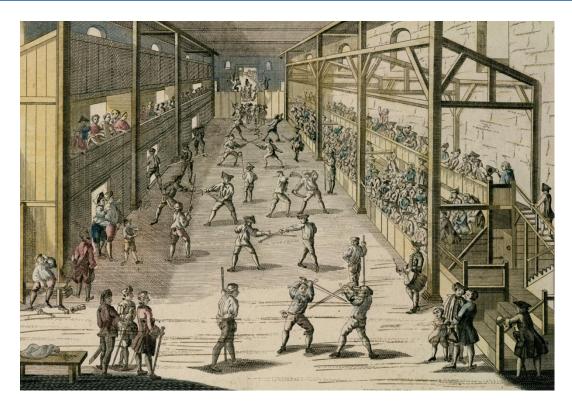
Higgins Armory: Introduction to Historic Combat



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Overview

"The exercising of weapons puts away aches, griefs, and diseases, it increases strength, and sharpens the wits. It gives a perfect judgement, it expels melancholy, choleric and evil conceits, it keeps a man in breath, perfect health, and long life." George Silver, *Paradoxes of Defense* (1599), p. 2.

Forms

The following are the basic forms taught at the museum. They can be mixed and matched with different packaging to cover a wide variety of periods and contexts. Any interpreter, with moderate training, should be able to lead a 15-20 minute session on any of these forms. Separate documents cover the specifics on each form. Forms marked * are especially important, and the list is roughly prioritized.

*2-hand sword (longsword, claymore, lightsaber)

*Single sword (broadsword, saber, cutlass)

*Rapier

Staff weapons (quarterstaff/pollaxe/axe)

Dagger/wrestling

Halfsword

Other skills interpreters should possess:

Sparring. Small kids (10-) with foam weapons can play with a trained interpreter to get a feel of some of the basics of swordplay.

Narration. Interpreters should be able to provide color voiceover for combat demonstrations (along the lines of modern sports commentary).

Safety

Safety in these sessions is handled in one of three modes.

Soft weapons. Padded weapons can be used with younger students to simplify safety. With older students, they tend to be an incentive to hitting harder and getting out of control.

Fencing gear. Wearing fencing masks, gloves, and jackets is essential when using foils, unbuttoned rapiers, or other weapons that pose a risk of eye injury and the like.

Controlled actions. For most teaching, it is sufficient for the instructor to establish control over the teaching environment, keeping the students from using more speed or energy than they are able to control.

Generally speaking, practice partners rarely put each other in danger: the greatest risk is usually that someone within a practice pair inadvertently injures someone other than their partner.

Teaching Concepts

These are concepts that the interpreter should be able to actively include in their teaching. In addition to the material in each individual document, the following are some general principles.

BLOOD. This is a useful mnemonic for major factors contributing to a swordsman's level of control, which is essential for creating both safety and danger (depending on what the fighter wants!). The letters stand for:

Balance. A swordsman must always be well balanced on their feet, allowing them maximum mobility at all times. This is achieved chiefly by keeping the head and torso upright and centered over the legs, while flexing at the knees to lower the center of gravity as well as increase mobility.

Line. At any given moment, the encounter between two swordfighters is defined by a geometrical pattern of lines. Particularly important are the *line of attack* (the swordsman always aims for a specific target, and executes the attack along an efficient line that will deliver power to that target) and the *line of defense* (the defender protects by interposing their weapon along a line that will effectively intercept the line of attack).

OO = Eye Contact. A swordsman never looks at the opponent's weapon. Beginners should learn to maintain eye contact. At advanced levels, the swordsman maintains a "thousand-yard stare" through the opponent's center (roughly the sternum). This ensures maximum awareness of the environment, using peripheral vision, which is the part of the eye that detects motion.

Distance. Different techniques work at specific ranges. A skilled swordsman always manages distance to be at the appropriate range for the technique they want to execute. Distance can be broken down into four levels: 1.Out of distance, where the opponents cannot reach each other; 2. Long distance, or "visual distance," where the opponents' limbs are within reach; 3. Middle distance, where the distal part of weapon can reach any part of the opponent's body; 4. Close distance, or "tactile distance," where the farthest target on the opponent is reachable with closest part of one's weapon.

Efficiency and economy. Training and technique teach the swordsman to use their body and weapon as efficiently as possible—unnecessary effort is a good way to lose a swordfight. Motions should always be minimized and effortless. Beginners will try to act as if they were fighting—this is a good thing for them to unlearn at the start. A good fighter's actions are always relaxed and effortless: as Yoda would put it "There is no try—do or do not."

Target body openings. Never strike for your opponent's weapon: your target is your opponent. Beginners tend to attack to the weapon. Keeping eye contact will help. Always look for places where your opponent's body is actually open—don't attack targets that are already protected.

Physics and Mechanics. All weapons are levers: they are strong but slow near the wielder's hands, weak but fast near the tip. Therefore the forte (strong part) is used for defending, the foible (weak part) is used for attacking. Body mechanics also play a role: a weapon is strongest in the line of the arm (e.g. the edge of the sword), weakest perpendicular to the arm (e.g. the flat). For this reason parries and other weapon-controlling actions are typically executed with the edge, most often the forward edge, which is biomechanically stronger than the rear edge.

Deceit and surprise. Faking your opponent out is one of the best ways to win a fight. Feint attacks are one common application of this principle. Changing suddenly from weapons-combat to grappling is another.

Background Concepts

These are concepts that interpreters should be aware of, but which will not necessarily be covered during a given 15-20 minute teaching session.

Footwork. Footwork is essential to a fighter: effective footwork allows them to change distance and line without losing balance. Lacking effective footwork, they will lose either mobility or balance, or both. For maximum mobility, weight is kept on the balls of the feet. Footwork is covered in detail in the Longsword document.

Weapon first. A fighter moves their weapon toward the opponent before moving the body: moving the body toward the opponent before the weapon presents an easy target.

4 Quarters/Combination Attacks. Your opponent can be divided into 4 quarters: high and low on the right and left sides. Your opponent's weapon is usually in one of these quarters, so you have to attack to one of the other 3. This initial attack is unlikely to be successful, so you should plan to deliver a combination attack that will eventually find an opening. For more information on this topic, see the Longsword document.

Fluidity. Effective fighting is always smooth and effortless, without any awkwardness, unnecessary effort, or tension on the part of the fighter. A good swordsman is always calm and relaxed, moving with ease. The body is kept poised, neither slack nor tense, but springy.

Timing/Initiative. Time is crucial to landing a hit: milliseconds mean the difference between life and death in a fight. If you can gain a fraction of time on your opponent with each move, eventually you will hit. You will also tend to fluster the opponent, putting them on the defensive, and making it hard for them to get in an attack.

Single-time responses. The simplest technique is to defend yourself, and then attack, but this takes two separate actions (swordfighters call this "two times"). The ideal technique is one that protects you while simultaneously attacking the opponent (swordfighters call this a "single time").

Provoker, taker, hitter. There are three types of attacks: one that goads the opponent into a response, one that neutralizes their weapon for an instant, and one that actually hits them. Attacks are often delivered as combinations of three or more actions to deliver all of these effects.

Psychology. Making your opponent afraid, angry, or otherwise getting them to lose their cool is an excellent way to win a fight.

Knowing your opponent. Different opponents have different strengths and weaknesses. In the opening stages of a fight, you will often try to get your opponent to reveal these strengths and weaknesses, while concealing your own.

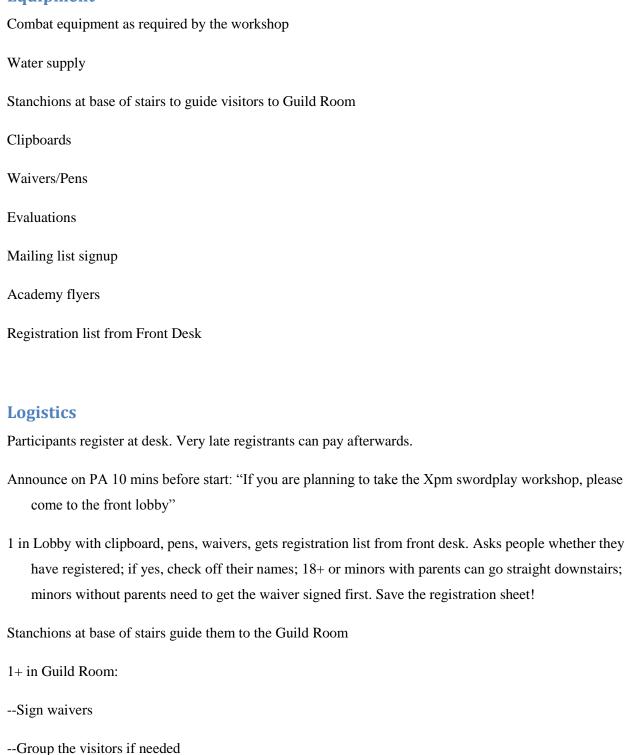
Cross training. Basic principles of physics, physiology, and psychology apply with all weapons. Most serious martial arts systems teach ways of fighting that are applicable regardless of the weapon.

Sources. Interpreters should know at least a few basics about the historical sources on which the weapons techniques are based. Copies of most major sources can be found in the Higgins library or the Guild Practice Room.

Know your limits. Learning to fight well takes sustained study under the guidance of an experienced practitioner. Recognize the limits of your own knowledge, and don't assume that a few sessions of swordswinging can turn you into Cyrano de Bergerac. Nor can we teach very much in a 15-minute segment. The drop-in workshops do *not* teach the basics of swordplay. They offer a taste of what swordfighting feels like, with a few takeaway messages to enrich the visitor experience. People who really want to learn this need to take proper classes.

Drop-In Workshops

Equipment



- --Hand out equipment and alert people who have footwear issues
- --Any extra staff or volunteers should have sample repros to show to visitors while waiting for the program to start

Format

5 minutes light warmup drill to get things moving

- 3-5 minutes historical intro to the weapon and its context, passing around a repro and introducing the safety version
- 2-3 segments of 15-20 mins. each

Each segment typically begins with teacher working with entire group to cover:

- --Grip (includes moulinet drill with some weapons)
- --Stance
- --Moving (includes guarding the L and R sides of the body)

Then break into pairs to cover the teaching sequence(s), building stage-by-stage, and doing it in both directions.

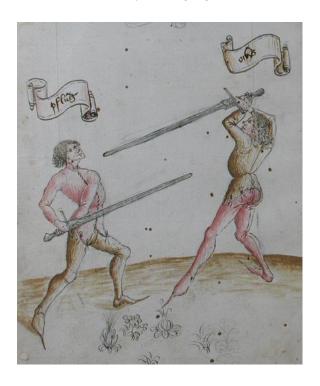
At end of class, thank the participants, hand out evaluation forms, invite people to try other classes, sign up on mailing list and take flyers.

Note that the teacher will need to accommodate left-handed participants. The documentation on each weapon includes information on adapting for lefthanders (the simplest option is always to pair lefthanders with each other, when possible).

INTRODUCTION TO HISTORIC COMBAT:

Longsword

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1. Introduction

The following materials describe basics of the "Liechtenauer" system predominant in German sources of the 1400s-1500s. Johannes Liechtenauer was a famous combat master of the 1300s whose verses on combat remained central to German martial arts for centuries afterwards. The verses are difficult to interpret, but the techniques are explained in a variety of later writings, of which the most important are the "Starhemberg" manuscript (1452), Hans Lecküchner's *langes Messer* (falchion) treatise (1482), Paulus Hector Mair's *Ars Athletica* (c. 1550), and Joachim Meyer's *Art of Combat* (1570).

A much smaller, but still important, body of material on the longsword survives from Italy and Iberia. The most important Italian source is Fiore dei Liberi's treatise of 1409, written toward the end of the author's career, and surviving in four manuscript versions, as well as a late-1400s derivative work by Filippo Vadi. The most important Spanish source is the *Compendium on Knightly Arts* by Pedro Monte, composed in Spanish some time around 1490, and published in an expanded Latin translation in 1509.

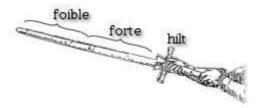
The longsword serves as an excellent all-around training weapon, due to its versatility. This document is intended to support about 4-6 hours of class time.

2. The Weapon



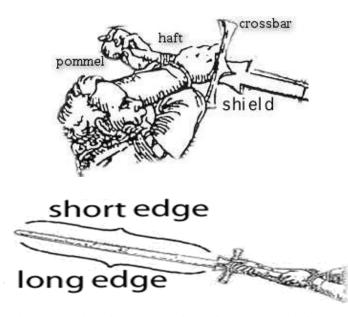
A German longsword of c. 1400 (Higgins Armory Museum 1996.02.1). Wt. 3 lb. 3 oz.

The longsword, also called the bastard sword or hand-and-a-half sword, was the classic weapon of the knight in the late Middle Ages. It was chiefly used in the 1300s and 1400s, but survived as a sport weapon into the 1700s. It was designed to be useable either with one hand or two—one hand being essential for knights on horseback, two hands offering additional possibilities when fighting on foot. Surviving examples typically have a blade about 40" long, and a grip of about 10", and weigh around 3-5 lbs. Specialized sport versions were designed to flex like modern fencing weapons; such weapons were around by the mid-1400s.



The forte (French for "strong") has powerful leverage, and is used for defense and controlling the opponent's weapon. The foible ("weak") has little leverage, but travels more quickly than any other part of the blade, and is used for attacking. This and the following illustrations show fencing longswords rather than combat versions.

The two-hand grip of the longsword added some power to the weapon's attack, but more importantly it allowed greater blade control, as well as making it possible to generate full-strength cuts from the action of the two hands working in concert.



The long edge attacks with more reach and power; the short edge allows angled attacks that can get around the opponent's defenses. They are also called the "forward" and "rear" edges, or the "true" and "false" edges.



This illustration from the early 1500s shows the same flex found in surviving examples of practice longswords today.

3. Grip

The grip on the sword should be relaxed and fluid, firming up when the situation calls for it. The main hand is next to the crossbar, the secondary hand is on the pommel. The secondary hand grips the pommel lightly, constantly changing position on the pommel to allow the sword to move quickly and fluidly. The main hand shifts back and forth between the "fist" grip and the "thumb" grip depending on the needs of the moment.

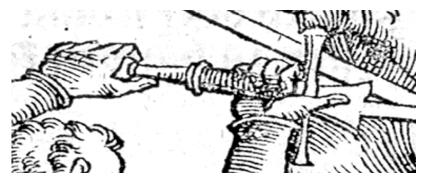
Fist grip



The fist grip holds the weapon with the main hand next to the crossguard closed as a fist.

It is optimized for long and powerful cuts.

Thumb grip



The thumb grip slips the thumb over the crossguard onto the shield of the weapon. It is optimized for speed, maneuverability, and thrusting. It allows cuts to be generated from the wrist rather than the arms.

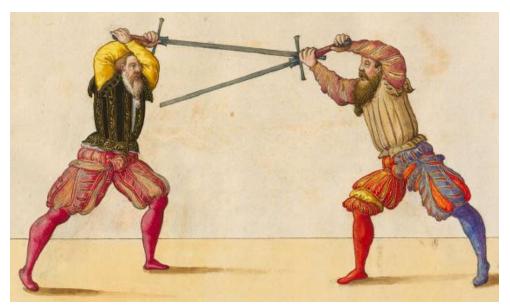
Drill: 8.1 Basic Moulinets

4. Guards and Straight Cuts

Guards serve as positions of readiness when out of range, and as waypoints and decision points in the course of an encounter. The tables on the following pages illustrate some of the chief guards as waypoints in the straight cuts. Note that the illustrations show variants of the guards based on specific tactical situations, not necessarily the "official" form in which they are taught.

Ox and Plow are the two chief positions of readiness; moving back and forth between them, and from one side to another, is called *winding*.

Ox (Ochs)



Ox on the right and left sides. In the default position for Ox the crossbars are horizontal. The Ox is a versatile guard that protects the head, while threatening a thrust or a cut from almost any angle. It is the end point of the Thwart and Squinter Cuts.

Plow (Pflug)



Plow on the left and right sides. This position protects the side of the body, and can threaten a thrust or lateral or rising cut. It is a more defensive position than Ox: it offers fewer attack options but is less physically demanding.

The Four Straight Cuts and their Guards

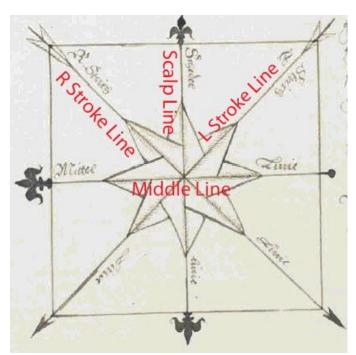
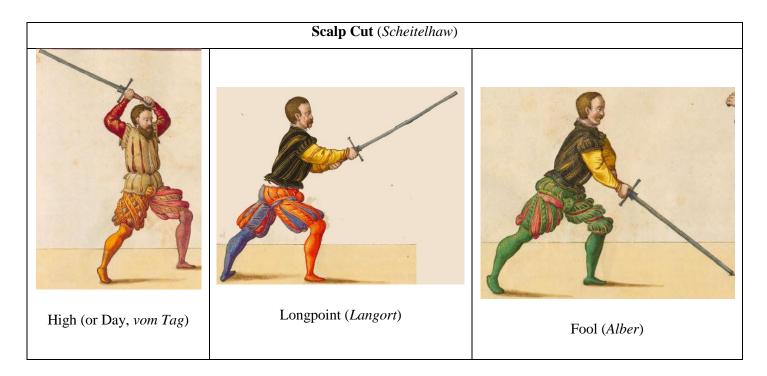
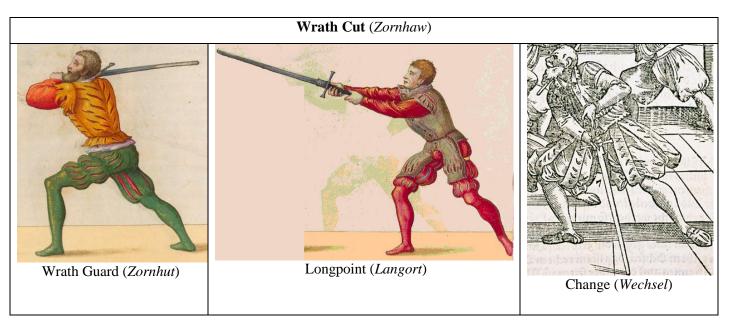
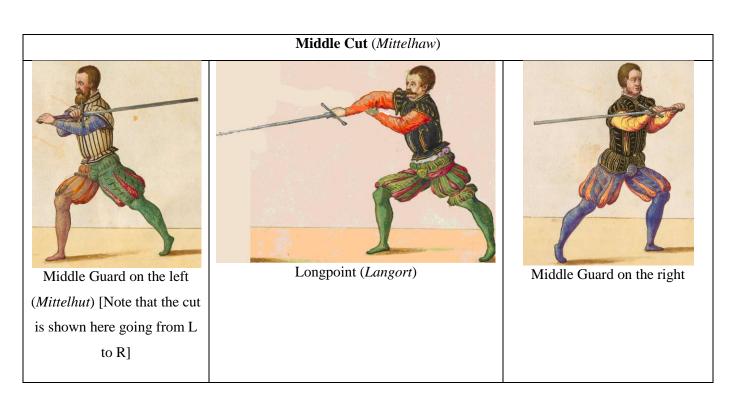
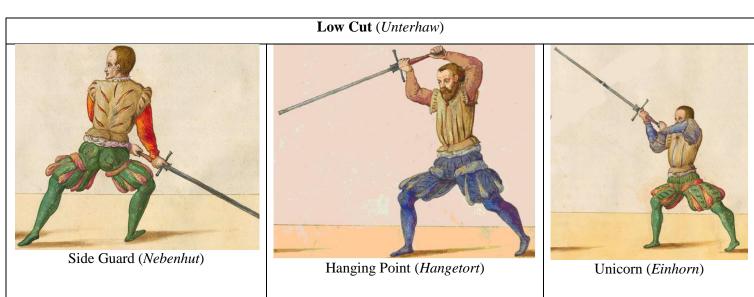


Diagram of the cutting lines from the Meyer manuscript of 1568. The Wrath and Low Cuts pass through the Stroke Lines.





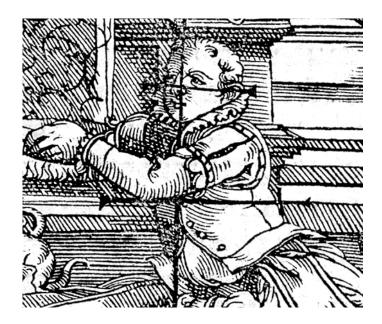




Drills: 8.2 Mirroring Drill, 8.3 Improvised Katas and 8.4 Straight Cuts

5. The Targets

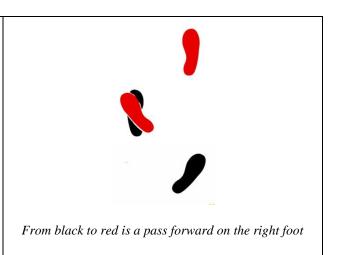
The opponent's target area is divided into 4 quarters along lines down the center of the body and across the sternum. (The horizontal line through the head is an additional subdivision, not important here.)



6. Stepping

Passing Step

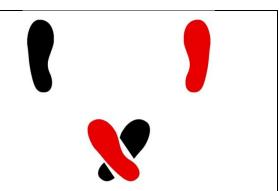
Stand with your left foot forward and your right foot back; the left foot points forward, the right foot angles out. Step forward with your right foot so that it is now in front, pivoting your left foot so that it is now angling out. This is a pass forward on the right foot. The passing step changes the lead foot and also opens or closes the distance.



Triangle Step

Stand with your left foot forward and your right foot back; the left foot points forward, the right foot angles out. Step forward and to the right with your right foot so that it is even with your left foot, and step back with your left foot so that your feet are now in mirror position from where they started. This is a triangle step on the right foot. The triangle step changes lead foot and moves slightly to the side, without changing distance.

This step can be varied to achieve different effects. For example, the first step can move forward to close the distance, then the second one moves sideways to bring the fighter offline.



From black to red is a triangle step on the R foot; from red to black is a triangle step on the L foot

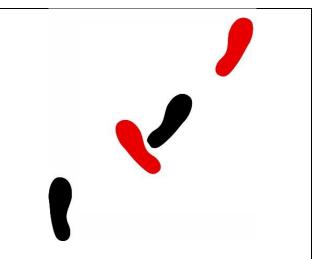
Gather Step/Sliding Step

These are two variations of a step used to change location without changing the relative position of the feet. The Sliding Step moves the leading foot first, the Gather Step moves the trailing foot first.

Gather Step: Stand with your right foot forward and your left foot back. Gather your rear foot toward your forward foot, then step forward on the forward foot to come back into your initial stance. This is a gather step forward on the right foot.

Sliding Step: Same, except that the leading foot moves first.

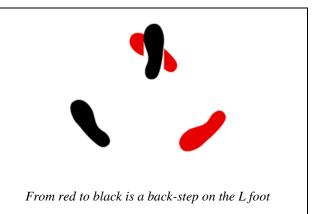
These steps can be done in any direction. A sliding step done straight forward or back is the standard step for classical fencing.



From black to red is a gather step on the right if the rear foot moves first, a fencing step if the front foot moves first.

Back Step

Stand with your right foot forward and your left foot back. Step with your left foot backwards behind your right. This is a back-step on the left foot. The back step is often used to remove the body from danger while delivering an attack.



Drill: 8.4 Two and Four Quarters Drill

7. Techniques from Armored Combat

The halfsword techniques of armored combat were also incorporated into unarmored longsword. See the Armored Longsword section for further discussion of halfsword.

Halfsword Guards



The Low and High Guards at Halfsword. The same guards are also used in unarmored combat.

Murder-Blow (Mortschlag)



The figure on the left is delivering the Murder-Blow. This is easiest to set up by starting in a halfsword guard.

Drill: 8.3 Improvised Katas, adding in Halfsword techniques

8. Drills

8.1 Moulinets

Practice the three basic moulinets:

1. "Helicoptering" overhead

2. Blade descending in front of you

3. Blade rising in front of you

8.2 Mirroring Drill

Begin in Plow. Leader moves forward and back with passing steps, changing sides, or stays at distance

with a triangle step, switching sides without changing distance. Follower maintains distance and

orientation by imitating leader's stepping. When ready, leader can also change guards, and follower

imitates.

8.3 Improvised Katas

Practice randomly running through all the techniques you know (guards, cuts, etc.). Use this document to

remind yourself of your repertoire of techniques. This drill can be done solo, or as a mirroring drill, with

people taking turns leading. It is an excellent warmup drill.

Simple version: Use only passing steps or only triangle steps

Advanced version: Mix up the stepping; you can also choose to cut through or end the cuts in Longpoint

8.4 The Straight Cuts Drill [Meyer 1570: 2.4v]

Start in Fool with your right foot back.

Lift your sword into High Guard, passing through Hanging Point with crossed hands, blade to the left, as

you bring the sword up (guarding your forward leg on the outside).

Deliver a Scalp Cut, passing forward on your right foot, ending in Fool.

Lift your sword into High Guard, passing through Hanging Point with uncrossed hands, blade to the right,

as you bring the sword up (again guarding your forward leg on the outside).

Deliver a Scalp Cut, passing forward on your left foot, ending in Fool.

Repeat this an equal number of times on the right and left sides, then do it stepping backwards on each

cut.

20

Repeat delivering Wrath Cuts ("Butterfly" Cuts), Middle Cuts, and Low Cuts ("Reversed Butterfly"). Start each series from the position where the cut ends, as you began the Scalp Cut series from Fool. Both forward and backwards, the cut will come from the side that starts with the foot back.

Variants:

- 1. End the cuts in Longpoint
- 2. Do the drill with triangle steps
- 3. Do the drill with gather steps (note that the cut will come from the side that starts with the foot forward, where passing and triangle steps will cut from the side that starts back)
- 4. Begin with a Wrath Cut from the R, then slash back up along the same line (leading with the rear edge); then bring the sword up and around for a Wrath Cut from the L, and slash back up through the same line. Sometimes called "Ribbon Cuts"; Meyer calls it a Cross Change.
- 4. Deliver a different cut each time
- 5. Randomize the forward and backward stepping, also throwing in triangle steps and gather steps
- 6. Mix up these variants

Two-Person Mirror Version: Leader and follower face each other, leader leads the actions, follower imitates, maintaining distance.

Two-Person Attack/Defense Version: Attacker ends the cuts in Longpoint, defender catches the cuts by winding into Ox or Plow—catch Scalp and Wrath Cuts with Ox, catch Middle and Low Cuts with Plow.

8.5 The Two and Four Quarters Drill [Meyer 1570: 1.27v]

Two Quarters—Solo Version

Start in Longpoint with your right foot back (you are out of range of the opponent at this stage).

- 1. Let your blade drop to your left side, and bring it around to deliver a right Wrath Cut, passing forward on your right foot, and ending in Longpoint. (The passing step brings you into range.)
- 2. Deliver a left Low Cut, doing a triangle step on your left foot, ending in Hanging Point. (The triangle step moves you toward the other side of your opponent while maintaining distance.)

3. Deliver a right Wrath Cut, passing back on your left foot, cutting all the way through to Change, and recover to Ox. (This is called *cutting away*, and serves to protect you as you move out of range.)

Variants:

- 1. Start the cuts in all four quarters of the opponent; each time, the second cut comes diagonally opposite the first. The basic version is R Wrath, L Low, so add R Low, L Wrath; L Wrath, R Low; L Low, R Wrath. You will need to alter the footwork accordingly.
- 2. Randomize where you deliver the first cut.
- 3. Cut all the way through with the first two cuts.
- 4. Start from Ox instead of Longpoint.
- 5. Deliver the cuts with the short edge (Low Cuts delivered this way are called "Slashing").

Two Quarters—Paired Version

The attacker does the same as in the solo version. The defending sequence is as follows:

Start in right Plow.

- 1. Triangle-step on the right foot, winding up into left Ox to catch the cut.
- 2. Triangle-step on the left foot, winding down into right Plow.

You can cut away when the attacker cuts away.

Similar defenses can be used against the variant attack sequences. Each time, the defender triangle-steps away from the cut, catching it by winding into Ox for Wrath Cuts, Plow for Low Cuts.

Four Quarters—Solo Version

Instead of doing just 2 cuts, the attacker delivers a cut to all 4 quarters of the opponent, as follows:

Start out of range in Longpoint with your right foot back.

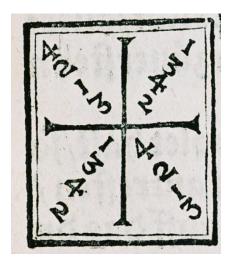
1. Deliver a right Wrath Cut, passing forward on your right foot.

- 2. Deliver a left Low Cut, triangle-stepping on your left foot.
- 3. Deliver a right Low Cut, triangle-stepping on your right foot.
- 4. Deliver a left Wrath Cut, triangle-stepping on your left foot.

Cut away with a Wrath Cut, passing back on your left foot, and recover to Ox.

Variants:

1. Repeat this pattern beginning in a different quarter (following the numbers as in the following diagram).



In the first sequence, the initial attack is from the upper right quarter (the outermost "1" above), then lower left (2), lower right (3), upper left (4). The second series begins with 1 in the lower right, 2 in the upper left, and so on.

- 2. Cut all the way through with the cuts.
- 3. Deliver the attacks as Thwart Cuts
- 4. Pull or run off with some of the cuts

Four Quarters—Paired Version

The attacker does the same as in the solo version. The defending sequence is as follows:

Start in right Plow.

- 1. Triangle-step to the right, winding up into left Ox to catch the cut.
- 2. Triangle-step to the left, winding down into right Plow.

- 3. Triangle-step to the right, winding across into left Plow.
- 4. Triangle-step to the left, winding up into right Ox.

You can cut away as the attacker cuts away.

Similar sequences of defenses can be used against each pattern of attacks.

8-Cuts Drill: Same concept, attacker does attacks on all 7 lines plus a thrust.

9. The Five Master Cuts

Wrath Cut (Zornhaw)

Described in Section 4. The Wrath Cut is the simplest and most powerful cut, and can also be used as a defense against most cuts.

Scalp Cut (Scheitelhaw)

Described in Section 4. The Scalper is a very quick and long cut that goes straight for the head. It is the classic response to an opponent in Fool, delivering an attack that comes in as far from the opponent's sword as possible.

Thwart Cut (Zwerchhaw)

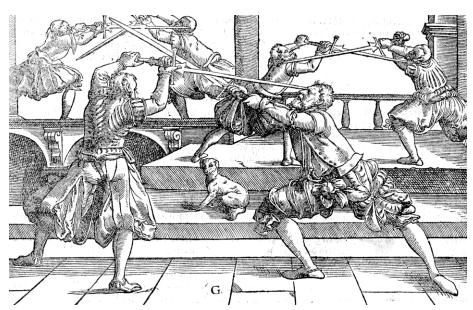
Start in right Ox and helicopter your blade around your head to end up in left Ox; repeat in the other direction. This is a pair of Thwart Cuts. The Thwart Cut protects the head while threatening the opponent; it is the classic response to an opponent in High Guard, protecting against the threatened cut from above while striking at the same time.



The figure on the R is executing a Thwart Cut against a High Cut.

Squinting Cut (*Schielhaw*)

Start in right Ox; drop the blade to moulinet past your left shoulder, scooping around to cut from the left side with the short edge, ending up in left Ox (but with the crossbars vertical). Depending on the tactical situation, the hands can drop down toward Plow. The same cut can be done from the opposite side. The Squinting Cut threatens the opponent while protecting one side of the body; it is the classic response to an opponent in Plow, protecting against the threatened cut from the side while striking at the same time.



The large figure on the L is executing a Squinting Cut against a High Cut

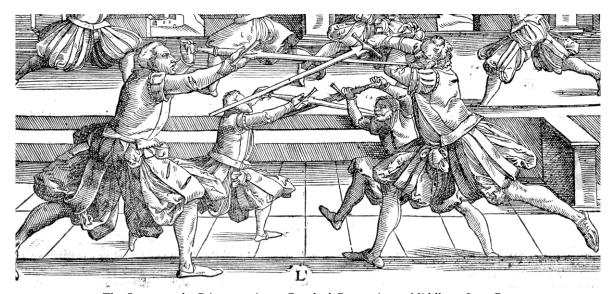
Crooked Cut (Krumphaw)

Start in Crossed Guard with the blade to the left and the left foot back; sweep the blade around and to the right in a moulinet motion to end in Crossed Guard on the opposite side, stepping with the cut. This cut can be repeated, describing a figure-8 moulinet with the blade.



Crossed Guard; it should be done with the thumb grip. This version with the blade angling to the left would normally be done with the left foot back, but execution depends on the tactical situation.

This is the most defensive cut, as it clears the space between the combatants, but it does not defend and attack at the same time, unless it is used against the opponent's arms. It is the classic response to an opponent in Ox: since the Ox can attack from pretty much any angle, the Crooked can protect against any possible interrupting attack.



The figure on the R is executing a Crooked Cut against a Middle or Low Cut.

9.1 The Master Cuts Drill

Do each Master Cut forward and back as in the Straight Cuts drill (Section 8.2). Variants 2-6 will also work.

10. Sample Encounters

10.1 Basic Encounter

This sequence builds stage-by-stage to show the dynamics of a simple swordfight.

A	В
Start in L Plow	Start in L Plow
Middle Cut to B's R shoulder	Remain still—this tests A's control. Once A has successfully demonstrated the technique, reverse roles.

Once both sides had successfully demonstrated control, add parries and ripostes:

A	В
Start in L Plow	Start in L Plow
Middle Cut to B's R shoulder	Shift to R Plow, then Middle Cut over A's blade to A's L shoulder
Pull back to hanging parry, then bring sword around for a Wrath Cut to B's L shoulder. When done smoothly, this is actually a moulinet action.	The drill can cycle from here; then reverse roles.



Parrying in Plow

Finishing action: As B parries in L Plow, B steps in with the parry, then lifts A's sword with his own to pass under it with a pass forward on the L foot behind B's lead foot. As he comes to the other side, he controls A's weapon: this will be either with his left hand to deliver a pommel strike; or with his hilt to deliver a disarm (grasping B's hilt with his left hand) or a throw (sending his left hand in front of B's shoulders).

This can be adapted for left-handers by executing the throw from R Plow.



Pommel-strike



Setting up a disarm



Throw

10.2 Advanced Encounter: The Double-Thwart [Meyer 1570: 1.26r]

A	В
Start in Fool	Start in right Change
Come up into High for a Scalp Cut	Sweep up to the left to set up a Thwart
Deliver Scalp Cut, passing forward on the R foot	Deliver a Thwart from the R, with a R triangle step

To protect against the Thwart, the Scalper will have	Ideally, pull the Thwart before contact, and deliver
to fall on the middle of B's blade.	a Thwart from the L with a triangle step. B now has
	the initiative, so A will act in response to B's
	actions in the rest of the encounter.
Block B's Thwart with a L triangle step	Wrench A's blade to your R to open a target for
	another Thwart from the L.1 The stepping for the
	wrench and Thwart can be either a gather step or
	back-step toward the L
Block B's Thwart, stepping toward the L if	Open the distance with a Middle Cut from the R,
possible	passing back on the L foot
Cut toward the incoming cut to block it (the swords	Cut away with a High Cut
	Cut away with a riigh Cut
may contact each other, but now you should be out	
of range)	
Cut away	

11. Drop-In Workshop Curriculum

Because this document goes into more depth than other Study Guides, below are the items for a typical 15-20 minute drop-in segment.

- 1. Warmup drill
- 2. Background on the weapon (section 2)
- 3. Grip (section 3)
- 4. Moulinets (section 8.1)
- 5. Stance (Plow and Ox only, section 4)
- 6. Moving: Mirroring Drill (section 8.2)
- 7. Basic Encounter (section 10.1)

-

 $^{^{1}}$ Meyer actually calls for a short-edge cut with crossed arms. The L Thwart has crossed arms, but is done with the long edge.

12. Selected Sources

Coe, Michael et al. (1989). Swords and Hilt Weapons. New York: Weidenfeld and Nicolson. One of the best general introductions to swords.

Forgeng, Jeffrey L. and Alexander Kiermayer (2007). "The Chivalric Art': German Martial Arts Treatises of the Middle Ages and Renaissance." In *The Cutting Edge: Studies in Ancient and Medieval Combat*. Ed. E. B. Molloy. Stroud, Glocs.: Tempus. 153-67. General introduction to German martial arts texts of the Middle Ages.

Forgeng, Jeffrey L. (2012). "Owning the Art: The German *Fechtbuch* Tradition." *The Noble Art of the Sword*, ed. Tobias Capwell. London: Wallace Collection. 164-75. A recent introduction to the German combat treatises.

Lecküchner, Hans (forthcoming). *Hans Lecküchner's Art of Falchion Combat* (1482). Transl. Jeffrey L. Forgeng.

Mair, Paulus Hector (forthcoming). *Treatise on the Martial Arts* (c. 1550). Ed. and transl. Jeffrey L. Forgeng et al.

Meyer, Joachim (2006). *The Art of Combat: A German Martial Arts Treatise of 1570*. Transl. Jeffrey L. Forgeng. London: Greenhill Books. One of the most important martial arts texts in the medieval German tradition; the translator's introduction surveys the material.

Mondschein, Ken (2011). *The Knightly Art of Battle*. Los Angeles: Getty Publications. An illustrated introduction to the works of Fiore dei Liberi.

Monte, Pedro (1509). *Compendium on Physical Exercises and the Knightly Arts*. Milan: Scinzenzeler. Translation in preparation by J.L. Forgeng

Tobler, Christian Henry (2010). *In Saint George's Name: An Anthology of Medieval German Fighting Arts*. Wheaton IL: Freelance Academy Press. Includes a translation of the "Starhemberg" manuscript, one of the most important medieval German sources on martial arts.

Tobler, Christian Henry (2007). *In Service of the Duke: The 15th-Century Fighting Treatise of Paulus Kal*. Highland City TX: Chivalry Bookshelf. Richly illustrated manuscript on combat arts, offering visuals that correspond to much of the material in the Starhemberg manuscript.

The Higgins Armory Sword Guild [Website] www.higginssword.org.

Heim, Hans and Alexander Kiermayer (2004). *The Longsword of Johannes Liechtenauer* [DVD]. Agilitas TV/Chivalry Bookshelf. Training video on German longsword technique.

INTRODUCTION TO HISTORIC COMBAT:

Single Sword

Text © Jeffrey L. Forgeng 2010-13



1. Introduction

The following materials describe basics of cut-and-thrust swordplay with a single-handed sword. The techniques are relevant to all blade weapons that are long and heavy enough to be used for cutting attacks. These include all types of broadswords, the sax, *Messer*, cutlass, and saber. Important sources on such weapons include: Hans Lecküchner's *Messer* treatise (1482); Joachim Meyer's *Art of Combat* (1570); Achille Marozzo's *Opera Nova* (1536); Giacomo di Grassi's *Art of Handling Arms* (1570); and Angelo Viggiani's *Fencing* (1575).

The techniques for single sword are actually largely the same as those for the longsword, only done with one hand on the hilt rather than two. The main difference is in footwork: because only the dominant arm is used, the tendency was to keep that side of the body forward, using sliding steps rather than passing steps. This was especially true after about 1500.

The material here is highly simplified and somewhat generic in order to cover a variety of weapons and periods including medieval broadsword, basket-hilted sword, cutlass, and saber. It is designed to support short introductory segments (c. 15-20 mins.) in the Higgins Armory's workshops.

2. The Weapons



Broadsword, c. 1300 (HAM 2428). 2 lb. 13 oz. Overall length 35 7/8", blade 29 7/8".

The double-edged one-handed sword of the Middle Ages had its roots in the Celtic *spatha*—in Romance languages, the term for a sword is a derivative of this word (It. *spada*, Sp. *espada*, Fr. *épée*). Today this type of sword is often called a broadsword. Viking Age examples typically have parallel edges, a rounded tip, and a small handguard, suggesting that they were not much used for thrusting or parrying, but were primarily slashing weapons used in conjunction with a shield.



Broadsword, early 1400s (HAM 2007.03). Wt. 3 lb. 8 oz. (excavated condition). Overall length 36 1/2"; blade 29".

After 1000, the handguard tended to become longer and the blade tapered more strongly to the tip. After 1400, it became common for swordsmen to slip their forefinger over the crossguard for improved blade control, leading to the development of complex hilts to provide better protection for the hand. By the late 1500s, broadswords of this type sometimes had "basket" hilts that provided full protection to the hand. The Highlander's broadsword was a late survival of this type.



Sword, late 1400s (HAM 3262). Overall length 40 1/2"; blade L.34 5/8"; blade width at hilt 1 1/4"; Wt. 2 lb.

During the 1500s, one branch of single-sword evolution led to the development of the rapier as a weapon specialized for civilian combat, such as dueling and self-defense (see the Rapier section of this document). By the late 1500s, the long, thin rapier was fully developed as a type distinct from the all-purpose single-handed sword, which had a shorter, broader blade, and was equally usable in military and civilian settings. Single-handed sword technique tended more toward cutting attacks, where the rapier was optimized for thrusting. Shakespeare's *Romeo and Juliet* (c. 1591-95) highlights the culture wars between advocates of traditional English swordplay with the broad-bladed single sword, and the fashionable gentlemen who favored the newfangled Italian rapier.



Sax, 600s (HAM 238.96). The wooden grip no longer survives. Overall length 25 1/2"; blade L. 20"

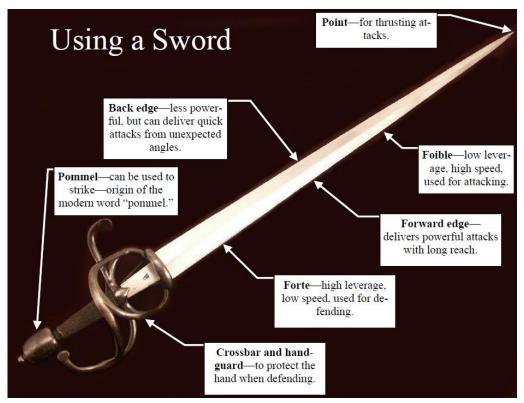
A subclass of the single sword are versions that have only a single edge. These often have some degree of curvature in the blade, and they can vary greatly in size. The early medieval sax could be anything from a long knife to a short sword. Its late medieval equivalent, the *lange Messer* ("long knife") had short utility versions comparable to a small machete, and long versions that were wielded with two hands. In English such weapons were known as "wood knives" or "cutlasses." The single-edged design made the blade more robust, and hence more suitable for utility purposes (such as cutting firewood or chopping through

brush). They were carried by farmers and huntsmen in their work, and high-end versions were made for noble hunters.



A high-end hunting sword, c.1490, of hand-and-a-half size (HAM 2007.01). Overall length 44", blade 36 1/2", wt. 2 lb. 7 oz.

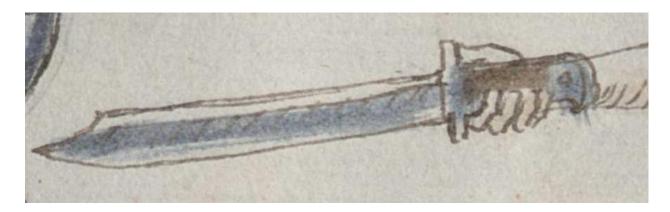
By the 1500s, the curved, single-edged sword was becoming increasingly common as a military weapon. In the 1600s, under Islamic influence, this style of weapon contributed to the rise of the saber as the sidearm of choice for light cavalry, known as the saber. Shorter versions were carried by footsoldiers, and known as hangers, or by sailors, and known as cutlasses.



Parts of a sword, showing a sword-rapier of c. 1600 (HAM 2005.02). The forward edge and back edge are also called the "true/long" edge and "false/short" edge. The sword measures 40" overall, blade 33 1/2", Wt. 3 lb. 3 oz.

3. Grip

The sword is usually held in a "fist grip." The grip is normally relaxed and fluid, firming up as necessary prior to contact.

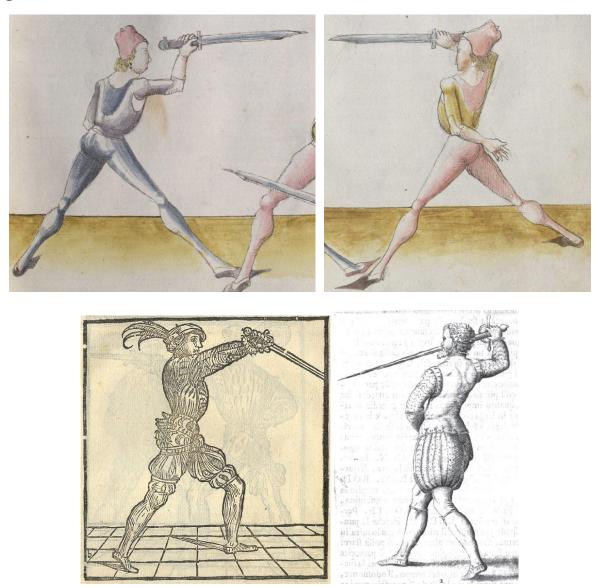


The fist grip holds the weapon with the main hand next to the crossguard closed as a fist. It is optimized for long and powerful cuts.

4. Guards

Guards serve as positions of readiness when out of range, and as waypoints and decision points in the course of an encounter. This document only covers the four most basic guards—high and low on the right and left sides, but the full range of guards documented in the longsword document applies to this weapon as well.

High Guard

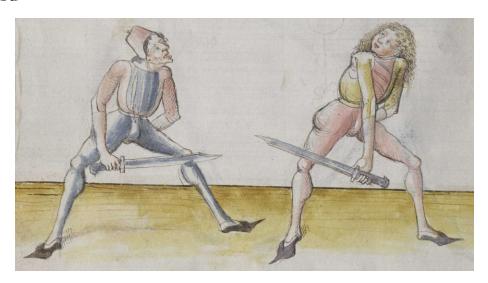


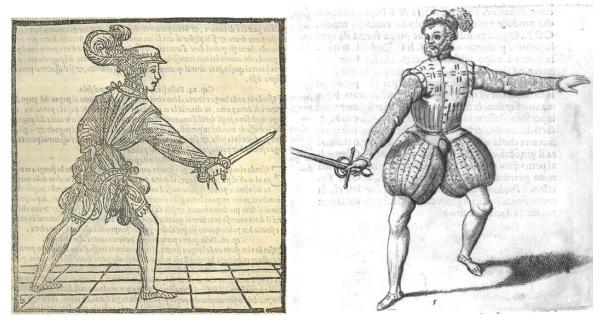
High Guards as shown by Lecküchner, Marozzo, and Viggiani. This is a versatile guard that protects the head, while threatening a thrust or almost any cut.



High and Low Guards in di Grassi (HAM 2006.04)

Low Guard







Low Guards as shown by Lecküchner, Marozzo, and Viggiani. This position protects the side of the body, and can threaten a thrust or cut from below. It is a more defensive position than the High Guard: it offers fewer attack options but is less physically demanding.

5. Training Drills and Sequences

5.1 Moulinets

Practice the basic moulinets. This is a good exercise for limbering up the hand, arm, and shoulder, while relaxing the grip on the sword. It is also a fun, flash move that can be easily practiced at home, and it has practical applications in combat, as will be illustrated below.

- 1. Blade descending in front of you
- 2. Blade rising in front of you



Moulinet #1 in action (Ablauffen)

5.2 Switching Sides

Begin in Low Guard, switch guard from one side to another. The point stays centered on the opponent's forehead, while the guard shifts from one side to the other, just far enough to close the line.

5.3 Mirroring Drill

Once the students can switch guards, add sliding steps (=fencing steps) in a straight line forward and back. Pair the students and have one lead, switching guards and slide-stepping forward and back, while the follower mirrors, maintaining distance and imitating the leader's guard.

5.4 Basic Encounter

This sequence builds stage-by-stage to show the dynamics of a simple swordfight.

A	В
Start in R Low Guard	Start in R Low Guard.
Middle Cut to B's L side (armpit level)	Remain still—this tests A's control. Once A has
	successfully demonstrated the technique, reverse

roles.

Once both sides have successfully demonstrated control, add parries and ripostes:

A	В
Start in R Low Guard	Start in R Low Guard.
Suit in R 25 W Suite	Start in 1t 25 ii Startu
Middle Cut to B's L side	Shift to L Low Guard, then Middle Cut over A's
	blade to A's R side
Drop point to catch the cut with hanging blade,	Parry in R Low Guard, then cut straight out to A's
continuing this moulinet action to cut to B's R side.	L side.
Drop point to catch the cut with hanging blade,	Parry in L Low Guard. At this point the sequence
continuing the moulinet action to cut to B's L side.	can cycle. Once both sides have mastered it,
	reverse roles.

Finishing action: As B parries in Low Guard, B *steps in* (passing step) with the parry, either straight, if parrying to the outside (R for a righthander), or clearing with his sword to pass under the blade if parrying on the inside. As he does this, he controls B's weapon: this will be either with his left hand to deliver a pommel strike; or with his hilt to deliver a throw, sending his left hand in front of B's shoulders.

The same thing works with lefthanders; again, if the parry is on the inside line, the defender follows up by passing under the blade to throw the opponent.



A pommel strike.

6. Selected Sources

Coe, Michael et al. (1989). Swords and Hilt Weapons. New York: Weidenfeld and Nicolson. One of the best general introductions to swords.

Forgeng, Jeffrey L. and Alexander Kiermayer (2007). "The Chivalric Art': German Martial Arts Treatises of the Middle Ages and Renaissance." In *The Cutting Edge: Studies in Ancient and Medieval Combat*. Ed. E. B. Molloy. Stroud, Glocs.: Tempus. 153-67. General introduction to German martial arts texts of the Middle Ages.

di Grassi, Giacomo (1570). Ragione di adoprar sicuramente l'arme Venice: Giordano Ziletti.

di Grassi, Giacomo (1594). *Giacomo Di Grassi his true arte of defence*. Transl. J. G.?London: I. I[aggard].

Lecküchner, Hans (forthcoming). *Hans Lecküchner's Art of Falchion Combat* (1482). Transl. Jeffrey L. Forgeng.

Marozzo, Achille (1550). Opera nova. Venice: Giovanne Padovano.

Meyer, Joachim (2006). *The Art of Combat: A German Martial Arts Treatise of 1570*. Transl. Jeffrey L. Forgeng. London: Greenhill Books. One of the most important martial arts texts in the medieval German tradition; the translator's introduction surveys the material.

Viggiani, Angelo (1575). Trattato dello schermo Venice: Giorgio Angeleri.

The Higgins Armory Sword Guild [Website] www.higginssword.org.

Heim, Hans and Alexander Kiermayer (2007). The Messer of Johannes Lecküchner Part I. Agilitas TV.

INTRODUCTION TO HISTORIC COMBAT:

Rapier

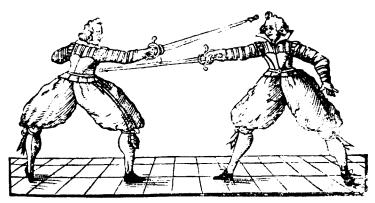
Text © Jeffrey L. Forgeng 2011-13



1. Introduction

The following materials describe basics of rapier swordplay. Important sources on the weapon include Camillo Agrippa's *Science of Arms* (1553), Joachim Meyer's *Art of Combat* (1570), and Giacomo di Grassi's *Art of Handling Arms* (1570); but there is a huge number of other treatises on this weapon from the 1500s and 1600s.

The use of the rapier is complex, and different masters advocated various systems for using it. The material here is highly simplified and somewhat generic. It is designed to support short introductory segments (c. 15-20 mins.) in the Higgins Armory's workshops. These workshops can be taught on a controlled safety basis using the rapiers with large spherical buttons (which are based on safety buttons actually used in the period). For smaller students, these weapons can be too heavy, requiring the use of Italian foils instead, in which case they will need to wear fencing gear.



Fencers at play. Note the buttons on the rapiers, the padded doublets, and the absence of head protection.

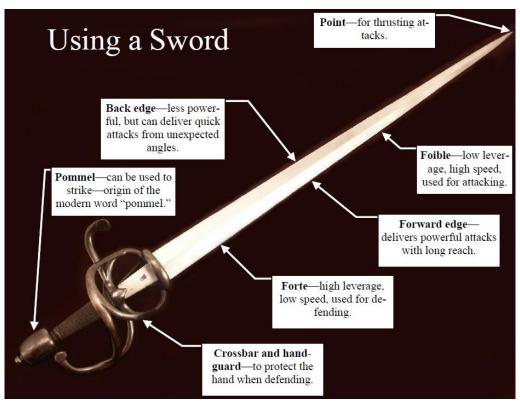
From a 1611 German fencing manual.

2. The Weapon



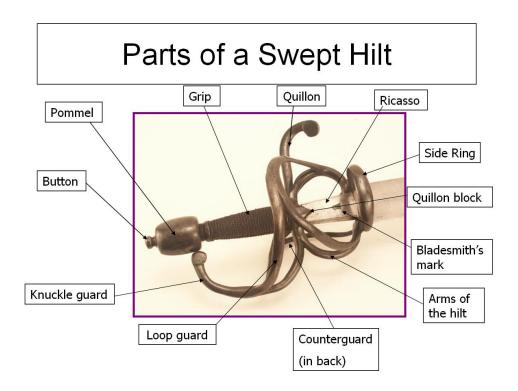
Italian sword of the late 1400s, showing some early rapier features: the blade is relatively light, and the hilt has a knuckleguard, arms of the hilt, and a side-ring (HAM 3262). Overall length 40 1/2"; blade L.34 5/8"; blade width at hilt 1 1/4"; Wt. 2 lb. The lost grip would have been made of a wood core wrapped with leather and wire.

There is no hard and fast line between the rapier and the cut-and-thrust sword (which is described in the Single Sword document): a Renaissance sword can be classed as a rapier to the degree that it is designed and used for thrusting in preference to cutting. Early versions of the rapier emerged in southern Europe (Spain and Italy) around the late 1400s. Known as the *espada ropera* ("clothing sword") in Spain, by the mid-1500s it had reached France, where it was known as the *épée rapière*, and by the late 1500s it was known in England as the rapier.



Parts of a sword, showing a swept-hilt sword-rapier of c. 1600 (HAM 2005.02). The sword measures 40" overall, blade 33 1/2", and weighs 3 lb. 3 oz.

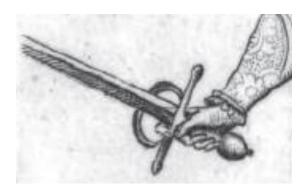
As the original name suggests, the weapon was designed to be worn with civilian clothing, which allowed for a thinner and longer blade, compared to the more robust swords needed on the battlefield. Although longer and thinner than the medieval broadsword, it was about the same weight: surviving examples are typically about 2-3 lb. The modern Italian fencing foil derives from a practice version of the rapier. The long, thin blade of the rapier is what made it best adapted for thrusting attacks, in contrast to broader bladed single swords, which might be equally suited for cuts and thrusts, or chiefly cutting weapons that could at need deliver a thrust.



Northern Europeans of the late 1500s saw the rapier as a foreign weapon: some embraced it as a lethal yet stylish international fashion, others rejected it as a foppish affectation better suited for killing one's countrymen in the streets than the nation's enemies on the battlefield. Shakespeare's *Romeo and Juliet* (c. 1591-95) highlights the culture wars between traditional English swordsmen and the fashionable gentlemen who favored the newfangled Italian rapier.

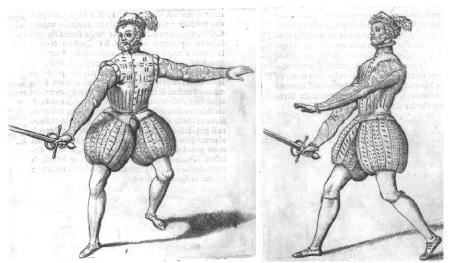
3. Grip

The grip is normally relaxed and fluid, firming up as necessary prior to contact. The index (and sometimes middle) finger is slipped over the crossbar onto the ricasso.



4. Guards

Guards serve as positions of readiness when out of range, and as waypoints and decision points in the course of an encounter. This document only covers the two most basic guards—right and left low guards. For the purposes of simplicity here, the dominant side of the body is always kept forward.



Low Guards on the right as shown by Viggiani.



High and Low Guards in di Grassi (HAM 2006.04)

5. Training Sequences

5.1 Switching guards

Students switch between R and L Low Guard. The point stays centered on the opponent's forehead, while the hilt shifts from one side to the other, just far enough to *close the line*.

5.2 Maintaining distance

Students pair up, facing each other in Low Guard on the R. The leader moves forward and backward with sliding steps (fencing steps), while the follower maintains distance. (See the Longsword document on stepping.)

5.3 Mirroring Drill

Leader randomly changes guards in addition to moving forward and back; follower imitates the guard and maintains distance.

5.4 Thrusting to targets

A holds sword artificially on the center line; B practices thrusts to each side of the sword.

5.5 Closing the line

A and B both start in either left or right guard. A thrusts to the available target, B closes the line by shifting to guard on the opposite side.

5.6 Riposte

Same as closing the line, but B adds a riposte, keeping the line closed while thrusting.

5.7 Disengage

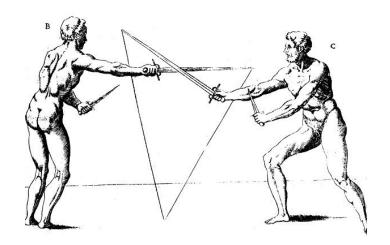
Same as closing the line, but as B tries to close the line, A disengages into a lunge on the opposite side.

5.8 Counterthrust with opposition

Same as closing the line with a riposte, except that the defense and riposte are executed as a single action by moving into the thrust while closing the line.

5.9 Keeping the inside line

A takes the *inside line* from B, either by moving his blade across (taking B's blade with it if necessary) or *changing engagement*. B responds by retaking the inside line by changing engagement. Once they can do this, A begins the footwork again as in 5.2, while B maintains distance; A intermittently tries to take the inside line, and B responds appropriately.



5.10 Attacking in time

The students reset to R guard. Staying in place, A switches to L guard to take the inside line. B evades contact to change engagement, extending his arm into a short lunge to hit A, closing the line by turning the true edge against A's sword.

By disengaging and attacking *while* A attempts to take the inside line, B is acting *in time*, using the *time* created by A's action.

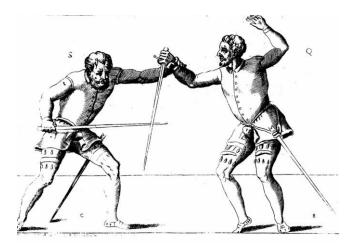


A shallow lunge in Mair.

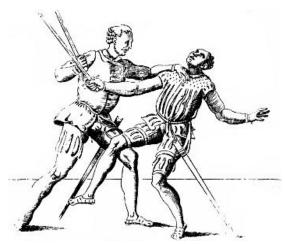
5.11 Grappling

As 5.6, but instead of riposting, A passes forward with the parry to grapple. If he is parrying to the outside line (R for a righthander), he steps in straight; if to the inside line, he lifts B's blade with his own to pass forward under it. As he does this, he controls B's weapon: this will be either with his left hand to deliver a pommel strike; or with his hilt to deliver a throw, sending his left hand in front of B's shoulders.

The same thing works with lefthanders; again, if the parry is on the inside line, A passes under the blade to throw the opponent, if on the outside line, A passes straight forward.



Wrist grapple in Agrippa.



Throw in Agrippa.

6. Selected Sources

Agrippa, Camillo (2009). *Fencing: A Renaissance Treatise*. Transl. Kenneth Mondschein. New York: Italica Press. Arguably the first true "rapier" treatise, first published in 1553.

Coe, Michael et al. (1989). *Swords and Hilt Weapons*. New York: Weidenfeld and Nicolson. One of the best general introductions to swords.

di Grassi, Giacomo (1570). Ragione di adoprar sicuramente l'arme Venice: Giordano Ziletti.

di Grassi, Giacomo (1594). *Giacomo Di Grassi his true arte of defence*. Transl. J. G.?London: For I. I[aggard]. One of the most straightforward and systematic rapier treatises.

Meyer, Joachim (2006). *The Art of Combat: A German Martial Arts Treatise of 1570*. Transl. Jeffrey L. Forgeng. London: Greenhill Books. One of the most important martial arts texts in the medieval German tradition; the translator's introduction surveys the material. Meyer's rapier technique is very similar to that of di Grassi.

Norman, A. Vesey (1980). Rapier and Smallsword. The classic in-depth study of these swords.

The Higgins Armory Sword Guild [Website] www.higginssword.org.

INTRODUCTION TO HISTORIC COMBAT:

Staff Weapons

Text © Jeffrey L. Forgeng 2011-13



1. Introduction

The following materials describe basics of two-handed staff weapon combat from European sources of the 1400s-1500s. Relevant weapons include the quarterstaff, halberd, pollaxe, and battleaxe. Important sources on these weapons include the *Jeu de la Hache* (Burgundian, late 1400s), Pedro Monte's *Compendium on the Military Art* (Spanish, c. 1490), the "Egenolff Fechtbuch" (c. 1531), Paulus Hector Mair's *Ars Athletica* (German, c. 1550), Joachim Meyer's *Art of Combat* (German, 1570), and Joseph Swetnam's *Science of Defence* (English, 1617).

The material here is highly simplified and generic, allowing a single system to be used for multiple different staff weapons. It is designed to support short introductory segments (c. 15-20 mins.) in the Higgins Armory's workshops.

2. The Weapons



Battleaxe, c. 1200s. (HAM 1100). The weapon is 38 in. long and weighs 1 lb. 12 oz.

Staff weapons can include any two-handed weapon with a wooden haft, with or without a metal head at one or both ends. A variety of such weapons were in use from the Middle Ages into the Renaissance. The simplest was the quarterstaff, typically around 6 ft. long. Slightly more complex was the battleaxe, having a single-bladed head, and widely used in the early and central Middle Ages. By the later Middle Ages (roughly the 1300s onwards), many staff weapons had complex heads that featured a thrusting tip and at least two striking faces that might include an axe blade, a piercing beak, and/or a crushing hammer. These weapons included the halberd, bill, and pollaxe.



Head of a halberd, late 1500s (HAM 1273). These weapons are typically about 8' long and weigh 4-6 lb.

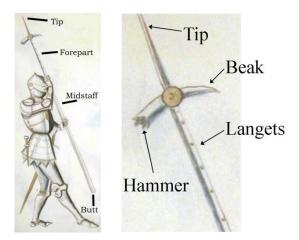
Military staff weapons were typically around 8 ft. long; the chivalric pollaxe was a bit shorter, around 6 ft. The length and weighted heads of these weapons allowed them to deal powerful blows that could injure armored opponents.



Head of a pollaxe, late 1400s (HAM 2653). The weapon weighs 5 lb. 12 oz. and measures 6 ft. long.

The quarterstaff was used much like a spear, with the emphasis on thrusting attacks. The techniques in this document emphasize striking attacks (partly for safety) that were more typical for weapons like the axe, pollaxe, and halberd.

All staff weapons can be divided into four sections: tip, forepart, midstaff, and butt.



3. Grip and Stance

Staff weapons can be gripped in various ways, and advanced practitioners will shift from one grip to another in the course of a fight. If the weapon is to be used primarily for thrusting, the fighter usually has their dominant hand at the butt and the secondary hand forward: this is the normal position for a

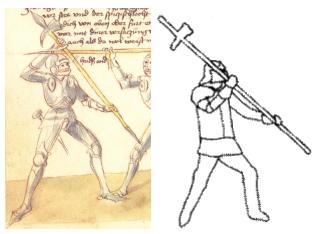
quarterstaff, spear, or pike. If the weapon will be used for striking, the dominant hand will typically be forward and the secondary hand toward the butt. This is a common position for weapons like the battleaxe, halberd, or pollaxe. The hand may be positioned with the thumbs toward each other, or both hands may have the thumb pointing forward. The thumbs-together position is more versatile, the thumbs-forward position has greater reach and power.

The normal grip leaves a longer section of staff protruding at the forepart than at the butt. Sometimes this grip can be shifted so that the staff is held in the middle. This is more effective at close quarters, but reduces the fighter's range.

4. Guards

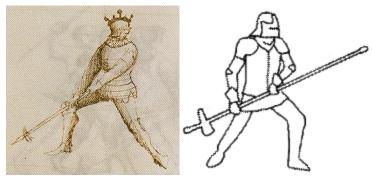
Guards serve as positions of readiness and defense. They can be taught through the drill at the end of this section.

High Reverse Guard



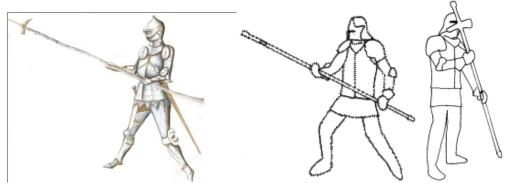
This position guards the side of the body while threatening a thrust with the butt or a downward blow with the head of the weapon.

Low Reverse Guard



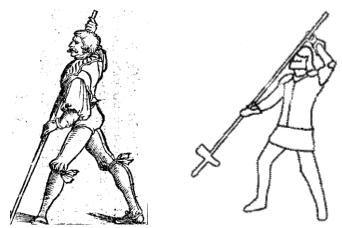
This position guards the side of the body while threatening a thrust with the butt or an upward blow with the head of the weapon.

High Forward Guard



This position guards the side of the body while threatening a thrust with the head of the weapon. With a pollaxe, the "cross" of the weapon can be held sideways to allow for defenses with the head.

Low Forward Guard

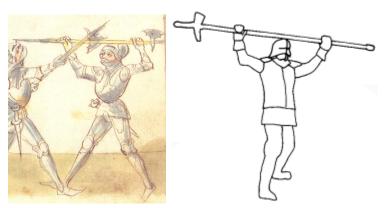


This position guards the side of the body while threatening a thrust with the head of the weapon.



Low and High Forward Guards in Swetnam.

Head Guard



A defensive position used to block overhead blows.

5. Training Drills and Sequences

Since the staff is essentially an ambidextrous weapon, identical content can be taught to both L and R handers.

5.1 Moulinets

Practice the two basic moulinets for a long staff weapon:

- 1. Weapon descending in front of you
- 2. Weapon rising in front of you

5.2 "Driving"

- Start in High Reverse Guard on the R
- Strike diagonally down to Low Forward Guard on the L, passing forward; then slash diagonally back up to High Reverse Guard without stepping

- Bring staff around to High Reverse Guard on L, strike diagonally down to Low Forward Guard on R, passing forward; then slash diagonally back up to High Reverse Guard on L without stepping
- Bring staff around to original position and repeat.

This drill comes from Meyer's section on the halberd (3.32r-33r); it allows the student to get a feel for the weapon in motion, it demonstrates the role of the guards as waypoints in combat. Once the drill has been done moving forward, do the same moving backward. Then have students face off, one driving forward while the other drives backward. Then have one student lead, randomizing the stepping. The same drill can be done using triangle steps instead of passing steps.

5.3 Mirroring Drill

Leader switches between guards, and can also move around with passing and triangle steps. Follower imitates the guard and maintains distance. Some of the transitions will effectively be strikes; when ready, the leader can also add thrusts.

5.4 Attacking and Defending on the Staff

- Both start in High Reverse Guard on R.
- Leader passes forward to strike horizontally from R; Follower triangle-steps to parry on forepart of staff.
- Leader passes forward again to strike horizontally from L using the butt; Follower triangle-steps to parry on midstaff.
- Leader passes back to strike horizontally from R; Follower triangle-steps to parry on forepart of staff.
- Leader passes back out of range, both resume initial position, and repeat with Follower attacking.

5.5 Sample Sequences

Cross block of swinging blow [Anglo 7]

A	В
Start in High Reverse Guard	Start in Low Reverse Guard

Strike diagonally down at B's shoulder	Strike diagonally up to meet A's blow
	Push A away from behind using the butt [The actual technique in <i>Jeu</i> brings the butt down over A's forward hand to break his grip].

Mid-shaft block of swinging blow [Anglo 9, 11]

A	В
Start in High Reverse Guard	Start in Low Reverse Guard
Strike vertically down at B's head, passing forward	Pass forward to catch in Head Guard, then step
	with left foot behind A's forward foot while
	bringing butt under A's chin to execute a throw
Withdraw weapon and step back with right foot,	
placing the butt under B's arm to push him away.	



The throw (in this case, the weapon is being held with the dominant hand near the rear).

Disarm [Anglo 12]

A	В
Start in High Reverse Guard	Start in Low Reverse Guard
Strike vertically down at B's head, passing forward	Pass forward to catch in Head Guard, then catch
	A's butt with your own to circle it around

	counterclockwise for a disarm.
Counter (Made up): Allow the disarm, and steps	
in, blocking the blow with left hand, stepping with	
R foot behind B's forward leg, bringing R hand	
over B's L shoulder to throw, taking B's pollaxe as	
he falls	

6. Selected Sources

Anglo, Sydney (1991). "Le Jeu de la Hache. A Fifteenth-Century Treatise on the Teaching of Chivalric Axe Combat." *Archaeologia* 109: 113-128. A particularly clear and usable treatise.

The "Egenolph" Fechtbuch (?c. 1531). *Der Altenn Fechter anfengliche Kunst*. Frankfurt-am-Main: Christian Egenolph. Includes a section on the quarterstaff.

Forgeng, Jeffrey L. (2012). "Owning the Art: The German *Fechtbuch* Tradition." *The Noble Art of the Sword*, ed. Tobias Capwell. London: Wallace Collection. 164-75. A recent introduction to the German combat treatises.

Forgeng, Jeffrey L. and Alexander Kiermayer (2007). "The Chivalric Art': German Martial Arts Treatises of the Middle Ages and Renaissance." In *The Cutting Edge: Studies in Ancient and Medieval Combat*. Ed. E. B. Molloy. Stroud, Glocs.: Tempus. 153-67. General introduction to German martial arts texts of the Middle Ages.

Mair, Paulus Hector (forthcoming). *Treatise on the Martial Arts* (c. 1550). Ed. and transl. Jeffrey L. Forgeng et al. Includes sections on pollaxe and staff.

Meyer, Joachim (2006). *The Art of Combat: A German Martial Arts Treatise of 1570*. Transl. Jeffrey L. Forgeng. London: Greenhill Books. One of the most important martial arts texts in the medieval German tradition; the translator's introduction surveys the material. Includes important sections on quarterstaff, halberd, and pike.

Mondschein, Ken (2011). *The Knightly Art of Battle*. Los Angeles: J. Paul Getty Museum. An introduction to the Getty manuscript of Fiore dei Liberi's 1409 treatise.

Monte, Pedro (forthcoming). *Compendium on the Military Art*. Transl. Jeffrey L. Forgeng. Includes material on the pollaxe.

Swetnam, Joseph (1617). *The Schoole of the Noble and Worthy Science of Defence*. London: Nicholas Okes. Includes a section on the quarterstaff.

Waldman, John (2005). *Hafted Weapons in Medieval and Renaissance Europe*. Leiden and Boston: Brill. The chief reference work on staff weapons.

The Higgins Armory Sword Guild [Website] www.higginssword.org.

INTRODUCTION TO HISTORIC COMBAT:

Dagger and Wrestling

Text © Jeffrey L. Forgeng 2011-13



1. Introduction

The following materials describe basics of dagger fighting and wrestling from European sources of the 1400s-1500s. Important sources on these forms include Fiore dei Liberi's *Flos Duellatorum* (Italian, 1409), Pedro Monte's *On the Recognition of Men* and *Compendium on the Military Art* (Spanish, c. 1490), Master Ott the Jew's wrestling treatise and Andre Liegnitzer's dagger plays (German, ?c. 1425-50), and Joachim Meyer's *Art of Combat* (German, 1570). Because the dagger is such a short weapon, its techniques are very closely connected to wrestling. The techniques of wrestling and dagger remain very consistent across time and cultures.

The material in this document is highly simplified. It is designed to support short introductory segments (c. 15-20 mins.) in the Higgins Armory's workshops.

2. The Weapons

Wrestling was a core skill in a knight's training. As well as teaching basic principles of body mechanics, it prepared a knight for armored combat in particular: armored duels proverbially came down to wrestling and dagger work at the end. In addition, wrestling and grappling techniques could be used in all other weapons forms. Wrestling was also popular as a sport, both with aristocrats and commoners.

The dagger was a common personal accounterment for men in the Middle Ages and Renaissance. Medieval daggers were primarily designed as thrusting weapons, some having no cutting edge at all. Before the 1500s, daggers had very little in the way of crossguards; the typical late medieval "rondel" dagger had just a round disk between the blade and hilt.

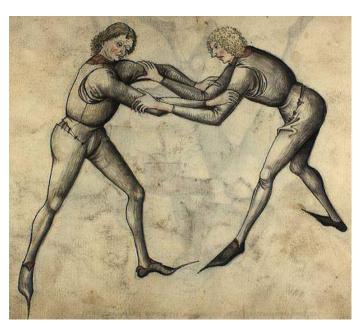


A typical "rondel" dagger of the late Middle Ages (HAM 1999.02.3). Weapons like this were worn both by armored knights and for civilian self-defense.

3. Grip and Stance

The dagger was normally held with the blade projecting downward from the fist, that is from the pinkie side, but sometimes it was held like a sword, with the blade projecting upward from the thumb/forefinger side. The dagger was normally worn on the dominant side of the body, and the downward grip was the natural drawing position for the weapon when worn this way.

One common starting position for wrestling was Gleichfassen, the "reciprocal grip."



Gleichfassen: the figures have their R hands on the inside of the opponent's bicep, L hands on the outside (Talhoffer).

4. Techniques

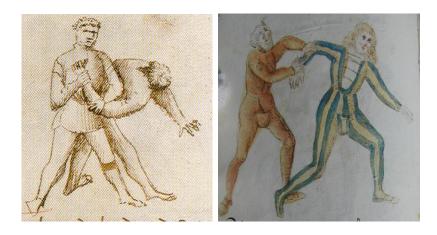
Medieval wrestling techniques typically work by securing advantage over the points of relative weakness on the opponent's body: chin, neck, elbow, wrist, and knee. Medieval German treatises classify most wrestling techniques as "wrestling at the arm" or "wrestling at the body." Wrestling at the arm refers to arm locks, which control the wrist and elbow to hyperextend the arm.

If the opponent is armed, the first move is usually to neutralize his weapon, often by grabbing the wrist.

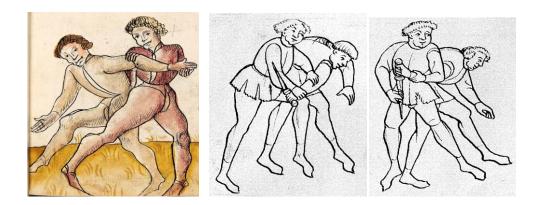
High Key. Rotates the arm up and backward, either dislocating the shoulder or forcing the opponent off balance.



Low Key. Rotates the arm down and backward, either dislocating the shoulder or forcing the opponent to the ground.

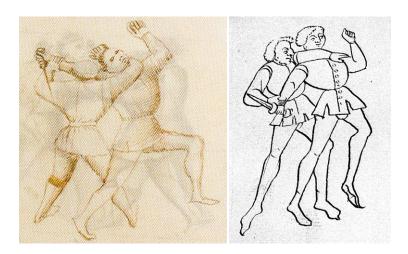


Arm Bar. Hyperextends the arm in a straight position, potentially dislocating the elbow, or forcing the opponent to the ground. It can also be done single-handedly by rotating the opponent's wrist.



Body wrestling refers to techniques that work on the core of the body. Many of them are variants on the hip throw.

Hip/Leg Throw. This move typically throws the balancing system of the shoulders, hips, and legs out of alignment to send the opponent to the ground.



5. Drills and Sequences

5.1 Disarm Flow Drill

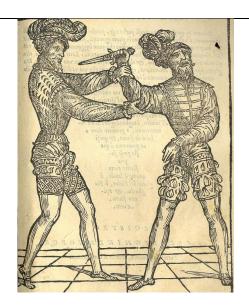
A (armed with dagger)	B (unarmed)
Stab diagonally down from R at B's clavicle	Intercept A with heel of L hand against A's wrist, palm away. Note that if A is targeting properly, A's blade will extend over B's forearm.

	Send fingers of L hand over A's forearm at the
المجارة المجارة	wrist, scoop counterclockwise to bring the dagger
	between your chests.
	If you are positioned correctly (as in the
ALL SEL MAN	illustration), A's dagger will be forced out of his
	hand by the leverage between B's hand and
	forearm.
	B takes the dagger in R hand as it comes free.
	Repeat with B as the armed attacker, A as the
	defender doing the disarm.

5.2 Self-Defense Sequences

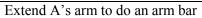
The following sequences are self-defense scenarios taken from the combat manuals. They normally assume that the combatants are already close to each other. B's defenses with the left hand will lead to face-to-face techniques; defenses with the right hand will put B behind A. All these techniques are essentially ambidextrous, so the handedness of the student is irrelevant.

Left-Hand Defenses	
A (armed with dagger)	B (unarmed)
Threatens a downward thrust from above	Catch with left hand, thumb downward. From here you can:



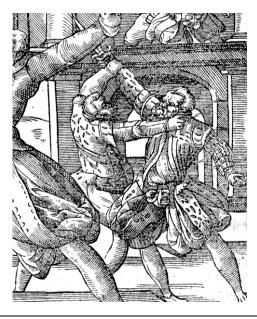
Catch A's elbow with your right hand to execute the upper Key (or slip the right hand onto the opponent's hand to do the Key single-handed)

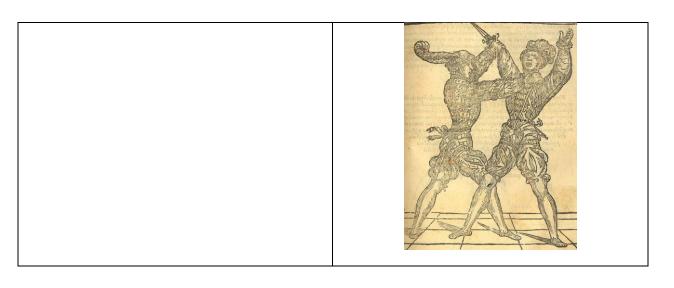


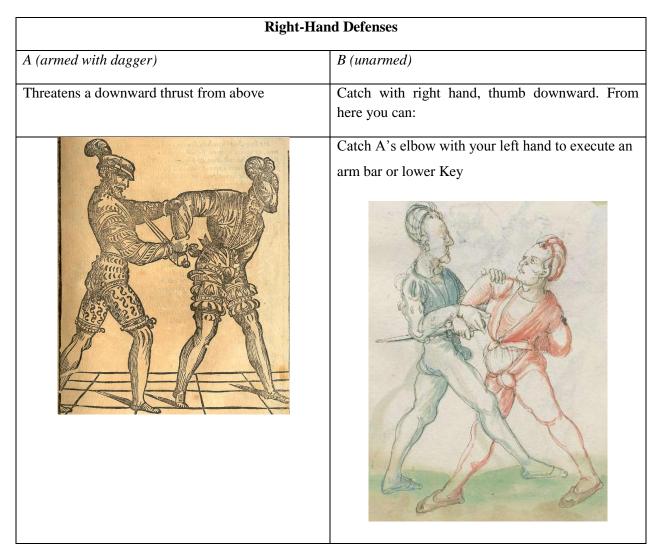




Extend A's arm, slip your right arm across the front of A's chest, and step behind them with your right leg to do a throw.









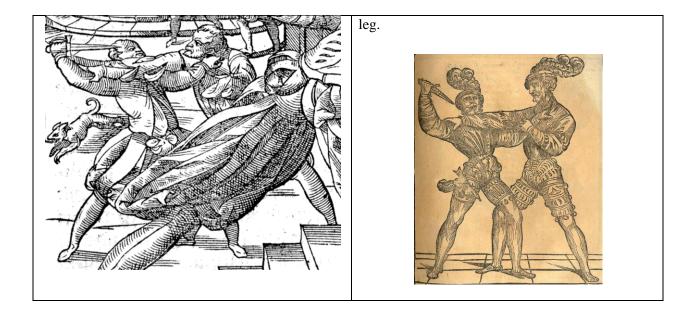




Pull A's arm in front of you while stepping behind them and slipping your left arm across their shoulders to do a throw.



Self-Defense Scenario (Meyer 1570: 3.10r)	
A (armed with dagger in belt)	B (unarmed)
Seems to be thinking about drawing	Grab A's nearer hand with your same hand (ie right to right or left to left), pull that hand toward you, and slip your other hand across the front of A's chest
At this point, A may try to draw with the free hand	Catch A's free bicep with the hand that is across their chest. If you hold here solidly, A cannot use the weapon, and you can also throw A over your



6. Selected Sources

Forgeng, Jeffrey L. and Alexander Kiermayer (2007). "The Chivalric Art': German Martial Arts Treatises of the Middle Ages and Renaissance." In *The Cutting Edge: Studies in Ancient and Medieval Combat*. Ed. E. B. Molloy. Stroud, Glocs.: Tempus. 153-67. General introduction to German martial arts texts of the Middle Ages.

Forgeng, Jeffrey L. (2012). "Owning the Art: The German *Fechtbuch* Tradition." *The Noble Art of the Sword*, ed. Tobias Capwell. London: Wallace Collection. 164-75. A recent introduction to the German combat treatises.

Marozzo, Achille (1536). *Opera nova de Achille Marozzo Bolognese, mastro generale de l'arte de l'armi*. Modena: Antonio Bergolæ. One of relatively few Italian sources on the use of the dagger.

Meyer, Joachim (2006). *The Art of Combat: A German Martial Arts Treatise of 1570*. Transl. Jeffrey L. Forgeng. London: Greenhill Books. One of the most important martial arts texts in the medieval German tradition; the translator's introduction surveys the material. Excellent section on dagger with important material on wrestling as well.

Mondschein, Ken (2011). *The Knightly Art of Battle*. Los Angeles: J. Paul Getty Museum. An introduction to the Getty manuscript of Fiore dei Liberi's 1409 treatise.

Monte, Pedro (forthcoming). *On the Evaluation of Men* and *Compendium on the Military Art*. Transl. Jeffrey L. Forgeng. Includes extensive sections on wrestling and some material on dagger.

Tobler, Christian Henry (2010). *In Saint George's Name: An Anthology of Medieval German Fighting Arts*. Wheaton IL: Freelance Academy Press. Includes copies of Ott's wrestling and Liegnitzer's dagger.

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INTRODUCTION TO HISTORIC COMBAT:

Halfsword

Text © Jeffrey L. Forgeng 2011-13



1. Introduction

The following materials describe basics of halfsword combat as documented in the "Liechtenauer" system predominant in German sources of the 1400s-1500s. Johannes Liechtenauer was a famous combat master of the 1300s whose verses on combat remained central to German martial arts for centuries afterwards. The verses are difficult to interpret, but the techniques are explained in a variety of later writings, of which the most important is the "Starhemberg" manuscript of 1452. These halfsword techniques were used for armored combat with longswords; they were also sometimes practiced in unarmored longsword combat.

The material here is highly simplified. It is designed to support short introductory segments (c. 15-20 mins.) in the Higgins Armory's workshops.

2. The Weapon

"Halfsword" refers to the knightly longsword as used in a spear-like grip, with the secondary hand on the middle of the blade. This was the normal position for using this weapon in armored combat: the normal "longsword" position was optimized for cutting attacks, which were ineffective against an armored opponent. For more information on the weapon, see the Longsword document.

3. Grip

The main hand is next to the crossbar, the secondary hand is on the blade. This position allows for greater thrusting accuracy to target the limited openings on an armored opponent. Sometimes the main hand can be brought onto the blade to reverse the weapon for a powerful "murder-blow" technique, striking with the hilt of the weapon. One can also release the secondary hand from the blade to facilitate grappling, although single-handed thrusts are less accurate than with both hands.

4. Targets

Since the edge of the longsword is largely irrelevant to armored combat, attacks are delivered either with the tip or hilt. The tip can thrust to any place that is not covered by armor plates: targets include under the visor, the armpits, inside the elbows, palms, into the cuff of the gauntlet, groin, inside of the legs, and even the soles of the feet. Some of these areas would have backup covering of mail, in which case the combatant would try to lodge his point into one of the mail links and push to break through.



The combatant on the left has planted his point into his opponent's armpit, and will now try to crowd him to break through the mail armpit gussets. His opponent will try to disengage before this happens.

Attacks with the hilt can deliver more power, and therefore may target the armor plates as well as the gaps. These attacks can be delivered with either the pommel (in halfsword or Murder-Blow position) or crossbar (in Murder-Blow position). The hilt can also be used to catch onto parts of the opponent's body, and overall the close range of armored combat allows for a good deal of grappling techniques, whether using the hands or the weapon.



 $Hooking \ the \ leg \ with \ the \ crossbar \ from \ the \ Murder-Blow \ position.$

5. Guards



Low and High Guards.

Murder-Blow (Mortschlag)



The figure on the left has delivered the Murder-Blow (for maximum reach and power, his right hand would be closer to his left).

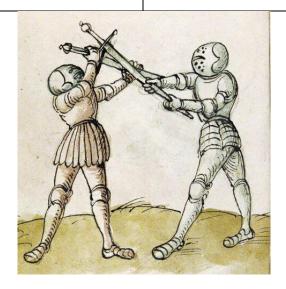
6. Sample Encounter

A	В
Start in Low Guard	Start in Low Guard
Thrust up to B's face	Counterthrust to A's face, deflecting his blade in
	the process.
Step in behind B's forward leg to snag B's neck	Release L hand to force A's hilt down, while lifting
with pommel	sword to thrust singlehanded to A's face



Step back and release R hand to deflect thrust with forearm, then take blade with R hand to deliver Murder-Blow, stepping forward

Return to halfsword grip to catch A's blade high, stepping forward, then circle around with hilt counterclockwise to catch A's hilt, while stepping back to disarm.



The simplest way to adapt this for a lefthander is to have them do the A part, starting on guard with the L hand and pommel forward rather than the point. This would be a less typical yet still possible starting position, allowing for a pommel-bash to the helmet as the opening move. The neck-hook can be done with the point of the sword. The trickiest part is the forearm block: the lefthander releases their L hand from the hilt, using it to deflect the incoming attack toward the L, while bringing the blade in the R hand

toward their R side to set up for a Murder-Blow from the R side (for a L hander, the Murder-Blow is delivered with the R hand toward the point of the blade, the L hand toward the hilt). B's part is entirely unchanged.

7. Selected Sources

Forgeng, Jeffrey L. and Alexander Kiermayer (2007). "The Chivalric Art': German Martial Arts Treatises of the Middle Ages and Renaissance." In *The Cutting Edge: Studies in Ancient and Medieval Combat*. Ed. E. B. Molloy. Stroud, Glocs.: Tempus. 153-67. General introduction to German martial arts texts of the Middle Ages.

Forgeng, Jeffrey L. (2012). "Owning the Art: The German *Fechtbuch* Tradition." *The Noble Art of the Sword*, ed. Tobias Capwell. London: Wallace Collection. 164-75. A recent introduction to the German combat treatises.

Mondschein, Ken (2011). *The Knightly Art of Battle*. Los Angeles: J. Paul Getty Museum. An introduction to the Getty manuscript of Fiore dei Liberi's 1409 treatise.

Tobler, Christian Henry (2010). *In Saint George's Name: An Anthology of Medieval German Fighting Arts*. Wheaton IL: Freelance Academy Press. Includes a translation of the "Starhemberg" manuscript, one of the most important medieval German sources on martial arts, with extensive material on armored combat.

Tobler, Christian Henry (2007). *In Service of the Duke: The 15th-Century Fighting Treatise of Paulus Kal*. Highland City TX: Chivalry Bookshelf. Richly illustrated manuscript on combat arts, offering visuals that correspond to much of the material in the Starhemberg manuscript.

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