VIKING SWORDS
This book contains descriptions, dating and study of social aspects of swords in the Viking Age society. The book comprises a catalogue of 832 Scandinavian swords, including details or fragments of swords. The finds are ordered according to provinces and parishes. Each catalogue entry is presented with a code for the province and a number for the sword.
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Chapter I

Approaches to the study of Viking Age swords and weaponry

Introduction

Bernard of Chartres (c. 1130) has a famous saying: ‘We are like dwarfs standing upon the shoulders of giants, and so able to see more and see farther than the ancients.’ To my mind this quotation expresses very precisely our dependence on previous researchers, and this is particularly the case with the study of Viking Age weaponry.

Eighty-eight years ago Jan Petersen published a book titled *The Norwegian Viking Age swords: A typological-chronological study of Viking Age weaponry*. The book was only the first part of his extensive research programme that aimed at the systematisation and chronological ordering of the main groups of the Viking Age material culture – weaponry, jewellery and tools (Petersen 1919; 1920; 1928; 1954). In his preface, Petersen points out that many questions about Viking Age weaponry remained to be solved after his research. Aspects that he considered interesting for future research were a comparison of the archaeological material with the evidence of the written sources, the decoration of the hilts, as well as studies of the Norwegian cultural connections in the Viking Age. Petersen looked upon his work as a preliminary elaboration and systematisation of the source material. His ‘boring chronological elaborations’, as he says, about types reveal the richness of the oldest history of Norway, a time period full of events. According to Petersen, the purpose of his chronological systematisation of the weapons is not only to trace the development of their forms through a chronological ordering of the archaeological material into 50-year phases but also to contribute to an understanding of the historical development during the Viking Age (Petersen 1919: 20ff.).

There are already four works of recent years where the history of studies of Viking Age weapons is presented in detail (Geibig 1991; Jakobsson 1992; Vešnjakova 2005; Marek 2005). Therefore, in order to make a more objective evaluation of the research already done it would be sufficient to outline only the main trends in the research on Viking Age weaponry.

Before Petersen’s book appeared, important research had been done by A.L. Lorange, which started the technological approach to the study of weaponry (Lorange 1889). During his work as curator at the Museum of Bergen, Lorange discovered traces of pattern welding and inlaid inscriptions with Latin letters and other signs on the blades of some swords. This led him to conclude that
most of the Scandinavian swords were manufactured on the Continent and imported to Northern Europe. Lorange supported his conclusion with colour drawings of swords that had inscriptions on the blades. He also introduced written evidence from Old Norse literature and Western European medieval chronicles related to different aspects of the swords. Lorange’s book demonstrates a range of problems that arise when inscriptions are analysed and documented. To illustrate this I would like to draw attention to two swords discussed by Lorange (1889: 15f., pl. IV:1, fig. p. 16). The iron strips inlaid on the corroded blade of the sword from Sæbø, Sogn og Fjordane, were incorrectly interpreted by Lorange as a runic inscription (see chapter II, Swords of type C, and chapter VII). As far as we know, only one Norwegian sword dated to the 13th century has a runic inscription, inscribed on a ring around the grip (Kirpičnikov & Stalsberg 1998: 512). The other sword (later than the Viking Age) was found in the Fyris River in Uppsala. Lorange interpreted the inscription as a name, INGELRAM or INGEBRANT. The same sword was published later by Holger Arbman with a drawing where the inscription is interpreted as INGELRILT (Arbman 1936a: 147, Abb. 2). Visual observation as the only method and basis for interpretations of inlaid letters and signs is still in use (see criticism in Androshchuk 2003). Until a new technique has been developed, most interpretations must be considered as disputable suggestions.

In the 1960s and 1970s the technological approach to the study of Viking Age swords was developed further by Aleksis Anteins and Lena Thålin Bergman (Anteins 1973; Thålin Bergman & Arrhenius 2005). The core of both publications was a metallographic analysis of Baltic and Swedish weaponry. Thålin Bergman’s work also included X-ray analyses of Swedish weapons. Special stress was laid by both researchers on solving the question of local iron-working traditions and the appearance of pattern welding in the two areas. In both works various patterns of weapon-smithing were presented. Despite the huge number of examined swords from Sweden (Birka 35, Uppland 30, Gästrikland 59, Västmanland and Dalarna 21, Öland 5, Östergötland 8, Gotland approx. 200), Thålin Bergman’s concluding remarks were not very optimistic: ‘The many technical different details in the pattern welding points to the existence of several production places. In the Merovingian period these places may have been situated in the Frankish area where spathas with pattern welding are quite common, but in lack of technical analyses … this hypothesis has to be further investigated. The same is valid for the swords with inscriptions often supposed to be Karolingian’ (Thålin Bergman & Arrhenius 2005: 81).

An interesting attempt to create a model of the production of weaponry in different cultural regions around the Baltic Sea was made by Kristina Creutz (2003). She challenged the traditional idea of Gotland as an important centre
of production of weaponry (Creutz 2003: 106f.). Her main method was an X-ray analysis of spearheads found in Sweden, Finland, Estonia, Latvia and Russia. On the basis of this and of visual observation of variations in the shape of the spearheads she came to the conclusion that there existed different technological traditions in the production of the same type of spearhead (type M according to Jan Petersen) in these regions. To my mind this conclusion is similar to the results of Lena Thålin Bergman quoted above. It seems that technological investigations are in general unable to solve the question of the provenance of weapons. In my opinion there are two main problems with Creutz’s approach. The first is that the study is restricted to only one type of spearhead. Before singling out one type, it would be important to make a systematic analysis of all types of spearheads known in Sweden and then look into the socio-cultural contexts of the use of spearheads in different chronological periods. The second problem is a consequence of the first, namely Creutz’s conclusion that there existed a stratified society in Viking Age Sweden (Creutz 2003: 290). If the author had made a statistical analysis of the other types of spearheads and weapons and their socio-cultural contexts, it seems to me that she might have come to the opposite conclusion.

The second trend in the research on weaponry is represented by studies of the morphological development of types. This is the traditional approach which had its beginning in the pioneering works by Oscar Montelius (1900) and the above-mentioned Jan Petersen (1919). The subjectivity in the selection of the visual criteria used in the classifications was criticised by Marc Maure (1977). He pointed out that Petersen’s typology was based mainly on the shapes of the hilts and that the blades form an important part of these composite artefacts. He therefore suggested that the typology should be based on a selection of clearly defined morphological elements and measurements representing both parts of the swords, and that a graphical method used in the natural sciences should be applied for their analysis. The blades were divided into single-edged and double-edged blades, while the analysis of the hilts concentrated on the shape of the upper part of the hilt (straight or convex shape of the base) and of the lower guard (straight, concave-convex or concave shape of the upper and lower side). On the basis of the correlation of these elements and measurements on 109 completely preserved Norwegian specimens Maure obtained 25 types of hilts which in most cases could be paralleled with Petersen’s ‘subjective’ types. Maure’s blade types were, however, difficult to correlate with certain types of hilts (Maure 1977: 112–114, figs. 39–40; for the blade typology, see Chapter III).

Very similar to Maure’s approach is a study presented by Alfred Geibig (1991). Having studied swords found in the former West Germany and dated to the 8th–12th centuries, he produced a new extended typology of hilts and
blades, based on morphological elements and measurements of all composite parts of the swords (see below, Swords in image and text). As a result he established 19 ‘combination types’ of sword hilts and 14 types of blades. The combination types are broad but in several cases divided into variants. The main constituent of the combination types is the broad-side view of the upper part of the hilt, while the narrow-side and upper-side views of the upper part of the hilt and the upper-side view of the lower guard are used for the division into variants. Geibig does not take into consideration that the hilts in a number of cases have been assembled from different types of swords. The decoration as an important feature in the design of the hilts has not received sufficient attention in Geibig’s work. The value of his classification of the blades is disputable as far as the Viking Age swords are concerned. Their blades show only minor differences. The author has not managed to catch any essential typological distinctions among the Viking Age specimens (see Chapter III). Geibig’s blade types are therefore only of interest in dealing with a collection of swords from different chronological periods. The chronological framework is also a weak side of the book because of its dependence on Petersen’s dates, which in many cases are disputable. Nevertheless, as I will show below, there are many innovative approaches in Geibig’s research, and one of the most important is his observation that the pommel has been constructed in different ways (see Chapter VII, Hilt construction as an indication of local manufacture and import of swords).

Finally, a theoretically oriented book by Mikael Jakobsson (1992), devoted to typology problems and to the interpretation of swords, should be considered. Jakobsson’s aim was to try to understand the regularities of the hilt design in terms of symbolic functions. He concluded that there existed six principles of hilt design: (1) triangular pommel, (2) tripartite pommel, (3) five- or polypartite pommel, (4) absence of pommel, (5) bent lower guard (‘bottom hilt’), and (6) absence of upper guard (‘top hilt’). This is an example of a very rough generalisation where the swords lose their individuality. However, Jakobsson’s attempt to apply a contextual analysis to the use of weaponry in different parts of Scandinavia has in many ways been an inspiration in my discussion of these aspects.

To sum up, I have tried to show that there have been two main approaches in the studies of Viking Age weaponry: a technological and a morphological approach. In both trends new theoretical perspectives have been proposed (Jakobsson 1992; Creutz 2003). In my view, one of the most important problems is that of source criticism. There is still no complete and many-sided source base that can be used for further development of the discussion. This makes all kinds of interpretations premature. So I think that we are still on the same
level as Jan Petersen. It is clear that a simple list of sword finds, usually called a 'catalogue', leaves important pieces of information out of consideration. In my opinion, what we need now is a critical, contextual approach that could lead us from understanding single artefacts to understanding Viking Age society.

There are two basic levels in such a contextual approach, which I will call a 'microanalysis' and a 'macroanalysis'. By microanalysis I mean the study of an artefact as a chain of different events. In the case of swords, which are composite artefacts, such events could be seen in the production of pommel, guards, blade and decoration, and in the assemblage and repair of the parts. Using Fernand Braudel's terminology (Braudel 1980), this could be viewed as the 'short history' whereas the use of the complete sword by its owners and its circulation in society may be seen as the 'long history', which is the object of my macroanalysis. The macroanalysis suggests studies of an artefact in relation to its surrounding settings: from a grave to a cemetery; from a settlement's feature to its place within a settlement; from its place in a micro-region to its place in a macro-region. Important sources for the reconstruction of the social setting in which artefacts were circulated in Viking Age Scandinavia are place-names (Brink 1996; 1997), rune stones (Sawyer 2000; Jesch 2001) and Old Norse literature (Gurevich 1966; 1984; Jesch 2001). This complex contextual approach consists of two levels of analysis, which I would like to call 'the anthropology of weaponry'. This denotes studies of different social aspects of weaponry and its role in societies and communities. It is worth noting that quite a lot has already been done towards developing an anthropological approach to the study of war and weaponry (Lebedev 1991; Härke 2000; Price 2002; Creutz 2003; Hedenstierna-Jonson 2006). However, I will try to show in the following chapters of this book that there is still much to be done in this direction.

Source criticism
It would not be an exaggeration to say that archaeological sources are presented in the form of three-dimensional originals and two-dimensional copies: drawings, sketches, pictures, photographs, and cross-section drawings. They may be interpreted in textual form (diaries, single-context sheets, reports, publications) or in two- and three-dimensional visualised reconstructions.

Archaeology is constantly dealing with images, illustrations or pictures of one kind or another, which makes the subject similar to art. Archaeologists talk about original works, copies and styles. What unites archaeology (or, generally speaking, science) and art is mimesis, the imitation of reality (Hauser 1985: 5). Our experience shows that every picture has many layers and contains many
scientific ‘truths’: we may use photographs as a mimetic or at least an acceptable equivalent to the original image, but we no longer believe in photography as a true representation of reality, because we know there are composed ‘fakes’ (Bolvig 2003: xxv).

That the primary archaeological source is to a great extent formed by images is shown by the history of Holger Arbman’s publication Birka I (1940–1943). Hjalmar Stolpe excavated this Viking Age cemetery over several years between 1873 and 1895. The documentation of the excavations consists of four main groups: notebooks, single notes with sketches, drawn plans with notes, and labelled boxes with finds. Stolpe made simple plans of cremation graves only in exceptional cases, but his plans of inhumation graves are very detailed. The first hundred graves were not documented with plans, and it is first with grave 464 that we find actual plan drawings. There are a lot of written supplements to the plans that explain, for example, at what depth the artefacts were found, the relations between them, and construction details. The plans published in Birka I are fairly good copies made by Harald Faith-Ell, who worked together with Arbman, and these are the plans usually used in later research. However, not all the depicted details are accurate. The shape of the hilt of some swords found in the chamber graves is not equivalent to the original (Bj 581, 624, 752, 832, 842, 850, 977). The position of a spearhead found in grave Bj 547 is depicted pointing in two different directions in a sketch in the notebook and in Stolpe’s drawn plan, which is used for the published drawing. The difference is not without importance – it leads to two different interpretations of the burial rite (Fig. 1–2).

Stolpe did not manage to publish the material from Birka. Instead it was

Fig. 1-2. Sketch and published plan of Birka grave 547 (after ATA and Arbman 1943).
Gustav Hallström who first took on this task. He started the work by organising the boxes with finds according to the grave numbers. He had organised the material from 222 graves when other commitments demanded his time. With the help of the artist Olof Sörling the artefact finds were drawn, and ink-drawings were made of the grave plans. Plans of the Birka cemeteries had been made only in the last few years of Stolpe’s excavations. At that time some of the pegs with numbers that Stolpe had put on the reconstructed graves were gone, and it was not possible to localise the place of several excavated mounds (Hallström 1913: 21). Stolpe had normally not described the artefacts, and therefore this became an important task for Hallström.

Hallström described the graves in the following order: (1) size, shape and inner constructions of the mound; (2) artefact finds. As a result, he only managed to describe and publish 98 graves (Hallström 1913) before he turned to other commitments. The most interesting artefacts were depicted twice: in the text and in plates. Hallström’s publication gave the reader fairly complete information about the artefacts and their context. The plates with images of finds were arranged according to their association in each grave.

When Holger Arbman began his work with a new, complete publication of the Birka graves in the 1930s, he changed the principles for the presentation. There was a desire that the work be comprehensive but at the same time not too extensive. Arbman, therefore, decided to order the volume of plates according to categories and types of artefacts (Arbman 1940–43: xxviii). This was the same method used to organise the corpus of Gotland’s Iron Age finds. The first volume of this corpus, Die ältere Eisenzeit Gotlands, was published earlier (Almgren & Nerman 1914–1923), and the second volume, Die Völkerwanderungszeit Gotland, was prepared and published by Birger Nerman during Arbman’s work with the Birka publication (Nerman 1935). The pictures in these books show an interest in arranging artefacts according to their types. The structure for presenting the excavated material in Hallström’s Birka volume is similar to the books about the boat-grave cemeteries at Vendel and Tuna in Alsike prepared by Ture J. Arne (Stolpe & Arne 1912; Arne 1934), and apparently it was Arne who decided to publish plates that presented not the different types of artefacts but their associations in the graves.

To sum up, the archaeological practice shows that we live in a world of circulating illustrations that shape our vision of the past. Since these pictures are imitations of the reality, we need to clarify their ‘scientific truth’ in relation to the originals and the descriptions. This gives rise to a question about the objectivity of textual description in relation to pictures.
Swords in image and text

A crucial problem in both art and archaeology is the distinction between original and copy. All kinds of archaeological illustrations are copies of original artefacts or structures.

In his article on the method and material of archaeologists, Oscar Montelius stressed the importance of access to original finds or at least to casts of more important items as well as images and descriptions of all artefacts that cannot be studied in original or as casts (Montelius 1891: 5f.). Montelius realised that it was impossible to see all the finds in person and therefore claimed that the material should be made visible in the form of images and descriptions (Montelius 1891: 8). Montelius referred to the artefact as the original and to the depictions of the artefact as images (avbildningar), drawings (teckningar) or figures. Knowledge of an artefact should be based on a detailed picture and knowledge of the find circumstances on a detailed description (Montelius 1891: 8f.).

The further development of the typological studies indicates that the ‘original’ used by the researchers more and more often was an image rather than the artefact itself. This is excellently illustrated by such classical typological publications as Oscar Almgren’s book about the fibulae of the Roman period (1899) and Bernhard Salin’s research on Old Germanic animal ornament (1904). The artist at the Museum of National Antiquities in Stockholm, Olof Sörling, made, in accordance with the Museum’s wishes, a large number of images of artefacts. Sörling’s images can be defined as originals in relation to the xylographies made by J.Engberg, W. Meijer and E. Hansen. These copies of the original images of the artefacts then became the basis not only for Almgren’s and Salin’s research but also for the knowledge of later generations of researchers. Sörling’s images are of high quality, but all of them are not absolutely accurate. Let me take just one example: a sword found in Grave 942 in the cemetery of Birka. The history

Fig. 3. Sword hilt from Birka grave 942 according to Ekhoff’s drawing (after Ekhoff 1886).
of this image is a good example of where our knowledge of types has come from.

The sword was first published in 1886 in an article about the conservation of iron artefacts (Ekhoff 1886: 141, fig. 25; Fig. 3). This picture was used by the author to demonstrate the results of cleaning “a richly elaborated sword hilt of iron with a decoration consisting of inlaid silver wires and silver sheets”. According to the author, all the artefacts intended to be cleaned should be drawn before and after the cleaning process in case of possible cleaning damages (Ekhoff 1886: 139).

In his thesis Holger Arbman considered this sword as a doubtless specimen of Carolingian craftsmanship (Arbman 1937: 209ff.). In his discussion of the origin of the sword he used the above-mentioned reconstruction made by Sörling and placed it in the text together with a picture of a sword from Holland, which he considered as the ‘nächste Parallele’ (Arbman 1937: 210, Abb. 36–37). Both drawings really do give the effect of a close visual resemblance, but a careful comparison with ‘original copies’ (photographs) published at the end (!) of the same book shows that the drawings represent reconstructions of two distinct types of swords that differ in construction (Arbman 1937: Taf. 65, 69; Fig. 4; cf. chapter II, The sword from Birka grave 942). This mistake is later repeated in articles by several German researchers who assign both these swords to the so-called Mannheim type, i.e., Jan Petersen’s special type 2 (Jankuhn 1939: 159, No.13; Menghin 1980: 236, 271, No.14; Müller-Wille 1982: 151, No.20). It is interesting to note that Arbman reproduced the same reconstruction of the sword from Grave 942 in his Birka publication (Arbman 1940: Taf. I:1a–b) but not the photograph. Sörling’s reconstruction is still kept in the Antikvarisk-Topografiska Arkivet (ATA) in Stockholm. This drawing represents a sword 90 cm long. This is exactly the same length that we find in the text part of the Arbman publication (1943: 364ff.). But in reality, the preserved part of the original sword is 18.2 cm long (see Catalogue, Up 53). A sword of approximately

Fig. 4. Sword hilt from Birka grave 942 in its current condition of preservation (after Arbman 1937).
this length is depicted in Stolpe’s original plan of the grave as well as in the published simplified plan (Arbman 1943: Abb. 315).

This analysis shows that the concept original covers at least two meanings in relation to images: a primary sketch and a final picture, the latter of which can often be seen as a reconstruction on account of possible damages.

The question about the relationship between originals and copies is also relevant to the description of swords. Anders Hagen’s experience of describing a Viking Age sword can be quoted: ‘I was given a magnificent sword from the Viking Age and the order [given by Sigurd Grieg] was clear: “Describe this artefact and show me the result. It is not urgent; you have a couple of hours”… I had never before held such a thing in my hands and I did not know the “code” that was inherited from Oluf Rygh’s time. How should I cope with this? But as no object was considered unique in the science of archaeology, I went downstairs to the storerooms. There were probably more than a thousand swords from the actual time period. Quite rightly – there was of course a sword that matched the one I had got from Grieg. I wrote down the number, checked the records, found the description and copied it with small changes. Before the time was gone I delivered the result and was informed that, for a beginner, my work was acceptable. But what Grieg did not know was that my short description was practically a copy of what he himself had accomplished many years before’ (Hagen 2002: 39, my translation).

Hagen’s story shows that description in archaeology is a very subjective thing, dependent on personal experience and the time given for the work. Any archaeological description is, as a rule, impossible to test if it is not supplemented with the source of information: the artefact itself, an original drawing or a photograph. The same is true for drawings, the accuracy of which depends on the researcher’s personal experience of doing such things and recognising important features.

It is interesting how Sune Lindqvist describes the typological process in his obituary for Jan Petersen: ‘Thus here a whole-hearted young man with a clear head, a good ability of observation and an enviable perseverance had long since been needed. The task was otherwise seemingly simple: first get a card index as complete as possible with drawings or photographs that showed each artefact or type variant. And the collection of material could not be restricted to one’s own country. It must represent all of Scandinavia! In 1892 Montelius limited himself to depicting nine specimens of an artefact group well represented just before and during the Viking period and of special importance for chronological studies – the so-called oval brooches. Thirty-six years later Petersen could multiply by nine the number of distinct types and type variants’ (Lindqvist 1968: 91, my translation).
Jan Petersen worked on his book about Viking Age swords for seven years and, as he says in his preface, an important basis for his study was the photographs and drawings he got from different sources (1919). It is obvious that Petersen had seen most of the swords he was writing about. He distinguishes forty-four different types among the Norwegian swords. For thirty-five sword types his descriptions are supplemented with drawings done by Sofie Krafft. I suspected that these drawings should be seen as an important source for his descriptions and definitions of the types.

In order to check this I visited the museum in Oslo (Universitetets oldsaksamling) in June 2001 and examined some of the swords Petersen had used as characteristic examples of his types. The result was that at least seven of them were found to be variants of types already distinguished by him: special types 14 and 15 represent type L; type U is the same as special type 2; type I is the same as type H; and special type 4 is simply a fragmentary hilt of special type 1. Most difficult for me was to understand the distinction between type H and special type 20. I have checked the two specimens of the last type in the stores of the museum in Oslo (C 4979, C 5593), and a close study shows that there is only one thing that makes them different from type H, namely that both of them have lost their pommel (see chapter II, Swords of type H/I). That this obvious fact was not noted by such an experienced archaeologist as Jan Petersen makes me convinced that at least some of his type definitions are based on studies of images, not of original artefacts.

It seems to me that primarily images, not real artefacts, were also the basis for another well-known archaeologist involved in typological studies – Nils Åberg. His archive contains a large number of unscaled sketches and copies of different and, as a rule, previously published drawings of artefacts and types of ornamentation (Reisborg 2002: 198). All these sketches form the basis of his typological work.

There are different approaches to how swords should be published or presented for readers. As a rule they are dependent on the goal the author is attempting to reach.

Petersen’s aim was to write a strictly typological-chronological study. He arranged the Norwegian material, type after type, in the chronological order that he reconstructed on the basis of the find associations in the Norwegian graves. It is clear that his descriptions of the types were based on images and not on the swords themselves. According to Petersen’s calculation in 1919, 2027 swords were known in Norway (Petersen 1919: 7). Petersen published images of 102 out of the 386 swords mentioned in his text (Petersen 1919: 214ff.). He was interested in the context of the finds only in relation to dating questions. His book is not a real publication of the swords, as the author also says himself:
his intention was to process the material (Petersen 1919: 2).

Another way to present swords is seen in Elis Behmer’s thesis on the swords from the Migration and Vendel periods (Behmer 1939). The author aimed to study the origin and early development of the double-edged swords. This is an extremely typological research which contains a list of finds arranged according to his types as well as plates with images of a selection of the swords, but no information about their context. The images are obviously a more or less casual selection of the illustrations used by the author for his typological research.

In 1954 the Polish archaeologist Andrzej Nadolski published a book on early medieval weaponry in Poland (Nadolski 1954). The swords are analysed as part of a large material of weaponry. At the end of the book there are plates with simple pictures of thirty-eight swords at a scale of 1:8. There are references to all these pictures in the text, where they are said to represent different types according to Petersen’s classification (Nadolski 1954: 24ff.). Only four sword hilts are illustrated with photographs in the text of the book (Nadolski 1954: fig. 1–3). What is completely different from the works of previous researchers is that information about the find places and find circumstances, measurements and remarks are collected systematically and presented in the form of a table (Nadolski 1954: 146–157).

A new approach to the study and presentation of the sources in publications was introduced in an article about a sword found in the Palace of Westminster in London published by G.C. Dunning and Vera I. Evison in 1961. This was a first attempt to use the wide possibilities for a contextual analysis of a sword. The article contains a detailed description of the find circumstances, a description of all parts of the sword, photographs and drawings including both horizontal and vertical sections, as well as an analysis of comparative material and various discussions (Dunning & Evison 1961: figs. 2–3).

A series of articles published by J. Ypey is characterised by detailed descriptions of the swords, high-quality images in the form of both photographs and drawings, and also X-ray photographs of the blades (e.g. Ypey 1962–63). To my mind these are still the most informative images of swords that have been published.

In 1964 a volume was published with plates of photographs and drawings of swords with remains of inlaid inscriptions on the blades as well as other decorated weapons from the Viking Age and the early Middle Ages in Finland (Leppäaho 1964). The volume was published after the author’s death and therefore does not represent the book that he had planned to publish. It contains images of forty-seven of the approximately 200 swords known from the country (calculated on the basis of Kivikoski 1973). The descriptions of the depicted swords are very laconic and deal primarily with type definitions and measure-
ments, that is, they are meant only as explanations to the images. There is no information about the find circumstances and about associated artefacts. The inscriptions are as a rule presented in two variants – photographs and drawn reconstructions, which makes it easy to check the documentation given. However, for 13 Viking Age swords there are only drawings. This publication clearly signifies progress compared to Lorange’s book from 1889 because it contains photographs (‘original images’), not just drawings (‘reconstructed copies’).

Inspired by the works of Lorange, Nadolski and Leppäaho, Nikolaj A. Kirpičnikov focused his studies of Old Russian weaponry on the swords and especially on the discovery and interpretation of inscriptions on swords from the Viking Age and Early Middle Ages found in the territory of Rus’ (Kirpičnikov 1966). During the preparation of his publication he collected a large number of drawings and photographs, some of which were published in his book.

The basis of Kirpičnikov’s study was a card index he created, with information about find circumstances, shape and size, date, place of storage, correlation to Petersen’s types etc. Most of this information is presented in tables similar to those made by Nadolski. Out of 183 swords known from the territory of Rus’, only 68 specimens are depicted. The inscriptions are only rarely presented in the form of both a photograph and a drawing, which makes it impossible to check the accuracy of the documentation. In three recently published articles about sword inscriptions by Kirpičnikov, written in collaboration with Scandinavian archaeologists, only drawings of the inscriptions are included, which makes the interpretations questionable (Kirpičnikov & Stalsberg 1995, Kirpichnikov & Stalsberg 1998; Thålin-Bergman & Kirpičnikov 1998; Kirpichnikov, Thålin-Bergman & Jansson 2001).

During the 1970s several articles dealing with different aspects of Viking Age swords were published. They do not pretend to present all the related material, but they demonstrate in various ways what should be borne in mind when studying swords.

Michael Müller-Wille published several extensive articles on a number of Viking Age swords from Germany (including Hedeby) and from Norway. The manner of presenting the material is the same as in the article by Dunning & Evison mentioned above, but with two complements – drawings of finds associated with the swords, and lists of parallels (Müller-Wille 1970; 1972; 1982). One of the articles is supplemented with a valuable analysis of the construction of the sword pommels, which underlines the importance of publishing such photographs in connection with discussions of type determinations (Arrhenius 1982).

In 1975–1976 Alexander Ruttkay published two extensive articles on medieval weaponry and equestrian equipment from Slovakia. Swords are discussed
as part of the presented material. His catalogue of the weapon finds contains information about find-places, find circumstances and dates, as well as descriptions of the swords and references to other publications. The analytical part of Ruttkay’s study aims at classifying the seventy-four swords according to the existing typologies by Jan Petersen and Ewart Oakeshott, in order to clarify their age, distribution and origin (Ruttkay 1976: 245–287). The presented images of the hilts and decorated blades consist of photographs and drawings. Occasionally when the author wants to figure out the construction of a pommel, he complements his studies with X-ray photographs. The images in Ruttkay’s work are not only illustrations to the text but also a source that can be actively used by other researchers.

Two different approaches to the presentation of swords are found in Zdenko Vinski’s article (1983) and Dušan Jelovina’s book (1986) on swords found in Yugoslavia. The two publications have different goals and different character. Vinski’s article has the same goal as the above-mentioned study by Ruttkay. He tries to classify twenty-three swords according to Petersen’s typology, and he also discusses their chronology and origin. However, in contrast to Ruttkay, Vinski’s depictions of the swords are only rough one-dimensional drawings illustrating the text, not a true source of information. Jelovina’s book is a presentation of finds kept in the Archaeological Museum of Croatia. The author has chosen to present a catalogue of the swords in the form of short descriptions (measurements of pommels and guards are missing) and pictures of the swords and associated finds, as well as photographs of the swords. The drawings of the swords are presented in reduced scale in the plates, but they are supplemented with drawings of horizontal and vertical sections of the pommels and guards. All the images of swords undoubtedly represent valuable sources ‘open’ to interpretations.

The already mentioned book by Alfred Geibig (1991; see above, Introduction) is a kind of modern revision of the typological approach to the study of swords. It is an analysis of the morphological development of swords from the 8th–12th centuries found in the former West Germany. What is most important and completely new in Geibig’s research is his manner of presenting the swords. The catalogue includes documentation of about 350 swords kept in different museums, and images of 261 swords are published, 179 of which can be referred to the Viking Age. The images are presented in the plates in the following way: a photograph of the whole sword; a photograph of the hilt; drawings of the narrow-side and upper-side views of the upper part of the hilt as well as the upper-side view of the lower guard and a cross section of the lower guard. In cases where remains of inscriptions or pattern welding are preserved, a photograph and drawings of them are added.
Geibig’s descriptive documentation consists of six main groups of information: 1) find-place, museum collection and find category (grave find, settlement find etc.); 2) condition of the artefact; 3) measurements, construction, material and description of the different parts of the hilt and their decoration; 4) measurements and description of the fuller and the decoration of the blade; 5) description of scabbard remains; 6) enumeration of associated finds (in graves); 6) type definition of hilt and blade; 7) references. Geibig’s detailed description of the shape of the hilt and blade is basically a textual summary of the data presented in his images. It makes sense for the author whose goal it is to trace the morphological developments of both hilts and blades during the broad period that he studies. It is only a pity that Geibig’s catalogue is published in two different ways. The plates with images accompany his discussion in the book, whereas the documentation is enclosed in the form of microcliche leaves, which needs a special technique that is now out of use. The plates in Geibig’s book represent both a presentation and an analysis of the material. They present the basis for the author’s morphological classification.

A book by Vytautas Kazakevičius deals primarily with an analysis of the swords from the 9th–13th centuries found in the Baltic countries (Kazakevičius 1996). Pictures as well as a table and a list of finds play a subordinate role in his discussion of the distribution, date and origin of the sword types. Many drawings lack vertical and horizontal sections of the parts of the hilts and represent secondary copies of photographs and pictures published elsewhere (Kazakevičius 1996: figs. 15, 21, 24, 29, 32, 37, 40, 46, 54, 69, 78).

A book by a restorer, Herbert Westphal, aims at tracing Saxon culture in Westphalia in the 6th–10th centuries on the basis of the shapes and technical standards of double- and single-edged swords as well as winged spearheads. His catalogue contains swords found not only in Westphalia and Lower Saxony but also in Schleswig-Holstein, southern Germany and Austria, and consists of very detailed descriptions of the condition, measurements, construction, decoration and technological analysis of the blade and the hilt. Special attention is paid to the technology of the blade. There is also information about the date of each sword, according to archaeology and according to the technology of the blade, and references to earlier literature. Photographs of the whole swords and special photographs of the hilts at a scale of 1:1, as well as photographs and drawings of signs and inscriptions or pattern welding on the blades, are presented in the text. In exceptional cases X-ray photographs of pommels complement the images (Westphal 2002).

Recently Valeri Jotov published a study of Bulgarian weaponry and equestrian equipment from the 7th–11th centuries (Jotov 2004). Six swords and 15 scabbard chapes, all found accidentally, are presented as photographs and
drawings. In only one case is a vertical section of a sword pommel given (Jotov 2002: Tabl. XXX:423). On the other hand, there are often drawn sections of tongs and blades as well as views of the lower guards from different angles. The material is limited. Nevertheless, the images do their work as a source because they raise questions.

Two books published by Ewart Oakeshott and Ian Peirce (Oakeshott 1991; Oakeshott & Peirce 2002), which represent a kind of ‘guide for collectors’, should also be mentioned. Their catalogues contain a number of images of medieval swords without scale, measurements and details about the find circumstances, and they are sometimes accompanied by questionable type definitions and dates.

To sum up, the practice of presenting archaeological data shows that a purely textual description of objects is always subjective and uncertain. Images of objects are also fairly subjective, especially if they do not show details and drawn images of three-dimensional projections. However, all these texts and images constitute sources; they simply have different informative value. Basically a combination of images and descriptions represents the term “archaeological record”. In presenting here a catalogue of Viking Age swords from Sweden, I have tried to make my own description of the swords very laconic but at the same time present measurements and describe some details that can barely or not at all be seen in images. In cases where I have used written evidence of the swords, I have cited these sources translated into English.

This book contains a catalogue of approximately 766 Swedish swords, including details or fragments of swords. I have studied about half of them personally. There is also a catalogue of 66 Norwegian swords from the former collection of Nordiska museet in Stockholm. The finds are ordered according to provinces and parishes. Each catalogue entry is presented with a code for the province and a number for the sword. The images of the swords I studied personally are, as a rule, presented in digital photographs and scanned drawings made by myself. The contours and details of the swords were originally drawn at a scale of 1:1 but are reproduced here in a reduced scale.

Explanations of type definitions, abbreviations etc. used in the book are collected in the introduction to the catalogue. Names and titles written with the Cyrillic alphabet have been transliterated according to the system used in Swedish research libraries (see www.kb.se/dokument/Kyrilliska%20alfabetet.pdf).