A,d,#	?	?
34.Grave 715, Mikulcice	3,A,d,#	H/I	850-950.
35.Grave 717, Mikulcice	3,A,d,#	X	950-1050.
36.Grave 723, Mikulcice	3,A,d,#	N	900-950.
37.Grave 805, Mikulcice	3,A,d,#	X	950-1050.
38.Grave 1347, Mikulcice	3,A,d,#	X	950-1050.
39.Grave 1665, Mikulcice	3,A,d,#	X	950-1050.
40.Grave 1750, Mikulcice	2,3,A,d,#	K	800-950.
41.Mikulcice	6,D	X	950-1050.
42.Mikulcice	6,D	Y	950-900.
43.Mikulcice	6,D	X	950-1050.
44.Mikulcice	6,D	K	950-1050.
45.Besterec-Gyalpalnya, Hungary	?,A	S	950-1000.
46.Budapest, Hungary, Danube River	?,B,R	S	950-1000.
47.Budapest, Hungary	1,A	X	950-1050.
48.Budapest, Hungary	1,B,R	X	950-1050.
49.Csang, Hungary	?,D	H	850-950.
50.Csongrad-Felgyo, Hungary	?,A	X	950-1050.

51.Heves, Hungary	?,A	X	950-1050.
52.Grave 1, Hajdadorok, Hungary	?,A	H	850-950.
53.Grave 2, Bacs-Kigkum, Hungary	?,X	X	950-1050.
54.Nagyhalasz, Hungary	?,A	X	950-1050.
55.Nyiregyhaza, Hungary	?,A	X	950-1050.
56.Szekesfehervar-Demkokegy, Hungary	?,A	S	950-1000.
57.Grave A, Szekesfehervar, Hungary	?,A	T	950-1000.
58.Grave 5, Szekesfehervar, Hungary	?,A	H	850-950.
59.Szekesfehervar, Hungary	?,A	Y	950-1000.
60.Szentes, Hungary	?,A	X	950-1050.
61.Grave 21,Szob Kiserdo, Hungary	?,A	S	950-1000.
62.Grave 2, Szob Vendelin, Hungary	?,A	X	950-1050.
63.Ujfeherto, Hungary	?,A	X	950-1050.
64.Grave 26, Breclav, Czech Republic	3,A,d	X	950-1050.
65.Grave 65, Breclav, Czech Republic	3,A,d	H	850-950.
66.Grave 174, Breclav, Czech Republic	3,A,d	X	950-1050.
67.Grave 257, Breclav, Czech Republic	3,A,d	X	950-1050.
68.Grave 118, Breclav, Czech Republic	3,A,d	H	850-950.
69.Grave 19, Boleradice,			

Czech Republic	?,A	M	900-950.
70.Libice, Czech Republic	?,A,d	M	900-950.
71.Litomerice, Czech Republic	?,A	Y	950-1000.
72.Grave 26, Pohansko,			
Czech Republic	?,A	X	950-1050.
73.Grave 65, Pohansko,			
Czech Republic	?,A	H	850-950.
74.Grave 118, Pohansko,			
Czech Republic	?,A	X	950-1050.
75.Grave 174, Pohansko,			
Czech Republic	?,A	X	950-1050.
76.Grave 257, Pohansko,			
Czech Republic	?,A	X	950-1050.
77.Grave 71, Rebesovice,			
Czech Republic	?,A	Y	950-1000.
78.Grave 119/az, Stare Mesto,			
Czech Republic	?,A	H	850-950.
79.Grave 223/51, Stare Mesto,			
Czech Republic	3,A,#	H	850-950.
80.Grave 227/49, Stare Mesto,			
Czech Republic	3,A,#	H	850-950.
81.Grave 116/51, Stare Mesto,			
Czech Republic	3,A,#	H	850-950.
82.Grave 190/50, Stare Mesto			
Czech Republic	3,A,#	X	950-1050.
83.Zdunce, Czech Republic	?,A	X	950-1050.
84.Blatnica, Slovakia	?,A,#	D	800-950.
85.Cervenik, Slovakia	?,A	X	950-1050.
86.Cerne on Tisa, Slovakia	?,A	X	950-1050.
87.Grave 16, Dolney Peter,			

Slovakia	3,A	X	950-1050.
88.Krasna of Hornad, Slovakia	?,B,R	T	950-1000.
89.Grave 2/60, Ladice, Slovakia	?,A	X	950-1050.
90.Male Kozmulovce, Slovakia	?,A	X	950-1050.
91.Marcelova, Slovakia	?,A	Y	950-1000.
92.Myjava, Slovakia	2,B,R	X	950-1050.
93.Varin, Slovakia	2,3,D	K?	800-950.
93.Cirna & Tisou, Slovakia?	3,A,#	N	900-950.
94.Horna Saliby, Slovakia?	1,A,*	N	900-950.
95.Krasna & Hornadom,			
Slovenia	3,A	T	950-1000.
96.Bojuice? Slovenia	1,?	X	950-1050.
97.Hrob 23, Zavade, Slovenia	3,A,d,#	X	950-1050.

Sources:

Bialekova, D. "Slovanske Prorebisko V Zavade." *Slovenska Archeologia*. #1, Vol. 30 (1982) 123-164.

Bilogriovic, G. "Karolinski Macevi Tipa K." *Opuscula Archaeologica* Volume 33 (2009) 125-182.

Hosek, J. et al. *Studien zum Burgwall von Mikulcice. Volume 4*. Brno, the Czech Republic: Archaeologisches Institute der Akademie der Wissenschaften der Tschechischen Republik Brno.

Marek, L. *Early Medieval Sword from Central and Eastern Europe. Dilemmas of an Archaeologist and a Student of Arms*. Wroclaw, Poland: Wydawnictwo Uniwersytetu Wroclawskiego (2005).

Milosevic, A. *Hrvati I Karolinzi*. Split (2000). ISBN: 9536803011.

Hruby, V. *Stare Mesto Velkomoravske Pohrebiste "Na Valach."* Praha, Czechoslovakia (The Czech Republic): Ceskslovenske Akademie Ved (1955).

Prichystalova, R. and M. Kalabek. *Ranstredoveke Pohrebiste Olomouc-Nemilany*. Brno, The Czech Republic: Masarykova Univerzita (2014)

Ruttikay, A. "Waffen und Reiterausrustig Des 9. Bis zur Ersten Halfte des 14. Jahrhunderts in der Slowakei." *Slovenska Aracheologia*. #1, Vol. 23 (1975) 119-203.

Vignatiova, J. "Karolinske Mece Z Pohanska U Brerlavi." *Sbornik Praci Filozoficke Fakulty Brenske Univerzity Studia Minora Facultstis Philosophicas Universtatis Brunensis*. (1993).

Summary:

Condition:

1. (Intact):	4
2. (Incomplete):	11
3. (Corroded):	41
4. (Broken):	1
5. (Bent):	0
6. (Fragmentary):	4
Unknown:	41

Context:

A. Burials/Graves:	79
d. (Flat)	28
Inhumation	28
 B. Bodies of Water:	5
Rivers:	5
C. Settlements:	1
D. Strays:	27
Unknowns:	0

Petersen Types:

Mannheim (750-850): 1

Special Type 1 (800-900): 1

D (800-950): 2

E (850-900): 1

H/I (850-950): 14

K (800-950): 16

M (900-950): 2

N (950-1000): 4

R/S (950-1000): 5

T (950-1000): 3

V (950-1000): 1

X (950-1050): 39

Y (950-1000): 5

Z (1000-1050): 1

Unknown: 3

Obviously the amount of Type K sword—16—is the most important information derived from this list. On the surface, the 16 Type K swords would signify something. Most of these swords were found in Croatia. Also, the date range of Type Ks, 800-950, is of concern. Androschuk's explanation for the long time circulation is that he sub-divides the type (9). All Type Ks have a lobed pommel, and Androschuk in fact compares Ks to Type O, which also has a lobed pommel. He sees little difference between the two types.

Type K1 has 5, 6, or 7 on the pommel, which is two piece. The lobes here are vertical and decorated. Type K2 is much like Type O swords, with slanted lobes. The pommel is still two pieces. Type K3 has single piece of metal for a pommel, but lobes as well. Androschuk believes Type K1 to be the earliest form dated to the 9th Century, type K2 to be a transitional form, and Type K3 to be the latest, dated to the 10th Century. The author also believes that these swords were "Carolingian"—that is to say German/Frankish—products. These "Type K" swords were probably diplomatic gifts.

Observations

Like its Northern neighbor the Baltic States, the countries/nations of Eastern Europe are diverse. Some of the Baltic nations (Poland, Lithuania, Latvia, and Estonia) are also Eastern European nations. During the Viking Period the various countries/nations—called "ethnicities" for the lack of a better word—had to deal with each other over this large geographical area. Add to this "mix" outside "ethnic" groups—the Magyars, the Bulgars, the Frankish Catholics, the Orthodox Christian Byzantines, and the Scandinavians—and you understand why swords dated to the period were present.

Swords have been found at population centers. Kiev and Mikulcice are examples of these centers. Trade allowed them to thrive, but what did these centers mean to the residents and the people who set up them? And what part did swords play in this area during this time? The answer to that question may vary from place to place.

Yet, swords are rare items in Viking Period in Eastern Europe. Look at Mikulcice. Of the 1750 known graves, only 17 burials contained swords. Stare Mesto, which has at least 190 graves, has only 5 burials with swords. Again, before answering the larger question of why swords were there in the first place, an understanding of why swords were placed in those graves needs to be discussed. Considering the variety of national groups, that discussion may be complicated.

Coming out of an ideologically oppressive condition, the archaeologists of the Eastern European nations may have a chance to examine the material culture of their past. What happened in the Viking Period may be significant, and the presence of swords suggests outside influences. To be sure the size and success of these influences may yet to have been determined.

Notes

1. Lozny, L.R. "Chapter 2. Sickles, Hammer and Trowel: Theory and Practice of Archaeology Under Communism." In: *Archaeology of the Communist Era. A Political History of Archaeology in the 20th Century*. L.R. Lozny (ed.) Cham, Switzerland: Springer (2017).
2. Klejn, L. "Chapter 3. Archaeology in Soviet Russia." In *Archaeology of the Communist Era. A Political History in the 20th Century*. L.R. Lozny (ed.) Cham, Switzerland: Springer (2017).
3. Kirpicnikov, A. N. *Drevnerusskoe Oruzhie*. Moscow: Arkheologiya SSSR. (Volume 1, 1966). Kirpicnikov also published an article about Viking Period swords in *Soviet Archaeology*.
4. Kirpicnikov, A. N., L. Thalin-Bergmann, and I. Janssons. "A New Analysis of Viking-age Swords from the Collection of the Statens Historiska Musser, Stockholm, Sweden." *Russian History* (2001) 221-244.
5. Komar, A. V. "Swords from Dnieprostoi (On the History of Find Made in 1928)." In: *Rus in the 9th—12th Centuries: Society, State, Culture*. N. A. Makarov and A. E. Leotiev (eds.) Moscow: Drevnosti Severa (2014) 47-61.
6. Androschuk, F. *Viking Swords*. Stockholm: Historica Museet (2014) 76-77, 104.

7. Bartosiewicz, L. "Chapter 9. Archaeology in Hungary 1948-1989." In: *Archaeology of the Communist Era. A History of Archaeology of the 20th Century*. L. R. Lozny (ed.) Cham, Switzerland: Springer (2017) page 201.
8. Neustupny, E. "Czech Archaeology Under Communism." In: *Archaeology of the Communist Era. A History of Archaeology of the 20th Century*. L. R. Lozny (ed.) Cham, Switzerland: Springer (2017) 151-166.
9. Androshchuk, F. *Viking Swords*. 63-66.

Chapter 7: Western Europe

At the beginning of the Viking Period, Western Europe was dominated by the Carolingian Franks. The impression that Charlemagne and his descendants had on France, Germany, Holland, and Belgium—the countries of concern here—cannot be overstated (1).

That the Scandinavians had an influence in Western Europe cannot be ignored either. However, the place of swords in this time and location can be confusing. Many swords are considered to be of Carolingian manufacture, and whether a Frank, a Dane, a Norwegian, or a Swede owned a sword found in Western Europe is a question that cannot always be answered.

France/Belgium

With the exception of Normandy, French archaeologists are not enthusiastic about the Viking Period. A. N. Jaubert writes, “Both the interpretation and identification of the possible archaeological remnants of the Scandinavian invaders are often very questionable” (2) and then further states, “Only two—perhaps three—cemeteries indicate the Scandinavian presence in Northern France, Pitres, and, perhaps, Reville in Normandy, and the Isle of Groix in Brittany.”

This lack of archaeological evidence seems odd when compared with English, Scotland, and Ireland, which are close by, and victims of the same Scandinavian raids and settlement. One can only suspect that the process of assimilation was different for the settlers in France and Belgium than in England, Scotland, or Ireland. The answer to the nature of how Scandinavian “Vikings” became French Normans does not seem to have been found in archaeology.

<u>Place</u>	<u>Scheme</u>	<u>Petersen Type</u>	<u>Date</u>
1. Ile de Groix, Brittany	2,A,b,c,\$?	?

2. Ile de Groix, Brittany	6,A,b,c,\$?	?
3. River Seine, near Rouen	?,B,R	W	950-1000.
4. River Seine, near Rouen	?,B,R	H	850-950.
5. River Seine, near Rouen	2,B,R	M	900-950.
6. River Seine, near Rouen	2,B,R	X	950-1050.
7. River Seine,			
Pont de Brontonne	2,B,R	W	950-1000.
8. River Seine, Freneuse	2,B,R	Y	950-1000.
9. River Scheldt (l'Escant)	?,B,R	?	?
10. River Scheldt (l'Escant)	?,B,R	?	?
11. River Scheldt (l'Escant)			
Near Termonde	1,B,R	Special Type 2	800-900.
12. River Scheldt (l'Escant)	?,B,R	?	?
13. Statte-lez-Hay	?,B,R	?	?

Sources:

Hasse, D.G. "Les Vikings en Belgique." *Revue Belge d'Archeologie et d'Histoire de l'Art*. (1935) 199-211.

Perin, P. "Les Objets Viking du Musee des Antiquites de la Seine-Maritimem a Rouen." In: *Receuil D'Etudes en Hommage a Lucien Musset*. Caen, France: Caen Musse de Normandie (1990) 161-188.

Price, N. *The Vikings in Brittany*. London: Viking Society for Northern Research (1989).

I have read about two Type K swords found in a river in France (3), but there is very little other information about them, just as there is very little information about Viking Period swords in France and Belgium. Most the swords were found in rivers. The island of Ile de Groix, where two swords were found in a grave, is off the coast and about as far as one can go and still be in France.

The reasons for swords being in rivers in France and Belgium are open to speculation. Casting a sword into a river for purpose of establishing a border is one possibility (4). A sword lost during battle is

another. But as stated, French archaeologists are not so interested in the Viking Period, and the reasons for the finds that are there will have to wait.

Holland

During the Viking Period the natives of Holland, the Frisians, had to endure the presence of the Carolingian Franks and the Scandinavians. This presence was aggressive on the part of both the Franks and the Scandinavians. Dutch archaeologists evidence of the Franks and Scandinavians mostly around an emporium called Dorestad.

More precisely called Wijk bij Duurstede, Dorestad's archaeological history has been outlined by A. Willemsen (4). Interest in the site began in the 1842, when the local people began digging up graves for bones for fertilizer. A variety of objects were discovered. This drew the attention of L. J. F. Janssen of the Museum of Antiquities, who attempted gather these objects. Janssen also excavated a trench at the site, which was disturbed. He continued in 1844, excavating a series of undisturbed graves. Three skeletons in coffins were discovered, along with some glass and jewelry. Janssen had discovered the first Carolingian cemetery in Holland.

The local people began digging again in 1879 for the same reason. Again a variety of objects were found. More were lost. In the 1920s, J. H. Holwerda excavated a series of trenches. He photographed his work, but does not seem to have mapped where exactly he excavated.

Finally an official government organization, called ROB, undertook excavations in the 1960s. This was a large scale project, which went on for ten years. The river side harbor of the Carolingian Settlement had been discovered, along with other features. The ROB had to cease work, due to the objections of many who wanted to develop area.

Interesting as Dorestad is, it is not the only Early Medieval archaeological site in Holland. E. Knol describes the re-discovery of a dig conducted between 1782 to 1784 (5). This 18th Century dig uncovered a cemetery with cremation burials. A sword and other weapons were found and dated to 8th Century. The graveyard is considered Carolingian.

Place	Scheme	Petersen Type	Date
1.Wijk bij Duurstede	4,3,B	Special Type 2	800-900.
2.Wijk bij Duurstede	4,B,R	Special Type 2	800-900.
3.Maarhaizen	3,?	Special Type 2	800-900.
4.Maas bei Aalberg	3,B,R	Special Type 2	800-900.
5.Maas bei Aalberg	3,?	Special Type 2	800-900.
6.Ijssel bei Rheden	3,?	Special Type 2	800-900.
7.Rheden	3,B	D/E	800-950.
8.Aalberg	?,B	S	950-1000.
9.De Byland	2,B	B	800-900.
10.Doetinchen	?,B,R	H/I	850-950.
11.Dorestad	?,B	Mannheim	750-850.
12.Elst	?,B,R	K	800-950.
13.Kessel	?,B	H	850-950.
14.Nijmegen	?,B	B/H	?
15.Nijmegen	?,B	H	850-950.
16.Nijmegen	?,B	M	900-950.
17.Nijmegen	?,B	Y	950-1000.
18.Nijmegen	2,B,R	X	950-1050.
19.Nijmegen	2,B,R	X	950-1050.
20.Saaxumhaizen	?,A	H	850-950.
21.Wirdum	?,A	H	850-950.
22.Wijk, Dorestad	2,B,R	Special Type 2	800-900.
23.Wijk, Dorestad	?,B	S	950-1000.
24.Wijk, Dorestad	?,B	S	950-1000.

25. Wijk, Dorestad	4,B,R	?	?
26. Wijk, Dorestad	2,4,B,R	?	?
27. Wijk, Dorestad	?,B,R	H	850-950.
28. Wijk, Dorestad	?,B,R	H/I	850-950.
29. Wijk, Dorestad	?,B,R	X	950-1050.
30. Wijk, Dorestad	?,B	S	950-1000.
31. Wijk, Dorestad	?,B	S	950-1000.
32. Wurd Tjauard	?,A	H	850-950.
33. Zilen	?,B	X	950-1050.
34. ?	?,B,R	H/I	850-950.
35. Doetinchem, Gelderland	?,B,R	H/I	850-950.
36. Fandort Unbekamt, Rhienblatt	2,B,R	H	850-950.
37. Hedendorf	?,A,c	?	?
38. Near Lith	?,B,R	?	?
39. River Meuse, by Neer	?,B,R	M	900-950.
40. River Meuse, by Neer	?,B,R	?	?
41. Luningsburg	?,D	?	?
42. Oosterhesslen, Drenthe	?,B,R	X	950-1050.
43. Schwinge by Stade	?,B,R	?	?
44. Near Utrecht	?,B,R	?	?
45. The River Meuse, Wessem	?,B,R	?	?

Sources:

Bilogrivic, G. "Type K Carolingian Swords." *Opuscula Archaeologia* (2009) 139, 173.

Menghin, W. "Neue Inschriftenschwerter aus Suddeutichland und die Chronologie Karolingischer Spathen auf dem Kontinent." *Vorzeit Zwischen Main und Donau*. Band 26 (1980) 227-272.

Marek, L. *Early Medieval Sword from Central and Eastern Europe. Dilemmas of an Archaeologist and a Student of Arms*. Wroclaw, Poland: Wydawnictwo Uniwersytetu Wroclawskiego (2005).

Preidel, H. "Die Karolingischen Schwerter bei den Westslawen." In: *Gandert-Festschrift zum Sechzigsten von Otto-Fredrich Gandert*. A. Von Muller and W. Nagel (eds.) Berlin: Herbert Lehmann (1959) 128-142.

Willemsen, A. "Scattered Across the Waterside: Viking Finds from the Netherlands." In: *Vikings on the Rhine. Recent Research on Early Medieval Relations Between the Rhinelands and Scandinavia*. R. Simek and U. Engel (eds.) Vienna: Fassbender (2004) 65-82.

Ypey, J. "Einge Wikingerzeitliche Schwerter aus den Nederlanden." *Offa* 41 (1984) 213-225.

Summary:

Condition:

1. (Intact): Zero
2. (Incomplete): 6
3. (Corroded): 6
4. (Broken): 4
5. (Bent): Zero
6. (Fragmentary): Zero

Unknown: 30

Combined Conditions:

2,4-- (Incomplete/Broken): 1

3,4—(Corroded/Broken): 1

Context:

- A. Graves/Burials: 4
c. Mounds: 1

- B. Bodies of Water: 37
Rivers: 22

- C. Settlements: Zero.

- D. Strays: 1

Petersen Types:

Mannheim Type (750-850): 1

Special Type 2 (800-900): 7

Type B (800-900): 1

Type D/E (800-950): 1
Type H/I (850-950): 11
Type K (800-950): 1
Type M (900-950): 2
Type S (950-1000): 5
Type X (950-1050): 5
Type Y (950-1000): 1
Unknown: 10

These numbers are too small to be conclusive. Furthermore, much information is missing, especially the condition of the swords.

The seven Special Type 2 swords followed by the eleven Type H/I point towards a serious presence in Holland during the 8th, 9th, and 10th centuries. The five Type S and five Type X—in all 10—suggest a continued presence, but also might point towards a class division. Type S swords are highly decorated. Type X swords are not decorated in any form. I would speculate that Holland in general and probably Dorestad in particular was a trading center for Carolingian/German swords.

Once again, there is a significant number of swords found in bodies of water: 37. That only 22 of this group are documented to being discovered in rivers probably shows the limitations of the sources used, and not some other conclusion. The reasons why all these swords were in rivers is open to speculation.

Yet, the largest problem is the ownership of these swords. How many swords were owned by Franks, Frisians, or Scandinavians is something the context, especially bodies of water, cannot tell us. Holland, or more exactly the territory that became Holland, in the Early Middle Ages is question that remains unanswered.

Germany

The History of German archaeology in a nationalist sense (as opposed to German contributions to ancient Greek and Roman Archaeology) has been the topic of much scholarly ink. The support of nationalist archaeology by the Nazis and the use the discipline can be seen as a cautionary tale in the perversion of scholarship for ideological purposes. As such, like many others, this discussion will begin with Gustav Kossinna, born in 1858.

L. Klejn (6) explains Kossinna's archaeological doctrine as "siedlungsarchaologie," which has been interpreted as "settlement archaeology." Klejn points out that the word "siedlungs" has a variety of meanings in German. The author instead interprets Kossinna's doctrine as "residence archaeology." This doctrine states that archaeology could be used to prove a people's origin, settlements, and expansion into a territory. Kossinna argued that the prehistoric Germans had a traditional settlement in Central and especially Eastern Europe.

Kossinna was not the only German archaeologist who believed in the superiority of their prehistoric ancestors. K.P. Faziolli (7) discusses the work of medieval archaeologist P. Reineke. In 1928 Reineke published an article that argued for the German dominance in Southern Germany. His proof was a series of graves, and Reineke assigned Slavic place-name evidence as being Germanic because of these burials. Faziolli believes Reineke wanted to discount the Slavic evidence and so prove them to be stateless. The goal of both Kossinna and Reineke use archaeology to justify German claims to Eastern Europe. Both Kossinna's and Reineke's works were well known in Nazi Germany.

B. Arnold (8) characterizes the archaeologists working in Nazi Germany as having made a Faustian bargain with the Fascist regime. At the beginning of Nazi Period, Alfred Rosenberg and his "Amt Rosenberg" ("Taskforce Rosenberg") dominated the field. Yet, the lasting impression of Nazi Archaeology was left by the SS Ahnenerbe. Their activities are especially important to medievalists.

Formed in 1935 by Himmler, the SS Ahnenerbe's purpose was to encourage and fund investigations of past German peoples. After an unimpressive start, the Reichsfuhrer set out to create a top-notch organization and recruited many within the profession. One of these recruits was Herbert Jankuhn.

Jankuhn was already a member of the SS in 1936 when Himmler visited the excavations at Haithabu/Hedeby. Impressed, the Reichsfuhrer offered his support, and so Jankuhn began his career in the Ahnenerbe. He thrived in the organization, becoming essentially the administrative head of the archaeological unit.

At this time before the World War II, Jankuhn published an article describing the "Mannheim" Type sword (9). This type has been added Petersen's Typology and is dated to have circulated between 750 and 850. It is an important addition.

World War II saw Jankuhn with a variety of jobs related to archaeology. His most significant was "Taskforce Jankuhn" where he was sent by Himmler to the East to visit museums and private collections of object and send back valuable finds to Germany. In truth the taskforce was sent to loot the territories conquered. Eventually Jankuhn was assigned to Waffen SS Division as an intelligence officer. He ended the war as a Lieutenant-Colonel of the SS, and spent three years in prison for being a member of that illegal organization.

After prison and de-Nazification, Jankuhn was allowed to return to his profession. In 1951, the archaeologist published an article on VLFBERHT swords. In 1956 he was appointed to a permanent position at a private university (10).

Post-Nazi archaeology spent the years after World War II rebuilding. Theories of interpretation, such as processual and post-processual anthropology, were ignored. Instead methods of "handling" finds in comparison with others, possibly similar, finds were reconsidered (11). An example of this is A.

Geibig's (12) complex typology of Early Medieval swords, which attempts to take blades dated from 700 to 1200 in account.

The history of German Archaeology cannot be written in a few paragraphs, but even the few words here can serve as an example of purpose over method. When the purpose of archaeology supersedes its methods, then the validity of the work can be doubted. Germany is an obvious example, but not the only place where this happened. Information can be easily eliminated from documents and promoted as important when methods of examination are ignored. The result is skewed vision of the past.

<u>Place</u>	<u>Scheme</u>	<u>Petersen Type</u>	<u>Date</u>
1.Alruppin	?,B,C	X	950-1050
2.Behren Lubchin	?,C	X	950-1050
3.Boel	?,A,a	T	950-1000
4.Borgstedt	?,D	X	950-1050
5.Borgstedt	?,D	L	850-950
6.Borgstedt	?,D	X	950-1050
7.Fedderingen	?,B	H	850-950
8.Geesthacht Krammel	?,D	B	800-900
9.Hamburg, Altona	?,B,R	C	800-900
10.Hamburg, Altstadt	?,B	A	800-900
11.Hamburg, Bergedorf	?,A	K	800-950
12.Hamburg, Bewelder	?,D	X	950-1050
13.Hamburg	?,B,R	X	950-1050
14.Hedendorf	?,A	Mannheim	750-850
15.Hedendorf	?,A	Mannheim	750-850
16.Hohenstaten	?,B,R	Mannheim	750-850
17.Lembeck	?,A	Mannheim	750-850
18.Liepe, Brandenburg	?,B	K	800-950

19.Mannheim	2,3,B,R	Mannheim	750-950
20.Mannheim	?,B,R	Mannheim	750-950
21.Nebel Amrum, Grave 34	?,A,c	Mannheim	750-950
22.Nebel Amrum, Grave 37	?,A,c	Mannheim	750-950
23.Nebel Amrum, Grave 41	2,A	?	?
24.Nebel Amrum, Grave 70	6,A	?	?
25.Nebel Amrum	?,A	E	850-900
26.Neuberg Bayern	2,3,B,R	Mannheim	750-850
27.Nordenbrarup, Grave 4	6,A	X	950-1050
28.Nordenbrarup, Grave 6	?,A	X	950-1050
29.Pommerby Falshoff	6,A	O	900-950
30.Rostock-Dierkow	6,C	V	950-1000
31.Schafstedt	?,A,c,*	X	950-1050
32.Schellhorn Scharsee	?,B	X	950-1050
33.Schleswig	6,D	T	950-1000
34.Sierksdorf	6,D	?	?
35.Stade	?,B	X	950-1050
36.Stade	?,B	X	950-1050
37.Stade	?,B	X	950-1050
38.Stade	?,B	X	950-1050
39.Suderbrarup	2,A,a,*	E	850-900
40.Ullerup, Sonderbrug	?,A	M	900-950
41.Vipperow	?,A	X	950-1050
42.Karlsruhe	2,3,B,R	Y	950-1000
43.Solingen, Deutsch Klingmuseum ?	2,?	R/S	950-1000
44.Museum fur Hamburg Geschite	2,?	?	?
45.Abbsbach	3,B,R	X	950-1050

46. Germanische National

Museum, Nürnberg	3,?	Mannheim	750-850
47. Speyer	3,B,R	Mannheim	750-850
48. Suffelweihersheim	3,B,R	Mannheim	750-850
49. Mannheim/Wierhaizen	3,B,R	Mannheim	750-850
50. Lembeck	3,A	Special Type 2	800-900
51. Lichtenfels	2,3,A	Special Type 2	800-900
52. Hamburg, Bergedorf	2,B,R	Special Type 1	800-900
53. Berlin	?,B,R	?	?
54. Bormerkoog	?,B,R	?	?
57. Brekendorf	?,D	X	950-1050
58. Fedderingen	?,D	?	?
59. Friesling, Bayern	?,D	?	?
60. Goting auf Fohr	?,A,c,*	?	?
61. Hamburg (Alster)	?,B,R	?	?
62. Hamburg	?,B,R	S	950-1000
63. Kamiak (Moldau)	?,B,R	?	?
64. Krondorf	?,A,*	?	?
65. Kippehne, Brandenburg	?,B,R	?	?
66. Lubeck	?,B,R	?	?
67. Lubom, Schlesien	?,D	?	?
68. Hamburg, Luhesand	?,B,R	A	800-900
69. Fresenheimer, Mannheim	2,B,R	Mannheim	750-950
70. Nevel Amrum	?,A	E	850-900
71. Nevel Amrum	?,A	E	850-950
72. Neider-Kranig, Brandenburg	?,B,R	?	?
73. Ostrosnitz, Schlesien	?,D	?	?
74. Potsdam	?,B,L	X	950-1050
75. Regensburg, Bayren	2,B,R	?	?
76. Rugau, Schlesien	?,D	?	?

77.Schafstedt	?,A,c,*	X	950-1050
78.Schleswig	?,D	X	950-1050
79.Sierksdorf, Oevelgonne	6,D	?	?
80.Sigmaringen	?,D	?	?
81.Susel, Schleswig-Holstein	?,D	?	?
82.Weismain	2,A,*	Special Type 1	800-900
83.Zantoch, Brandenburg	?,B,R	?	?

Sources:

Geibig, A. *Beiträge zur morphologischen Entwicklung der Schwerter im Mittelalter. Eine Analyse des Fundmaterials vom ausgehenden 8 bis zum 12 Jahrhundert aus Sammlungen der Bundesrepublik Deutschland*. Neuminster, Germany: Karl Wachholtz Verlag (1991).

Jankuhn, H. "Ein Ulfberht-Schwert aus der Elbe bei Hamburg." In: *Festschrift für Gustav Schwantes zum 65. K. Kersten* (ed.) Neuminster, Germany: Karl Wachholtz Verlag (1951).

Marek, L. *Early Medieval Swords from Central and Eastern Europe. Dilemmas of an Archaeologist and a Student of Arms*. Wrocław, Poland: Wydawnictwo Uniwersytetu Wrocławskiego (2005).

Menghin, W. Neue Inschriftenschwerter aus Süddeutschland und die Chronologie Karolingischer Spathen auf dem Kontinent. " *Vorzeit Zwischen Main und Donau*. Band 26 (1980) 227-272.

Preidel, H. "Die Karolingischen Schwerter bei den Westslawen." In: *Gandert-Festschrift zum Sechzigsten von Otto-Fredrich Gandert*. A. von Müller and W. Nagel (eds.) Berlin: Herbert Lehmann (1959) 128-121.

Williams, A. "A Metallurgical Study of Some Viking Swords." *Gladius*. XXIX (2009) 121-184

Summary:

Condition:

- 1.(Intact): 0
- 2.(Incomplete): 10
- 3.(Corroded): 7
- 4.(Broken): 0
- 5.(Bent): 0
- 6.(Fragment): 6

Unknown: 54

Combined Conditions

2,3—(Incomplete/Corroded): 4

Context:

A.Burials/Graves: 24

a.(Chamber): 2

c.(Mounds): 5

B.Bodies of Water: 34

R. Rivers: 24

L.Lakes/Ponds: 1

C.Settlements Finds: 2

D.Stray Finds: 17

Unknown: 2

Petersen Types:

Mannheim (750-850): 14

Special Type 1 (800-900): 2

Special Type 2 (800-900): 2

A (800-900): 2

B (800-900): 1

C (800-900): 1

E: (850-900): 4

H/I (850-950): 1

K (800-950): 2

L (850-950): 1

M (900-950): 1

O (950-1000): 1

R/S (950-1000): 2

T (950-1000): 2

V (950-1000): 1

X (950-1050): 20

Y (950-1000): 1

Unknown: 26

Obviously, much of the information wanted, such as the condition of each sword, is not easily accessed. This shows the limitations of the sources, and not anything else. Still, there is some information that can be gleaned from this list.

The 14 Mannheim Types swords found is not surprising. The period of circulation, however, is worth noting—750-850. This century is the high-tide of Carolingian power under Charlemagne and Louis the Pious. The swords are in line with the Carolingian Renaissance.

Neither is the amount of swords found in bodies of water (mostly rivers) a surprise. 34 is a notable number, but how and why the swords found their way to the rivers and other bodies of water needs consideration. Casting these weapons in water as some sort of ceremony can be discounted since the Carolingians were staunchly Christian.

The amount of swords found in graves, 24, was a surprise. Carolingian graves are notable for their lack of objects. However, not all of the graves were dug by Carolingian Franks. Finding swords in graves could be a throw-back to Merovingian time, where swords are found in burials. Furthermore, what is currently considered Germany may not have been Carolingian. This is especially true of Schleswig, which was Danish.

Observations

82 swords from bodies of water are listed out of total 141. To ignore these numbers is unwise, but to interpret these numbers is another task. There are three possible explanations: 1. Sacrifice, 2. Accident, and 3. Warfare.

All of these explanations are dependent on the details of all 82 finds. A single find of a sword suggests a sacrifice. Multiple finds suggest warfare. Finds near settlements suggest accidental loss, such as a boat sinking.

However, the finding of swords and other objects from bodies of water, especially rivers, is not always intentional. Many a sword, other weapon, or other object was found during construction, and so not always well documented. While in the present laws exist for the archeological examination and documentation of finds, this was not always the case. I wonder how many “old rusty objects” were found here and there that were just cast aside without much thought. Rescue archaeology as a legal obligation is a recent idea.

Then there is the problem of ownership. Who owned these swords? This question is especially important with Dorestad. This trading emporia was once claimed by Frisians, Franks, and Danes. To simply say that “this sword belonged to a Viking” is to take the evidence too far. Furthermore, the trade of Frankish swords blades (at least) being well known, the role of Dorestad in that trade is important. However, that role remains a mystery.

The swords themselves offer a tantalizing question. They are the prestigious objects of a time that is still mis-understood to students of the past. What they meant to the people of that time and owners of those swords is too vague. The questions about swords bears repeating.

Notes

1. Stalsberg, A. "The VLFBERHT Sword Blades Re-evaluated." Found Online.
2. Jaubert, A. N. "Some Aspects of Viking Research in France." *Acta Archaeologia*. Volume 71, #1 (2000) 159-169.
3. Muller-Wille, M. "Waffen und Bewaffen: Schwerter aus Haithabu." In: *Archaeologische und naturwissenschaftliche Untersuchungen an landlicher und fruhstadtischen Siedlungen im deutschen kunstengebiet...* H. Jankuhn, et al. (eds.) (1984).
4. Willemsen, A. "Welcome to Dorestad. A History of Searching and Finding 'The Dutch Troy'." In: *Dorestad in an International Framework*.
5. Knol, E. "Het Karolingisch gravveld op de Bultvenne bij Termunterzijl—de campagnes 1782-1784 en 1818." *Jaarverslagen van de Vereniging voor Terpendonderzoek*. 83-90 (1996-2006) 104-125.
6. Klejn, L. "Gustav Kossinna 1858-1931." In: *Histories of Archaeology: A Reader in the History of Archaeology*. T. Murray and C. Evans (eds.) New York: Oxford University Press (2008) 312-327.

A Marxist, Klejn has ideological influences in his point of view.
7. Faziolli, K.P. "From First Reich to Third Reich: German Imperialism and Early Medieval Scholarship in the Southeastern Alpine Region (c. 1919-1945)." *Archaeologies. Journal of the World Archaeological Congress*. (2012).

I'd like to thank the author of this article for sending it to me.
8. Arnold, B. "The Past as Propaganda: Totalitarian Archaeology in Nazi Germany." In: *Histories of Archaeology: A Reader in the History of Archaeology*. T. Murray and C. Evans (eds.). New York: Oxford University Press (2008) 153-135.
9. Jankuhn, H. *Offa* (1939).
10. Steinel, M. "Archaeology, National Socialism and Rehabilitation: The Case of Herbert Jankuhn." In: *Ethics and the Archaeology of Violence*. A. Gonzalez-Ruibal and G. Moshenska (eds.). New York: Springer (2015) 153-165.
12. Harke, H. "All Quiet on the Western Front? Paradigms, Methods, and Approaches in West German Archaeology." In: *Archaeological Theory in Europe. The Last Three Decades*. I. Hodder (ed.) New York: Routledge (1991) 187-222. ISBN: 0415065216.
12. Geibig, A. *Beitrage zur morphologischchen Entwicklung der Schwertes im Mittelalter. Eine Analyse des Fundmaterials vom ausgehend 8 bis zum 12 Jahrhundert aus Sammlungen der Bundesrepublik Deutschland*. Nueminsten, Germany: Karl Wachholtz Verlag (1991).

Chapter 8: Conclusion

To begin with the basic totals:

Total number of swords: 2501

Condition of the Sword:

1.Intact: 122

2.Incomplete: 851

3.Corroded: 817

4.Broken: 222

5.Bent: 220

6.Fragments/Fragmentary: 399

Unknown: 413

Context of the Sword:

A.From Graves/Burials: 1662

B.From Bodies of Water: 180

C.Settlement Finds: 76

D.Stray Finds: 452

Unknown: 51

Petersen Types:

Mannheim Type: 24

Special Type: 8

Special Type 1: 12

Special Type 2: 33

Type A: 16

Type AE: 9

Type B: 89

Type C:	52
Type D:	19
Type E:	62
Type D/E:	38
Type F:	7
Type G:	4
Type H:	462
Type I:	6
Type H/I:	63
Type K:	67
Type L:	45
Type M:	183
Type N:	9
Type O:	25
Type P:	11
Type Q:	38
Type R:	14
Type S:	32
Type R/S:	24
Type T:	64
Type U:	5
Type V:	64
Type W:	6
Type X:	235
Type Y:	54
Type Z:	46
Unknown:	562

These numbers are basic and general because going further requires looking at these swords in regional areas. For instance, Germany does not contain many Type H swords, but it does contain the most Mannheim Type swords. However, with a count of 436, Type H swords are the *most swords found* in the larger context of Europe. I italicized “*most swords found*” because assuming that Type H swords were the most used or owned by people during the Viking Period is not necessarily a fact. The abundance of Type H swords found only suggests that idea, but it doesn’t prove it.

The reason why swords can only suggest a historical phenomenon is the largest context in which they were found: graves and burials. With 1579 swords found in burials, you have to ask why were these weapons of war placed in graves? The answer turns out to be more complicated because not all of these swords were discovered in the graves of Scandinavians who were Vikings.

A convoluted argument that the graves containing swords found in Serbia, Croatia and Slovenia held Scandinavian warriors (“Vikings”) with their swords can be made. However, a more logical argument can be made that the people buried with these swords were important natives of the area can be made as well. Until the bones of the deceased are examined (if possible) by scientific process to determine origin, the later argument of native identity is more acceptable.

The above example is obvious, but even that is not always so. The swords found in the Baltic, where the Scandinavians/Vikings were very active, along with other groups/ethnicities/nationalities, looking at the contents of a grave or burial does not always determine that group/ethnicity/nationality of the deceased. The possibility of, say, a Piast (Polish) monarch hiring a Danish warrior, or a Swedish monarch hiring a Finish warrior existed. If those warriors should die in battle, burying them with their weapons maybe part of a community’s/nation’s acknowledgment the deceased’s position.

Scholarship about graves and burials is abundant, especially in archaeological scholarship. The discovery, excavation, and documentation of cemeteries make up a significant portion of the discipline.

With the Viking Period names like Stolpe, Shetelig, Arne, Arbman, Arwiddson, Lindqvist, Brondsted, and many more are all easy to connect with the examination of Scandinavian burials dated to between 750 and 1100. More recently archaeologists like Neil Price, Anne Pedersen, and Martin Rundkvist (to name a few) have all attempted explain a specific aspect of the graves and the objects found of the Viking Period. All of these people's work is worth reading.

Thankful as I am for obtaining the works of these professionals, familiarity with them bred questions I found hard to answer. Viking Period burials in Scandinavia vary—a lot! Beyond a grave being either a cremation or inhumation, there's chamber graves, ship graves, boat graves, cremation mounds, mounds with multiple burials, cremation urn burials, flat graves, coffin graves, equestrian graves, and in one very notable example, a ship-chamber grave. An attempt to deal with the various forms was worked into the cataloging scheme.

But the variation in burials was not the only problem encountered in this project. These other problems are:

1. Poorly documented burials.
2. Completely undocumented burials.
3. The rarity of swords found in graves.
4. Problems obtaining sources of information.

The most obvious and most frustrating example of poorly document burials comes from Norway. As shown in Chapter 3, many of the burials documented in periodicals such as *Bergens Museums Aarbok* (a title with various spellings) of the late 19th and early 20th centuries almost always presented archaeological finds from burials as simple lists. The location of the grave was given, and occasionally the form of the burial was presented (usually a mound); after that was a list of the finds, sometimes with an etching of an interesting object, but mostly not. The condition of the objects is usually not

related, much less the position of these finds in the burial. This documentation is not much with which to work.

The best known example of the objects being documented but not burials where they were found in is Kilmainham and Islandbridge in Dublin Ireland. Discovered in the 1840s during railroad construction, the spectacular finds of this site were simply taken to a museum. The graves were ignored. Another example of swords being discovered, but with no documentation are the 68 swords (most curiously bent) found in the Southeast Baltic and now presented on *The SMB Database*. There are other examples, but these swords presented without their provenance are less valuable to scholars of the past. The shame of this situation that both these examples might have a significant historical value if their context were defined.

Projects like this which attempt to examine a type of object can suffer from a narrowness of purpose. While it is true that this work lists 1579 swords found in graves, looking at the larger context of cemetery or region shows that swords placed in burials is a rare phenomenon. Only 51 swords from Birka are listed out a possible 1000 graves from that settlement. At Hedeby only 35 swords were found in the more than a thousand graves discovered. On Iceland only 19 swords were discovered out 157 burials documented. There are other examples, but suffice to say that burying some dead with a sword was a rare occurrence. With this rarity, we must ask what is the historical and social significance, if any, of the practice?

The biggest problem with this project was obtaining the sources of information. While the original purpose of the project was to reconnect swords with the context of their discovery, that purpose changed—some would say devolved—into what information can be obtained. To many a medievalist working in the profession, the inability to obtain sources may seem like a petty complaint. These days there are three basic ways to obtain information: the internet, the interlibrary loan

department of your local library, college, or university, and simply buying the article or book from the author or author's publisher.

To say that the internet has provided people with a "flood" of information is cliché. But the analogy is true, and for scholars the amount of information available from the net can be daunting. The results, however, of net searches are mixed. For instance, the information presented here about Poland would not have been available without the internet. Yet, information about Finland is frustratingly hard to find. More importantly, the quality of all that is on the internet is stunningly inconsistent. Many an article or website is simply the uninformed opinion of the author. These articles need to be read with a great degree of skepticism. The author(s) must be considered and a bibliography must be included for an article to be read, followed by a re-reading for potential use.

Many people take the interlibrary loan services of a library somewhat for granted. As the ILL Librarian for the Free Library of Philadelphia for over 20 years, the process of interlibrary loan is not always obvious. Just because you can find a book or periodical on the World Catalog (or WorldCat, or WorldShare, OCLC, or whatever the marketing department of OCLC calls it next) does not mean it can be obtained. ILL services are a courtesy between libraries; requests can be refused. The rarer the item, the less likely it is to be loaned. Also the further away an item is, the less likely it is to be loaned. This is especially true with public libraries between Europe and the United States. Furthermore, many a library system charges a fee for the loan. The average going rate these days (February, 2018) is \$20. The best advice to give is be prepared when it comes to ILL.

Lastly, there is simply buying the books. This is a time consuming and expensive process, and I don't know any other scholar who hasn't spent time scouring websites and book-stores for useful items. Indeed, my copy of V. Kazakeevicus' *IX-XIII a. Baltu Kalavigai* (1996) was found in a used book shop in

Easton, PA. This was a pleasant surprise, and I continue to lurk about both on the web and in shops other surprises. I can only hope my bank account will survive.

Given all these problems, can a conclusion be drawn? That depends upon your point of view. Questions of ethnicity and nationality have to be answered before truly saying something about swords found in burials and graves. That the Viking Period graves of Scandinavia contained Swedes, Norwegians and Danes (or more exactly what became Swedes, Norwegians, and Danes) is still the most likely conclusion within that geographic area. That these weapons/sword graves present a whole series of problems, such as why does one grave have a bent sword and another does not, is the stuff of future work.

The most probable reason why these swords are associated with the Vikings is that the Scandinavian counties have the most swords of this type. The chapters above make that obvious. The logical perspective is to name the weapons after the people, and so the weapons are called “Viking Period Swords” or “Viking Age Swords” etc. But as has been demonstrated, these swords are not exclusive to Scandinavia. These swords are found in much of Europe.

As such, the perspective of examination needs to change from merely Scandinavian to European. The European perspective does have its problems, but this larger way of seeing these swords allows for a better historical view of the continent’s situation. Seeing Scandinavians as participants in Europe from 750 to 1100, along with the Franks, the Anglo-Saxons, the Irish, and the proto-Slavs allows for an explanation of swords at this time in history.

The European Perspective can explain swords into two ways: trade and diplomacy. But before discussing trade and diplomacy, the obvious must be acknowledged—swords were weapons mostly for war. Swords were arguably the premiere weapon of the Early Middle Ages, and so valuable for that

reason. While decorated spear-heads and ax-heads have been found, the most decorated weapon of the Early Middle Ages was the sword.

Add to this the skill it took to forge a sword, as studied by Williams, Hosek, and others, and the result is the stuff of legends. Swords were named: Unferth gives Beowulf the sword *hrunting* in the Anglo-Saxon epic poem. There are other examples. For the warrior from the Early Middle Ages, owning a sword gave prestige, and so in trade, the weapon was a luxury item. S. Coupland points out that Frankish swords cost five gold pieces (1). S. Brondsted points that Frankish kings/emperors banned the trade of weapons on occasion (2).

Only recently has trade in the Early Middle Ages gained the attention of scholars. Archaeologists such as R. Hodges (3), S.M. Sindbaek, (4) and others have discussed the development of an “emporia network” along the coasts of the North Sea and the Baltic. By the Viking Period these emporia (trading towns or centers) were well established or being established. Dublin (along the Liffey), York (called Jorvik, along the Humber), Dorestad (along the Rhine), Ribe, Kaupang, Birka, Hedeby, Wolin, Truso, Staraya Lagoda, and Kiev were not just political centers, but much more importantly centers for trade. Trade was made technologically possible by the “Viking Ship,” which was often built for the transport of goods and peoples.

While these emporia and towns suggest a network, the finding of silver coinage—a great number of which were from Arabia—establishes that not did a network exist, but covered a large geographical area. Silver was probably the life-blood of trade, but goods varied from ceramic pots, iron, imported fabrics, the raw materials for jewelry (which was probably made at the emporia), furs and people (as slaves).

Swords were part of these goods, and there is a little evidence to suggest that blades were refitted with new hilt constructions. Most of the stray fragments of swords found at places like Truso and Hedeby were parts of hilts, usually pommels.

The other element of the European perspective is diplomacy, which is murkier than trade. The sword as a diplomatic gift is not well documented. Brondsted (5) presents anecdotal evidence about a Bulgar ruler presented with a series of “Frankish” blades. The origin of the swords, however, is not specified.

Archaeology hints at this form of diplomacy. A. Stalsberg presents an VLFBERHT found in Spain (6); this maybe a diplomatic gift. Some Type L swords, highly decorated weapons of Anglo-Saxon make, may have been gifts given by kings to kings. The most likely series of swords given as diplomatic gifts, however, are Type K swords found in Croatia. The best explanation for these swords being in Croatia and possibly Slovenia is that they were gifts sent by the Frankish/Carolingian King/Emperor to the rulers of that area. Swords being luxury items sent to ruler would be a rich gift, indeed.

To see these swords in a European perspective allows us to change how we see the “Vikings” in a different way. The term “Vikings” is becoming more and more obsolete, and many acknowledge that it only a popular term of convenience. But to see the Scandinavians expanding from Norway, Denmark and Sweden as not only violent pirates, but as traders and colonists is what the study of swords suggests. We are not looking at “Viking Swords,” but we are looking at European Swords used by Scandinavians.

To be sure, these Scandinavians should not be discounted in the period of their expansion. Their trade in swords and other goods testified to a necessary vitality that brought much of the decayed remnants of the Roman Empire into something new. The Danes, Swedes, and Norwegians helped

establish something completely new civilization: Europe. These old swords dated to between 750 and 1100 are a silent testament to that beginning.

Though adopting a European perspective with these swords may bring us closer to understand the violent, barbaric time that was Early Middle Ages, the basic question, “Are these weapons important?” remains unanswered. Examining these swords in form and in construction provides interesting information, but it does not notify us of the significance of them. Are Viking Period swords important?

Re-enactors of history would answer that question with a resounding “Of course!” Some may consider these people an un-scholarly nuisance, but their ability to create a group from ground up should not be dismissed. Their enthusiasm to study all things of a specific historical period allows for fresh perspective. To ignore re-enactors is to dismiss a useful resource which needs occasional guidance.

Arms and armor enthusiasts and professionals would that question with “Yes.” Viking Period swords are the stuff of their interest. Yet the study of arms and armor stretches from period to the next. The requirements of the field demands specialization while also demanding a general knowledge. Enthusiasts are very specialized in one period or aspect of that period, but they must be able to say something about another aspect of another period. The practical upshot here is standards become skewed.

For archaeologists the question “Are Viking Period Swords important” the answer is not so simple. A part of the method of this work was to look at a nation’s or location’s archaeological establishment and history of the discipline. All archaeologists documented finding swords—this is part of the discipline. But the archaeologists of nations like France have no real interest in the Viking Period, much less any interest in swords. Still other nations acknowledge the phenomena, but for political

reasons do little else. Much of Eastern Europe did this until there was a serious change in ideology and, more importantly, the people enforcing that ideology. Russia is an example of this. I strongly suspect that A. N. Kirpicnikov could not conduct research or publish his works until Joseph Stalin died and was denounced in 1956 by Nikita Khrushchev.

Even nations that have done more than documenting and acknowledging Viking Period swords do not always think them as so important. Jan Petersen wrote his typology as doctoral thesis and then moved on to other subjects. Alfred Geibig did the same, and in fact when you look at his work, the Viking Period is only a part of a larger whole. Even Fedir Androschuk has moved on to other archaeological subjects since publishing his book in 2014. The only archaeologist to examine swords as a singular phenomenon is Anne Stalsberg with her work on VLFBERHT swords.

Most archaeologists look at swords as part of a context, usually as parts of burials. Here many names come to mind, but Anne Pedersen and her continued work on weapons graves and equestrian graves. But as stated above this work is complicated by inconsistencies. Again not all graves Pedersen cataloged and examined contained swords, and there is the distinct possibility that some of these burials did not contain Scandinavians. The examination of the deceased bones (usually their teeth for birth location) has allowed people to question the assumptions of the material culture found, including the inclusion or exclusion of swords and other objects.

The subject of Viking Period swords, and the subject of the Viking Period in general, can be reconsidered. For the historian of the Early Middle Ages, the swords and other objects found by archaeologists take on a doubtful position. With new information published about burial contexts, the historian feels obliged to reject the old synthesis but does not necessarily have enough information for a new synthesis. No one doubts that the Scandinavians from about 750 to about 1100 expanded into a

wide geographical area. However, the effect of this expansion seems to have changed, and the place of certain objects—swords being one—are now much more complex.

Notes:

1. Coupland, S. "Carolingian Arms and Armor in the Ninth Century." *Viator* (1990) 29-50.
2. Brondsted, J. *The Vikings*. New York: Penguin Books (1967) 120-121.
3. Hodges, R. and D. Whitehouse. *Mohammed, Charlemagne & the Origins of Europe*. Ithaca, New York: Cornell University Press (1983)
4. Sindbaek, S. "Part 2: Northern Europe." In: *The Archaeology of Medieval Europe. Vol. 1. Eighth to Twelfth Centuries AD*. J. Graham-Campbell & M. Valor (eds.) Aarhus, Denmark: Aarhus University Press (2007) 302-305.
5. Brondsted, J. *The Vikings*. P. 121.
6. Stalsberg, A. . "Herstellung und Verbreitung der Vlfberht-Schwertklingen." *Zeitschrift für Archäologie des Mittelalters*. 36 (2008) 89-118. This article has been translated into English and is now available online as "The Vlfberht Swords Revisited."

