

# THE SWORD OF JOHANNES LIECHTENAUER, ANALYSIS OF THE PICTORIAL SOURCE AND AN ATTEMPT OF A RECONSTRUCTION

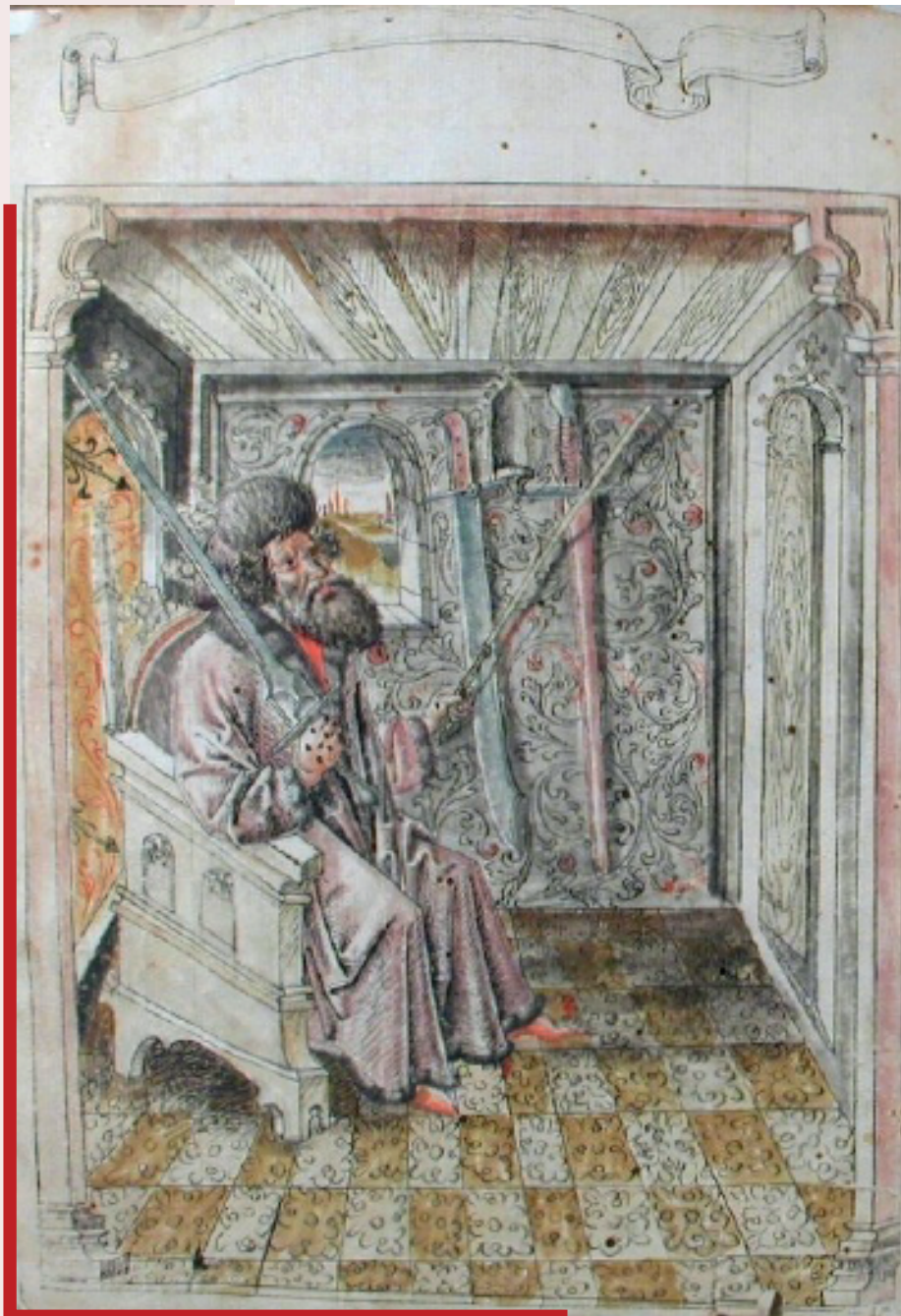


Fig.1 Johannes Liechtenauer on page 2v of the manuscript Cod.44.A.8



KVETUN ARMOURY

The sword depicted in the hand of Johannes Liechtenauer on fol. 2v of the manuscript known as Codex Danzig (Cod.44.A.8, also MS 1449) recorded in 1452. The manuscript contains 114 handwritten sheets, which describes a number of techniques with a variety of weapons in the German tradition of the 15th century.

There are three illustrations in the entire manuscript – two of them (fol. 1v–2r) depict 4 basic positions with a long sword in the German tradition. The third (fol. 2v) is a supposed image of Johannes Liechtenauer. Both illustrations are united by a similar image of a sword, which can be interpreted as paratschwert also known as a federschwert.

The base of this interpretation can be the presence of a pronounced extended ricasso in the sword and an indistinct drawing of the blades, as well as a rounded blade tip, which is a hallmark of the training swords that have come down to us. Analogues of a similar image can be found in other fencing treatises, such as the Codex Solothurn (Cod.S.554), Kunste Zu Ritterlicher Were (MS KK5012), Opus Amplissimum de Arte Athletica (MSS Dresd.C.93/C.94) and many others until the last third of the 17th century, as can be seen in the work of Teodori Verolini *Der Künstliche Fechter* (1679).

Such swords are quite common in archaeological material. The dimensions of these swords are in the range of 125–135 cm, in which they coincide with the long swords of the second half of the 15th century, as well as their weight, which is in the range of 1.3–1.7 kg. The fundamental and noticeable difference between these swords and combat swords is the absence of sharp edge, which makes such sword much safer for fencing training and gives it a characteristic narrow outline.

Most likely, to compensate the loss of mass, the ricasso was increased up to a massive shilt. It should also be noted that such a sword does not have a clearly distinguished blade tip, being rounded instead. In cases where the tip is present, it is probably made at a later time relative to the creation of the sword, since its design does not allow maintaining sufficient elasticity at the tip to hit the target.



Fig. 2 Training sword in the Solothurn Codex

## Sword design

Let us turn to the sword depicted in the hand of master Johannes on fol. 02v. Describing it according to the Oakeshott typology, the following features can be distinguished:

- the pommel is located somewhere between types T3 and T5, having a pronounced pear shape, like on most paratschwerts known in archaeological material;
- the hilt has a pronounced corrugation, which can be observed on similar paratschwerts, for example, on two swords from the Metropolitan Museum (see Fig. 3), as well as on swords in the Solothurn Codex (see Fig. 2);
- the crossguards on all five swords depicted on pages 01v-02v show simple drawing and can be classified as Oakeshott type 3, i.e. straight crossguard without narrowing and bending.



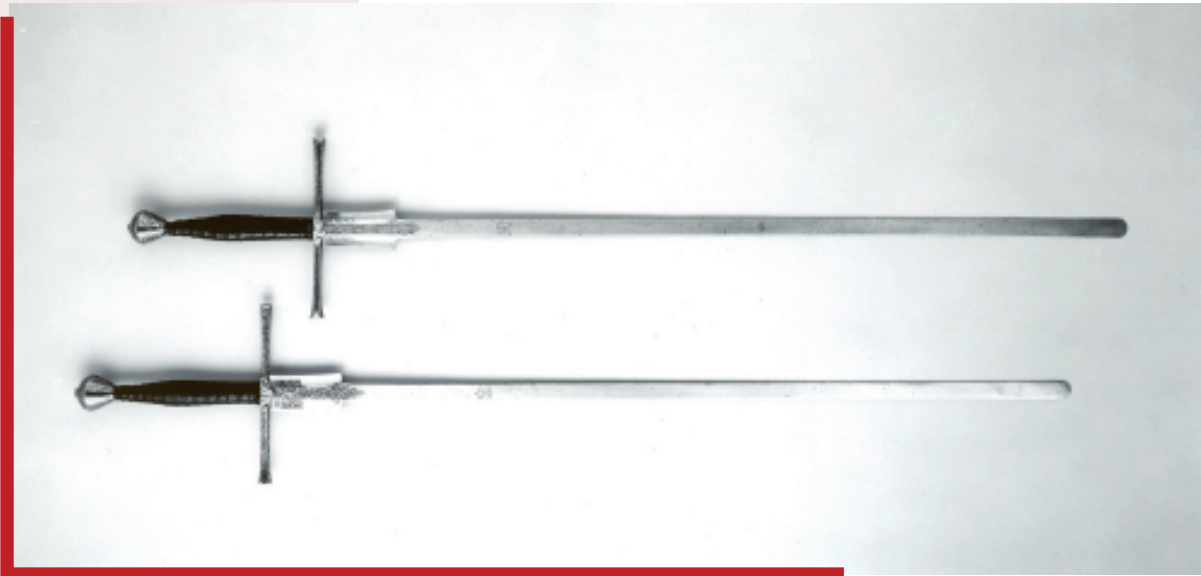


Fig. 3. Two paratschwerter in the Metropolitan Art Museum

- the blade of the sword can be attributed to R.Norling type 2: parallel or almost parallel "blades", which also brings the depicted swords closer to the swords from the Metropolitan Museum.

- ricasso has the most pronounced features that define the uniqueness of these 5 swords - three Y-shaped lines can be traced on it, probably formed as stiffeners. On the most detailed of the images, with the master Liechtenauer himself, it can be assumed that the ribs were formed by sampling steel from the edges of the ricasso (Fig. 4). You can also see a semi-circular detail at the base of the ricasso, which can be interpreted as a protective flap, which was traditionally made of leather and which served to tightly fix the sword in the scabbard. Similar flaps, called rainguards, can also be seen on swords from the Codex Solothurn (Fig. 2).





Fig. 4. Sword hilt details from the Danzig Codex.

## Sword dimensions

The size of the sword can be judged from two sets of data. In the first case, in the image of the master Johannes himself, we can observe a sword hanging on the wall in a scabbard. If we compare the sizes of the sword in his hands and the sword on the wall, you can see that they are almost identical: the difference is 5% of the length of the image. The sheathed sword can be interpreted as a standard long sword of its time, ranging from 120 to 130 cm and convenient for use on horseback and on foot, one- or two-handed, since it is this weapon that is described in the treatises of the Liechtenauer tradition.

The third object in the image is a long combat knife (langes messer), also a weapon typical of the German region in the mid-15th century, often found in fencing instructions. Relative to the sword located on the wall on the right, the knife is 10% smaller.

Thus, if we take the long sword as the main measure, we get the following: long

**knife = 90%**

**long sword = 100%**

**paratschwert = 105%**

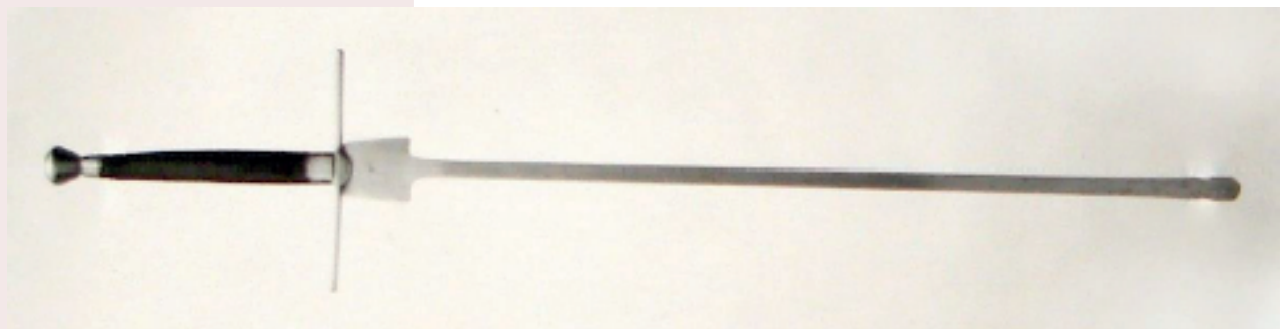
If we convert it this into conditional proportions, we can assume that with a total sword length of ~125 cm, a long knife will have a length of ~110 cm, and a paratschwert of ~133 cm. Considering the conventionality of the pictorial source, we nevertheless find quite realistic proportions, which can be confirmed by some solid analogues in the archaeological material of the corresponding era. The sizes of swords known to us for fencing practice, dated to the 15th, 16th and 17th centuries, suggest that the dimensions of the sword are in the range of 130-135.5 cm (see Appendix).

Thus, the paratschwert depicted on page 2v, as well as the other four swords depicted in the codex, can be interpreted as a separate and relatively early version of a training long sword with a special ricasso design, probably serving to strengthen the forte of the sword and prevent the destruction and breaking of the blade when parrying.

Description	Date	Total length (cm)	Blade length (cm)	Handle length (cm)	Pommel
Federschwert from Museo di Venezia	1500-1600	134	104,5	29,5	T3
Federschwert from Landesmuseum	1500-1600	130,8			T3
Federschwert from Askeri Moze Istanbul	1500-1600	130	~105	~25	T3
Federschwert from Luzerne	1500-1600	134	105	27	T3
Federschwert from Landesmuseum 2	1500-1600	135	95	40	T3
Federschwert from TForum	1500-1600	135,5	102,5	33	T3
Federschwert from Metropolitan 1	1500-1600	128,5	103,5	25	T3
Federschwert from Metropolitan 2	1500-1600	128,5	103,5	25	T3



Federschwert from Museo di Venezia



Federschwert from Landesmuseum

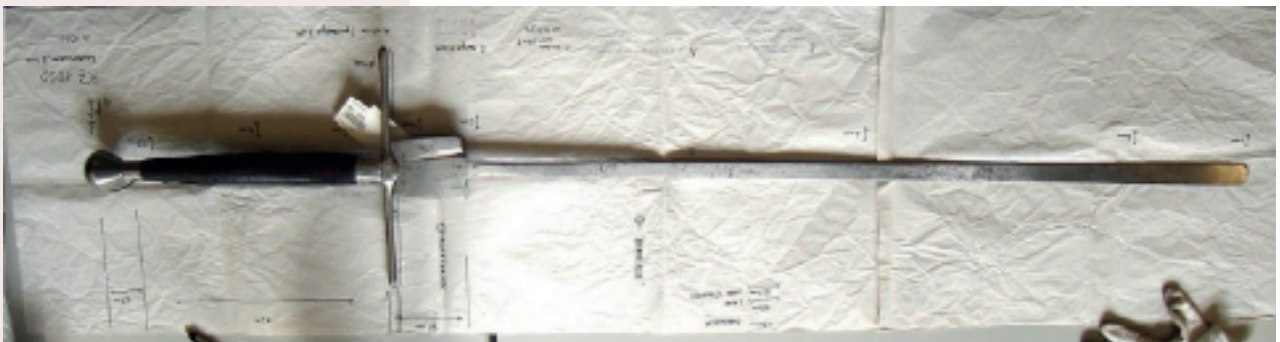




Federschwert from Askeri Moze, Istanbul



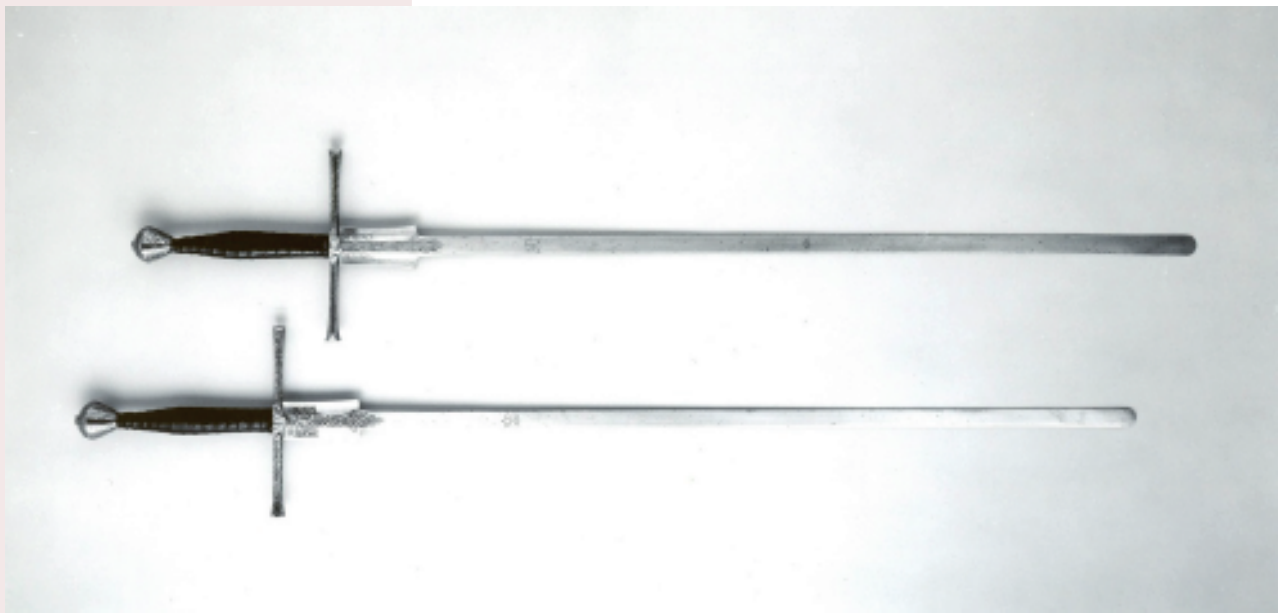
Federschwert from Luzerne



Federschwert from Landesmuseum



Federschwert from private collection



Federschwerts from Metropolitan art museum