

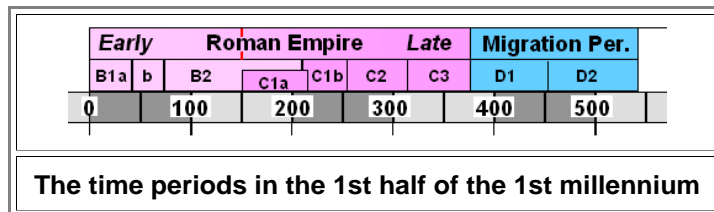
Northern Sword Types of the First Millennium

What I give you here is an extremely abbreviated account of the "science" of classifying swords found (more or less) in the "North" in the (more or less) first half of the first millennium. Typically, each class has several subclasses, and even the swords in one subclass can look quite different.

The classification is based on a lot of features that are not always immediately apparent. They are also not always clear since "[the book](#)" on occasion states plain nonsense [1](#).

Unfortunately the book also refers a lot to (non-existent) "carburization" and makes many unsubstantiated claims with regard to the positive influence of pattern welding on mechanical properties like better "elasticity" or "vibrations damping".

- The swords get younger in time as you go down the lists. More precise data to the dating of the swords are given farther down. The general system always used for giving periods from about 0 AD to 500 AD is shown below. It will be used throughout.

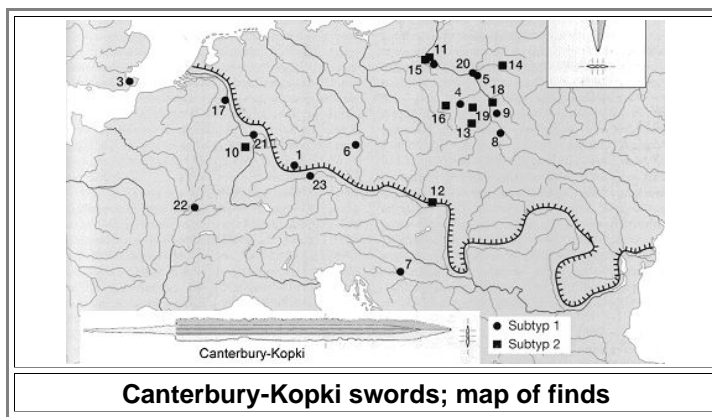


12 groups with altogether 60 subgroups and variants to subgroups are needed to classify a grand total of **418** swords! In other words: While there some are common denominators for groups of swords, any given sword is rather unique. More! Two swords that look alike enough to put them in the same group / subgroup may be totally different with respect to their compositions. One might be a randomly piled together piece of inhomogeneous iron / steel, while the other one is a master piece of highly complex pattern welding.

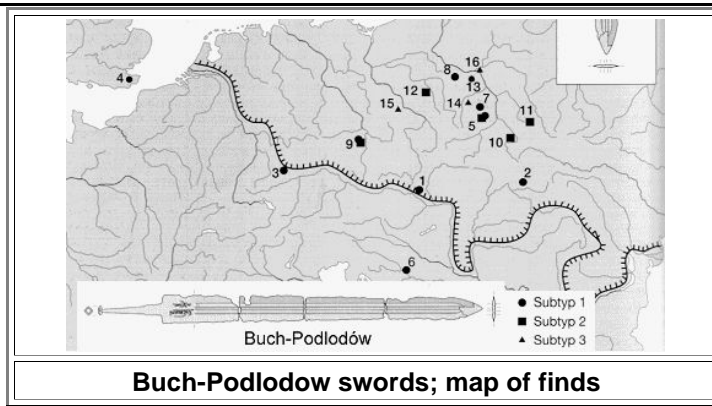
- Anyway, here are the 12 major groups. For each type there is a map showing where the swords were found. I have distilled the comments from long texts and edited the maps to some extent. I might be a bit off on occasion. One reason for this is that the data given in the maps do not always match those in the text. Whenever I refer to "piling" etc., I interpreted what I read (and I might be wrong). Most of these swords were definitely or quite likely made in the Roman empire and "exported" to the Barbaricum. It appears that the metallographic examinations were mostly made in the "East", e.g. in Poland, using the swords found there. It is thus possible that the simple make and bad quality often found just testifies that the guys there made "cheap" copies of the more complex Roman swords. They look like the original (and it is the look that defines the groups here) but have not much in common with the structure of the original. That is just my feeling, however, and I might be completely wrong.

The number in the right-hand corner of the following tables gives the number of known swords of the respective type.

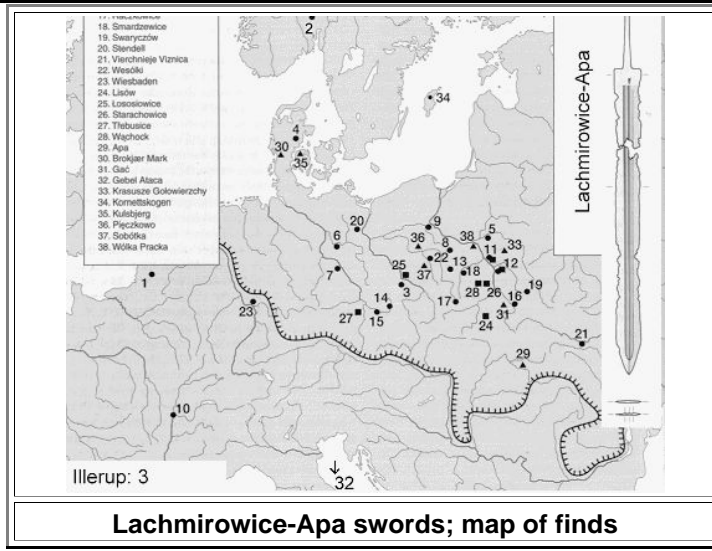
Canterbury-Kopki	1st - 2nd century; B2 - C1a	25
<ul style="list-style-type: none"> Light to medium light Roman "export" spatha for the "Barbaricum". For horseback use; 72 cm - 88 cm. 2 subtypes; 2 variants Mostly found: 15 in the Przeworsk culture 2 (Poland) area; 10 around the border area of Empire. 14 swords analyzed. 8 pattern welded, 2 "primitive", probably random piling. About 2/3 of these swords were made with a complex pattern welding, including chevron patterns. A few have incrustations and stamps. Roman origin is likely for most but not all. 		



Buch-Podlodów	C1a; some C1b; B2	18
<ul style="list-style-type: none"> • Roman spatha variant; long with broad blades. Very light - medium light. • 3 subtypes; 3 variants. • 12 from Przeworsk culture (Poland) 6 elsewhere, around Empire border. • 8 swords analyzed. 7 with pattern welding, 1 "primitive". • Complex pattern welding, including chevron patterns. Mostly from Roman smithies. Incrustations; typically 2 - 4 fullers 		



Lachmirowice-Apa	Mostly C1a, B2, a few C1b	47
<ul style="list-style-type: none"> • Medium weight late Roman spatha type. • 3 subtypes; 3 variants. • 39 Przeworsk culture (Poland), 3 in Danish bogs, 5 elsewhere. • 21 swords analyzed; all from the East. 10 primitive (including two with incrustations and thus most likely Roman), 5 pattern welded, rest piling by face-welding. • All kinds of cross-sections; with and without fullers. 		

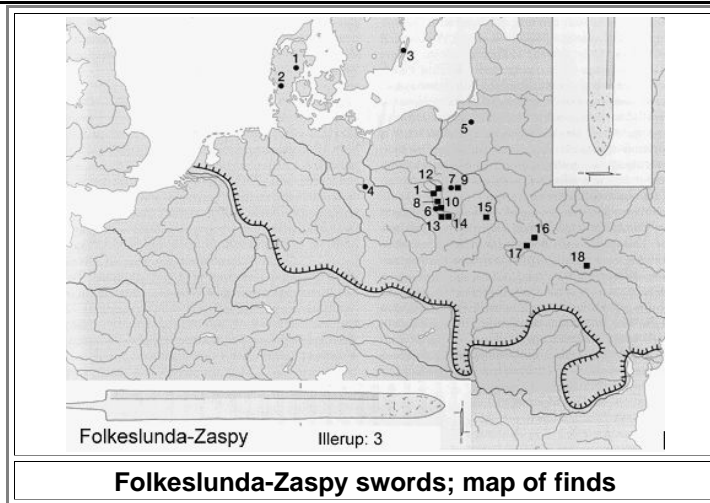


Folkeslunda-Zaspy

Mostly C1b

23

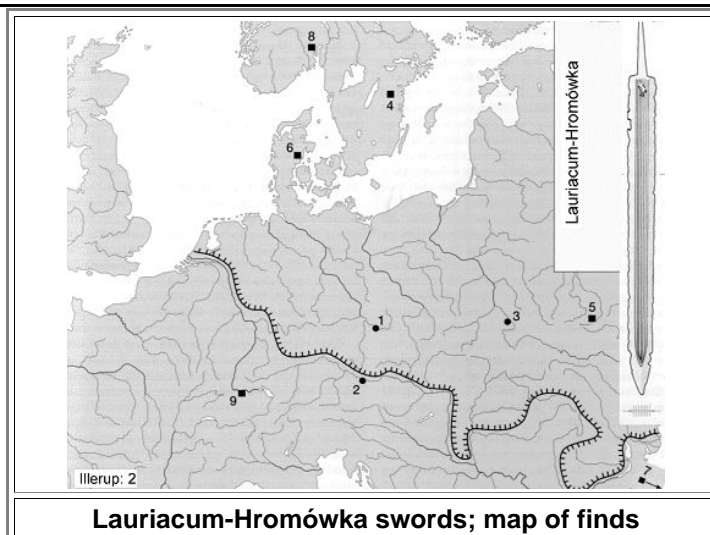
- Medium weight spatha.
- 2 subtypes; 1 variant
- 2 in Danish bogs; rest in the "East".
- 21 swords analyzed; all "primitive" except the 2 pattern-welded ones from Danish bogs.
- Simple cross-sections; typically no fullers.

**Lauriacum-Hromówka**

Mostly C1b or a bit later

11
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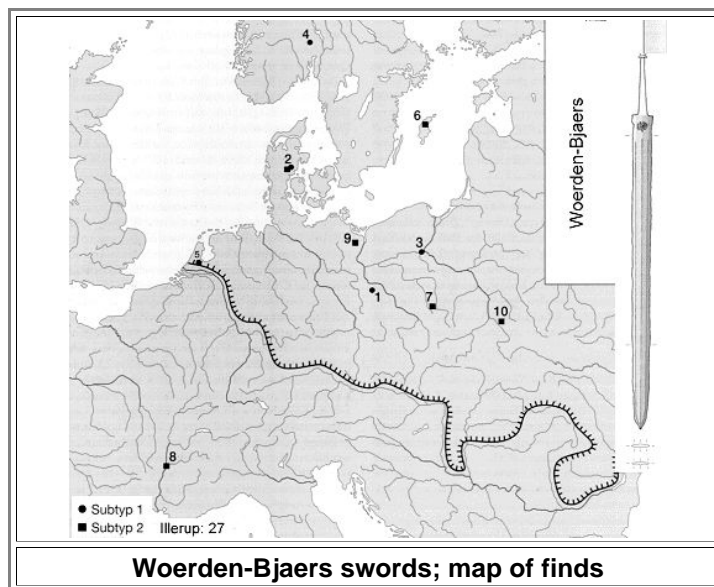
- Medium length, quite broad. Medium weight
- 2 subtypes; 1 variant
- All over; 1 in Danish bogs.
- Some metallurgical analysis, pretty much all swords are pattern welded.
- Typically many fullers; some with asymmetric cross-section. Many with incrustations or other adornments

**Woerden-Bjaers**

All C1b

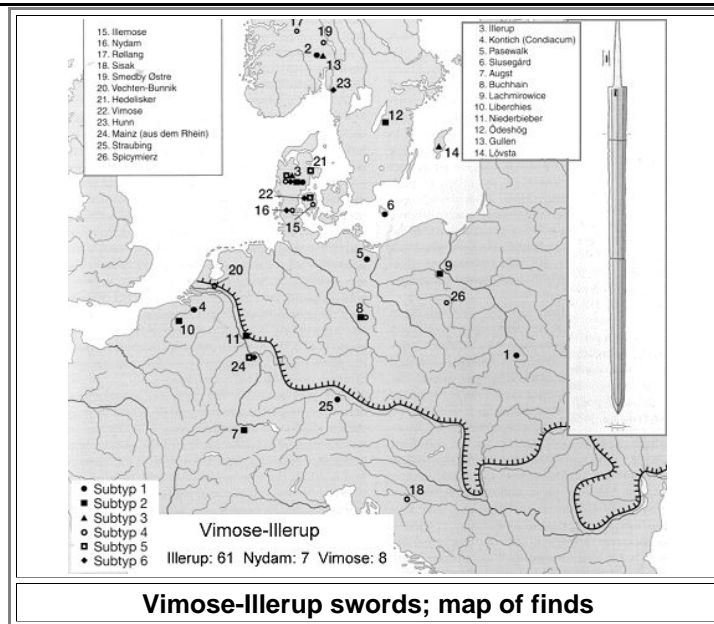
36

- Late Roman medium (to heavy) weight spatha. Slashing type
- 2 subtypes; 2 variants
- 25 from [Danish bogs](#), rest all over (the East)
- 2 (eastern ones) analyzed. 1 primitive, 1 pattern welded. Most of the rest obviously pattern welded including very [complex patterns](#)
- All kinds of cross-sections, typically with fullers, some asymmetric. Often stamps and incrustations.



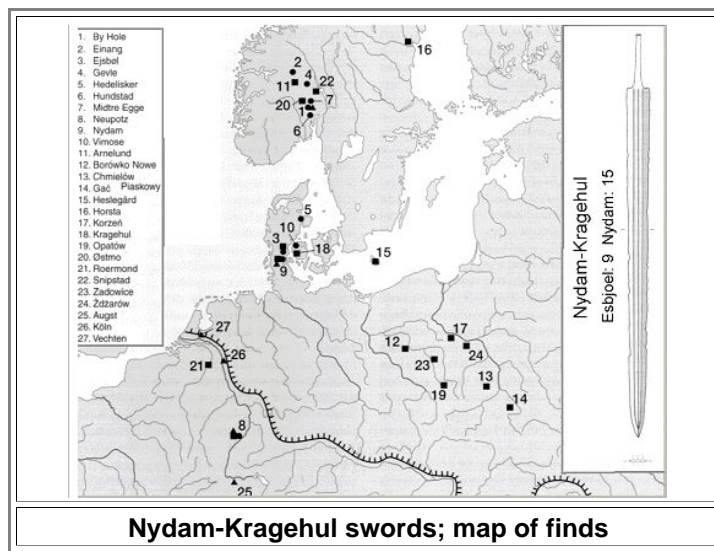
<u>Vimose-Illerup</u> . Long, pointed. Mostly on the light side.	Almost all C1b	102
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- Longish narrow blades ("rapier like"), middle weight.
- 6 subtypes; 4 variants.
- Mostly [Danish bogs](#), otherwise Scandinavia and Barbaricum.
- 8 analyzed. Primitive piling, good piling and pattern welding occur. More than 50 % with recognizable complex pattern welding. Quench hardening in some cases.



<u>Nydam Kragehul</u>	Mostly C2	58
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- Similar to Woerden-Bjaers; lighter.
- 3 subtypes; 2 variants
- Mostly [Nydam](#). Otherwise Sveden and the East.
- 8 analyzed (mostly from the East). 2 with primitive piling, rest complex pattern welding.
- Cross-section mostly symmetric; with and without (at most 2) fullers. Some with incrustations and / or stamps.



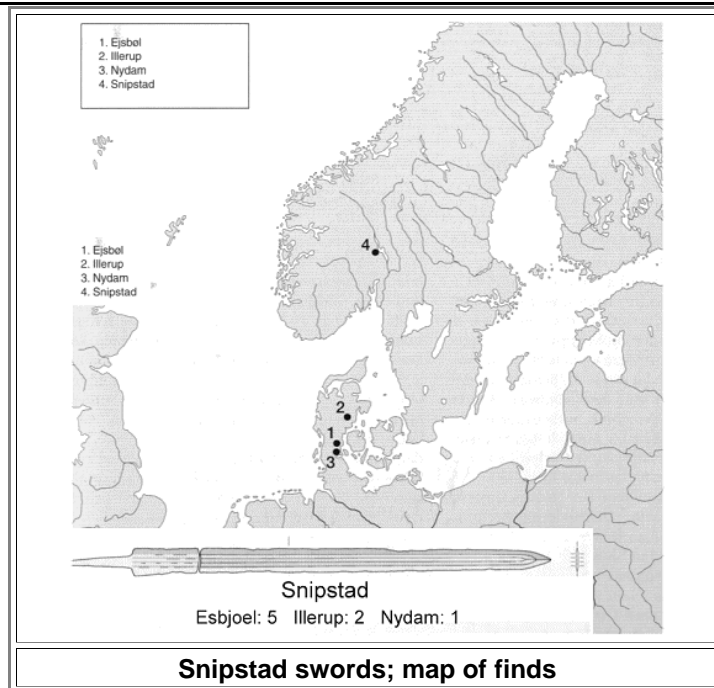
Nydam-Kragehul swords; map of finds

Snipstad

C2 (6) - D (3)

8

- Similar to Lauriacum-Hromówka. Medium weight; long.
- 1 subtype; 1 variant.
- No metallurgical analysis yet (2006).
- Mostly from [Esbjoel](#).
- Asymmetric blades; 2 - 6 fullers per side. Often complex pattern welding visible.



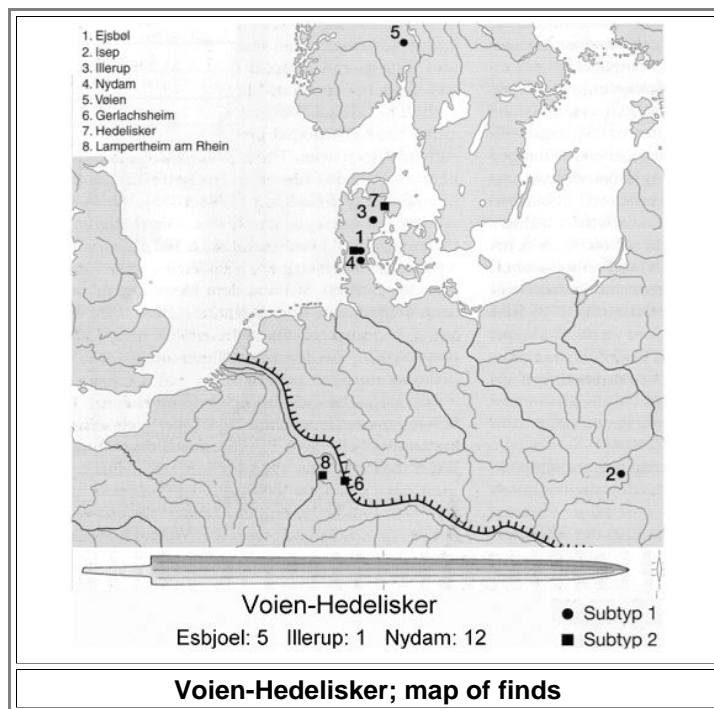
Snipstad swords; map of finds

Voien-Hedelisker

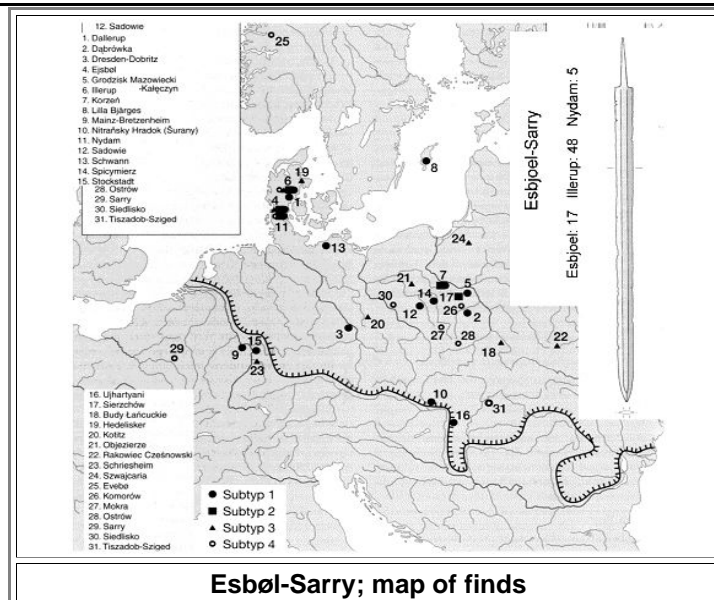
C2 - D1; even D2

13

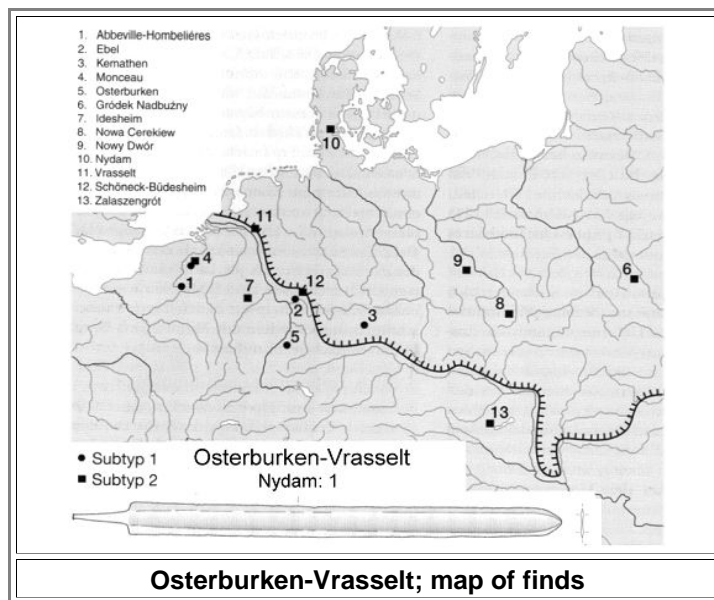
- Akin to [Vimose-Illerup](#). Long, pointed. Mostly on the light side.
- 2 subtypes; 1 variants.
- 1 (Eastern) sword analyzed: uniform homogeneous steel (!)
- Mostly from [Danish bogs](#) (Nydam, Esbjoel, Illerup); a few from Norway; the East.
- No fullers. Most swords made by more complex piling or (simple (?)) pattern welding.



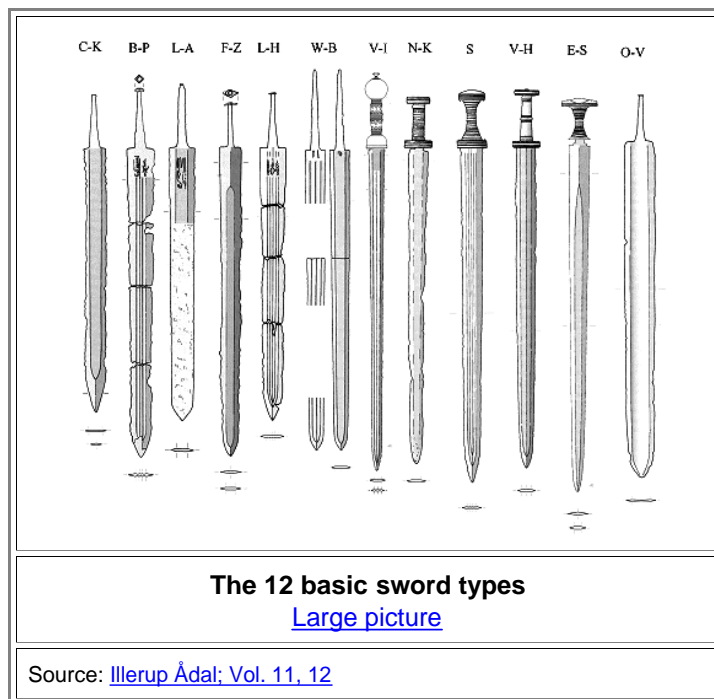
Esbjøl-I-Sarry	Mostly D	106
<ul style="list-style-type: none"> • Late Roman, Migration spatha; pointed, rather heavy. Forerunner of heavy Merovingian swords. • 4 subtypes; 6 variants. • 11 swords analyzed: Simple and complex piling; some (simple) pattern welding. Some swords are made form rather uniform steel (!) • Mostly Danish bogs (70%); Rest from Norway; Przeworsk culture, Empire border • Symmetric (six faces) no fullers. No stamps or incrustations 		



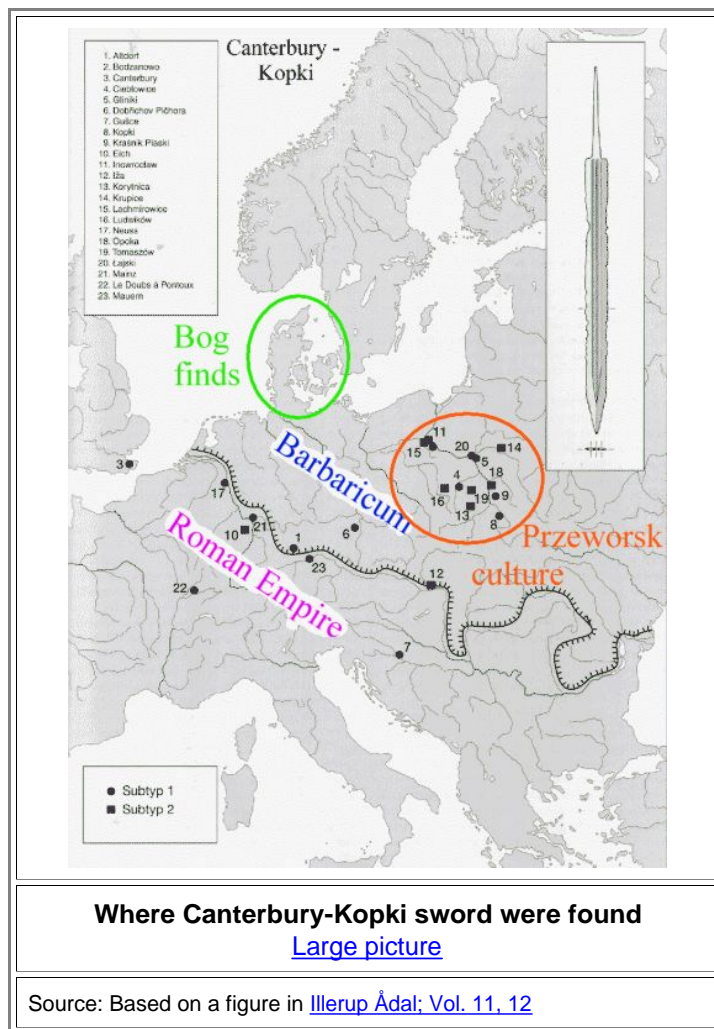
Osterburken-Vrasselt	C3 - D1	16
<ul style="list-style-type: none"> • Long, broad, unadorned and heavy - the sword for the non-nonsense guy? • 2 subtypes; 2 variants. • No metallurgical analysis yet (2006) • Towards the South: all over in bog. • Symmetric; often simple (lentil) + shallow broad fuller. No stamps or incrustations. At least 2 swords have patterns ; most are heavily corroded 		



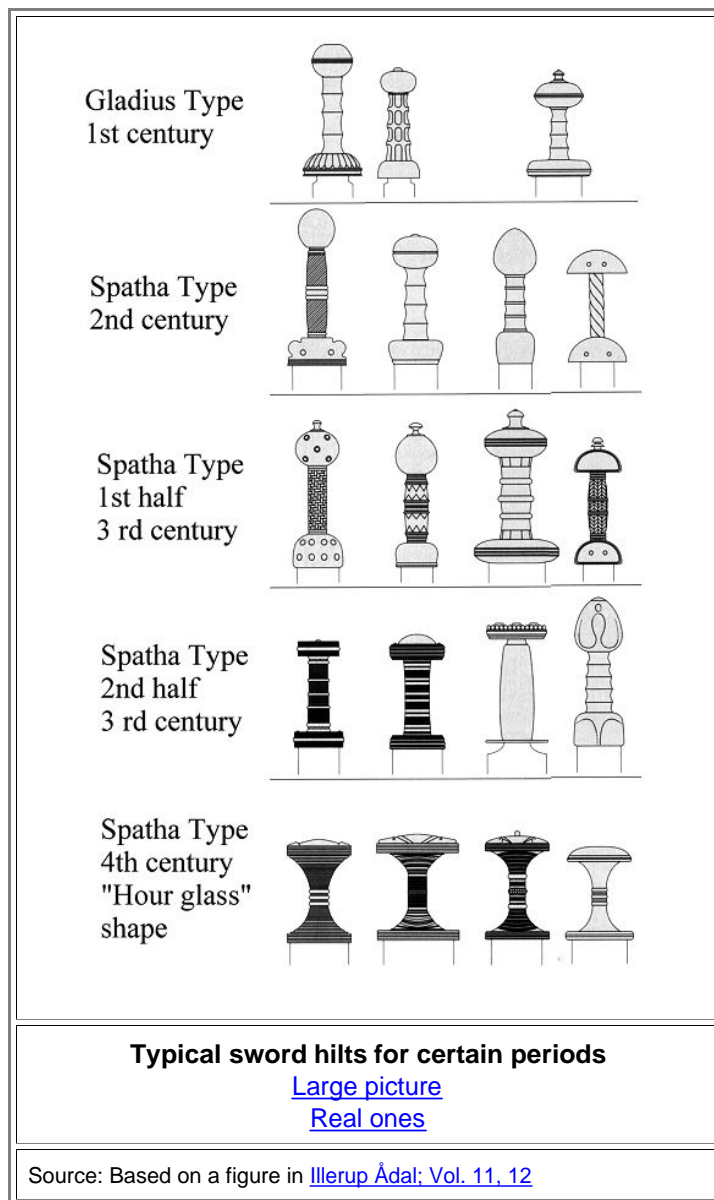
Here is a direct comparison of these sword types. I picked one sword of each group, more or less at random, from the selections given in the book. Note that there is a lot of variance within just one group. Pick other examples and the picture would look quite different



Here is a full map for Canterbury-Kopki swords with some areas / cultures highlighted (by me).

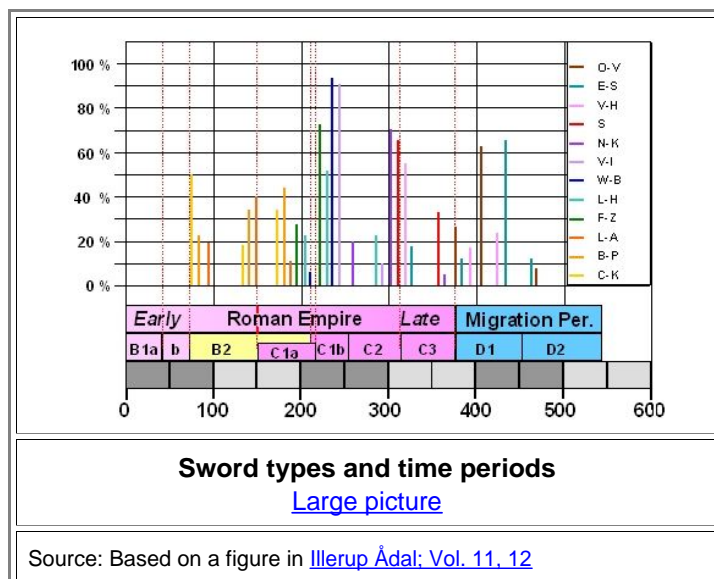


▶ The **dating of the swords** relies mostly on contextual evidence, e.g. what kind of **hilt** was found with a sword. The fashion in hilt shapes and material changed; here is a kind of temporal map:



● [This link](#) shows how the fashion in hilts developed after about 400 AD.

▶ Most of the 418 swords discussed here have been dated to one of the periods [given above](#) or to, for example "B2 or C1a", with precise percentages given. Below is my attempt to turn many pages of prose into a graph. The color gives the type, the length of the lines the percentage assigned to a certain time slot. The position of the lines on the time scale is more or less arbitrary within the proper time slot(s).

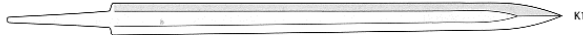


1) One example

K1: Ältere Klingen mit stark verjüngten Klingen.



Abb. 105: Die Form der Klinge.



K2: jüngere Klingen mit verjüngten Klingen.

First, there is not a single blade with the "tailored" look. Second, the text says: K1: Older blade with strong tapering. K2: Newer blade with tapering. ????

2) Do we want to know anything about cultures with names like that? Well - here are a few data from Wikipedia:

The Przeworsk culture is part of an Iron Age archaeological complex that dates from the *3rd century BC to the 5th century AD*. It was located in what is now central and southern Poland. It takes its name from the village near the town Przeworsk where the first artifacts were found.

The main characteristic feature of the Przeworsk culture are burials. These were mostly cremations, with occasional inhumation. Warrior burials are notable, which often include horse-gear and spurs (*and swords*). Some burials are exceptionally rich, overshadowing the graves of Germanic groups further west, especially after 400 AD. Pottery and metalwork are often rich and show a great variety.

The culture declined in the late 5th century, coinciding with the invasion of the Huns. Other factors may have included the social crisis that occurred as a result of the collapse of the Roman world and the trade contacts it maintained with peoples beyond its borders.