Master of Arms

Interactive Qualifying Project Report Submitted to the Faculty of the

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Abstract

This project studied the Higgins Armory Museum's copy of the martial arts treatise *The Art of Combat*, written by Joachim Meyer in 1570. The team researched the author's life and times, and studied the longsword, rapier, halberd, and other weapons from the treatise to understand their history and their use in Meyer's time. The outcome was an instructional video and documentary to accompany the artifact and to enrich the Armory's historic combat classes.

Introduction

The purpose of this project was to create a video detailing the historical context of, and the techniques described in, Joachim Meyer's treatise *The Art of Combat* written in 1570. The video is 45 minutes long and explains the weapons techniques described in the treatise. It also provides demonstrations of the techniques as well as providing the history and uses of the weapons. The weapons covered are the longsword, rapier, dusack, dagger, staff weapons, and wrestling techniques. This video is intended for use by the Higgins Armory Museum in their Historical Combat programs as a source for information about combat during the Middle Ages and Renaissance.

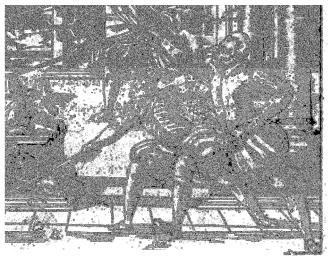
The Higgins Armory Museum is the only arms and armor museum in the Western Hemisphere, featuring collections from Europe, the Middle East, Africa, India, and Japan. Additionally, the museum hosts historical combat classes designed to introduce people of all ages to medieval martial arts. The production of our project occurred in the midst of the museum's closing due to costs, however still we had plenty of opportunities to see, touch, and use several of these artifacts. We were able to hold original weapons from Meyer's time period, including a lange messer and katzbalger (meaning "Large knife" and "Cat skinner", respectively), as well as one and two handed swords. These weapons, along with a significant portion of the museum's artifacts, have been relocated to an exhibit at the Worcester Art Museum so they can still be viewed by the public.

Also included in the museum's collection is a second edition copy of *The Art of Combat*, published in Augsburg in 1600 after Meyer's death. Copies of either edition of *The Art of Combat* are rare and precious; the book can be compared to the Rosetta Stone in importance to the field of martial arts. Meyer's treatise is unique because it was the last of its kind to describe

medieval German combat techniques. The Higgins copy of the book is one of the very few original copies of Meyer's treatise found in the Western Hemisphere. We were able to hold this 400 year old book and study the intricate woodcuts within, which have been remarkably well preserved.

By studying the museum's copy of *The Art of Combat* and learning about Meyer himself,

we were really able to bring him to life. We came to understand that this man was absolutely fascinated by the martial arts and his life essentially revolved around weapons and combat. His actual profession was as a blademaker, so he knew how to make many of the weapons used during his time. In addition to being a bladesmith, Meyer was also able to put his knowledge to use as a combat instructor. Meyer knew how to fight up close and personal with wrestling and dagger techniques, but was just as comfortable with weapons that kept an opponent at a distance, like the halberd or pike. He was renowned as a master with the longsword, the classic medieval weapon, but was also skilled with the rapier, the main weapon of the Renaissance era, and a weapon new to his native Germany. His



High Guard with the rapier as shown in a woodcut from Meyer's <u>The Art of Combat.</u>



High Guard with the rapier as seen in "Master of Arms" video.

knowledge of weapons techniques transcended two of the major eras of history, but what set Meyer apart was his ability to teach others those same techniques.

His book is essentially a training manual of all the combat techniques Meyer knew, and it is an impressive work. There are several factors that tie together Meyer's entire system of combat, from the layout of the sections to techniques that are applied similarly across all weapons. He begins his first weapons section by describing the basics of combat, such as footwork and stance, then continues with guards and techniques done from each guard. Each technique he describes is broken down into parts, making it easy to learn in a step-by-step process. In several sections, Meyer mentions that his techniques can be used for all similar weapons. For example, Meyer uses the dusack as demonstration for all single handed sword techniques. This makes Meyer's book even more broadly applicable and relevant to medieval martial arts. The book is also filled with intricate woodcuts showing several of the techniques described in the text, aiding a reader in visualizing the technique in action. What makes this work unique is Meyer's inclusion of a substantial number of training drills for each weapon. The structure of Meyer's book allows a reader to learn about and practice with the weapons the same way Meyer's own pupils would have done. In fact, the reader essentially becomes another pupil of this master who died over 400 years ago, reviving the fighting techniques he taught and utilizing them in the present day.

The classic Hollywood perception of medieval combat is two men in armor so heavy they can barely stand, hacking at each other until one is strong enough or lucky enough to get through his opponent's armor. This perception could not be more wrong. Books written by combat masters like Joachim Meyer have changed the way that people, especially ourselves, think about combat during the Medieval and Renaissance periods. Instead of the world of duels, hack-andslash weapons, and invincible heroes created by Hollywood, combat was much more refined, and while some aspects of the period are accurately depicted on the silver screen, far more are not. Combat, for men trained to use weapons, was not wildly swinging a weapon, hoping to hit someone; instead, it was a chess match of cuts and parries, thrusts and counterthrusts. While many of the images made by other weapons masters have been used for training since Meyer's day, it was not until the translation of Meyer's works that the complexity of the techniques became apparent. Combat in Meyer's system relies on guards and cuts to protect the swordsman while striking out at the opponent with cuts aimed at vulnerable points. *The Art of Combat* has several techniques where the fighters would take notice of each other's positioning and movements in order to read their intentions, then adopt an opposite guard that allowed them to easily defend against attacks and strike back. *The Art of Combat*, along with Meyer's Rostock and Lund Manuscripts, have shown experts and amateurs alike exactly how the techniques drawn by older masters can actually be used in a real fight.

Our final video is divided into six sections, generally adhering to the same groupings Meyer used for the material of his book. The first section of the video introduces the viewer to Joachim Meyer himself as well as providing historical background for Meyer's book. The second section details some of the history of the longsword. It also explains Meyer's system of combat, then continues to demonstrate many of the longsword techniques in his book. The third section describes the evolution of the rapier over time and describes Meyer's techniques and strategies with the rapier. The fourth section demonstrates the techniques Meyer describes with the dusack. Meyer believed these techniques were applicable to any one handed sword. The fifth section demonstrates many of the techniques Meyer describes for wrestling techniques to be used either with or without a dagger. The final section demonstrates the techniques Meyer describes for combat with polearms such as the quarterstaff or halberd. All of the techniques we demonstrate in the video are interpretations from Meyer's own descriptions.

The report itself is only divided into four sections. Its first three sections are the same as those of the video, but the video's last three sections are compressed into one for the report. The first section of the report gives the historical background of Meyer's book. It presents research on the life of Joachim Meyer performed in order to determine how his experiences may have influenced his writing of *The Art of Combat*. It also includes some information on how historical weapons treatises, battles, and the culture of martial arts influenced Meyer's work.

The second section of the report focuses on the German longsword, or bastard sword. We explored the physical form and evolution of the weapon from its conception to the form Meyer used in 1570. We also explored its social and historical context: who it was used by, when it was used, and – in a general sense – how it was used. Finally, we explored Meyer's work with the longsword within *The Art of Combat*. The largest single section of Meyer's work is dedicated to the exploration of longsword combat, and his descriptions within this section constitute a large part of our understanding of medieval combat.

The third section of the report includes information on the rapier, a slender sword typically used by civilians. This section is broken down into three major topics. First is the development and evolution of the rapier from the heavier swords of the Middle Ages. This blade was considerably lighter and faster than earlier swords, but well suited for the fast, technical combat of the Renaissance. The second subtopic is the functionality of the rapier as both a weapon and a status symbol. Noblemen often wore embellished rapiers to show off their wealth, but the blades were just as effective in duels. The last subtopic focuses on the techniques for rapier combat, as described by Joachim Meyer in *The Art of Combat*. These early German techniques use finesse and speed to quickly disarm or kill an opponent.

The last section of the report includes the sections in Meyer's book that contained less substantial material. It focuses on the dusack, dagger, wrestling techniques, and staff weapons. The dusack is a one handed weapon used primarily for training because techniques taught using the dusack are applicable to all swords. While the longsword is thought of as a knight's primary weapon, he also had to know wrestling techniques to gain the advantage in close quarters combat; the use of the dagger was taught for the same reason. Staff weapons, or polearms, had the advantage of a long haft to gain striking power and a chance to pierce plate armor. The staff weapons Meyer covers are the quarterstaff, halberd, and pike. For each of the main weapons, we focused on the physical form of the weapon, the historical context of the weapon and why it was used, as well as the actual combat techniques as detailed in *The Art of Combat*.

Our goal in this project is to adapt Meyer's techniques and bring them into the modern culture so that people around the world can become familiar with his system of combat. We believe that insight into Meyer's system will help further our understanding of combat both in the Middle Ages and the Renaissance. The study of historic martial arts is an incredibly young field, and new interpretations and discoveries are coming out all the time. Theories about certain techniques and how to apply them evolve rapidly, and cause more changes and interpretations, feeding a cycle of rediscovery of these centuries-old tactics. Researchers all over the world are participating in this project, and the collaboration has created some unique perspectives on the material. It is a great honor to be included in this global effort to unlock the secrets hidden within Meyer's works, and we hope that our contributions will aid others to make the next big discovery in this exciting and extremely promising work

Life and Times of Joachim Meyer Dominick Polcari

Joachim Meyer's Life and Works

Joachim Meyer is a man whose life remains somewhat of a mystery, even after his fame due to the great interest in his book The Art of *Combat.* Since his name was a common one during his time, the reference in Basel to a Joachim Meyer being born could possibly be an entirely different person than the fencing master in whom we are interested. However, it is highly likely that the remaining references about his life in Strassburg are in fact referring to



Cover page from The Art of Combat

our author. It is believed he was born in Basel in 1537 to Jacob Meyer and Anna Freund. However, not much is known about his childhood and the next record of his life is not until his marriage with Apollonia Rulmann in 1560 in Strassburg. Through this marriage, Meyer was able to gain citizenship in the city of Strassburg and set up his business in the city rather than trying to survive as a journeyman. Journeymen at the time travelled around and found work wherever they could, most often in shops under the master artisan and owner of the shop. The marriage record also notes that Meyer was a cutler (blademaker) and a member of the Company of Smiths.¹

While he resided in Strassburg, Meyer became renowned as a teacher of fencing and organizer of fencing matches. These matches were essentially showcases where the competitors battled to win money. In order to organize these events, Meyer had to request permission from

¹ Dupuis, O. (2006). Joachim Meyer, escrimeur libre, bourgeois de Strasbourg (1537? - 1571). In Maitres et techniques de combat. Dijon: AEDEH. Pp. 2.

the Strassburg council because the events were a source of disorder. Evidence of these matches is found in the Strassburg council minutes with entries noting that Meyer asked permission to hold

matches. The council minutes also provide evidence that Meyer was teaching fencing by 1561 because Christoph Elias, a student of his, asked the council permission to organize a fencing match. Since this entry occurs only a year after Meyer received his citizenship, it shows that Meyer was probably well-versed in the martial arts and fencing long before he arrived in Strassburg.²



During the 1560s, Meyer was not only teaching fencing and organizing prizefights, he was also looking for new sources of knowledge, both German and foreign, on the martial arts. He soon began writing treatises of his own, such as the Rostock and Lund Manuscripts as well as his *Art of Combat*. A good portion of the content in the Lund Manuscript is included almost verbatim in *Art of Combat*. His purpose in writing these treatises was most likely one of self-promotion. Through his two manuscripts, he began to gain respect from martial arts practitioners outside of Strassburg. His intended crown jewel in self-promotion was his lavish *Art of Combat*. It was filled with many impressive illustrations created through woodblock prints attributed to Tobias Stimmer. These made production of the book very expensive and Meyer accrued a debt of 300 crowns during its production. In order to promote his book, he attended the Imperial Diet at Speyer in June 1570, a political gathering of all the nobles of the region, who also happened to

² Introduction by Jeffrey Forgeng to Meyer, J. (1560). Lund Manuscript. Pp. 4.

be largely Protestant. He also attended the event to seek out a patron for his book so that he could repay his debt. At Speyer, he was able to gain a contract with Duke Johann-Albert I of Mecklenburg-Schwerin as fencing master. This position would gain him prestige, as well as bringing him closer to customers in the Duke's court who would be willing to pay a higher price for Meyer's book.

When he returned to Strassburg, he gained permission from the authorities to leave the city without losing his citizenship. Soon after he shipped his books to Schwerin ahead of him and set out in person in January 1571. His journey was over 800 km and took place in the middle of the harsh German winter. He arrived at the duke's court on February 10 in poor health and died soon after on February 24. Meyer's brother-in-law, Anthoni Rulmann, took over Meyer's



debts and became the guardian of Meyer's widow. Rulmann asked the Strassburg city council for help to regain Meyer's property from Duke Johann-Albrecht, especially the books, which were extremely valuable and could be used to pay off all of Meyer's debt. The duke returned only Meyer's personal belongings and sent 50 thalers to his widow. In regards to the books, he claimed that when he opened the chest containing the books, he found that all the copies had been ruined by water damage. However, it is entirely possible that the duke kept the books for himself since it is difficult to verify his report. Meyer's Rostock Manuscript was also quietly appropriated by the duke and wound up in his library. It eventually ended up making its way to the Rostock University library, from which it gets its name. The woodblocks used for the illustrations in *Art of Combat* as well as the plates of the book were sold to settle the debt and found their way to Augsburg, where they were used to print a second edition of the book.³

Meyer was well-respected by his peers for his knowledge of the martial arts and his *Art of Combat* only increased this respect. After its 1600 reprinting, it was heavily relied upon by both Jacob Sutor in his *Kunstliches Fechtbuch* (1612) and Theodor Verolinus for his *Der Kunstliche Fechter* (1679), so much so that they could possibly be considered plagiarisms of the book. Meyer is also mentioned by Heinrich von Gunterrodt in his *De veris principiis artis dimicatoriae tractatus brevis, ad illustrissiumum principem Joannem ducem Megapolensem* (1579). "A few years ago there was a Strassburger named Joachim Meyer who attempted to set forth firm rules, and produced a large volume on this art in German..."⁴ He is also the only author outside of Italy and Spain receiving mention in Giuseppe Pallavicini's survey of fencing masters in 1670.⁵

The *Rostock Fechtbuch* is Meyer's first major weapons treatise of which we know. The manuscript had at least four different authors, suggesting that Meyer took an already existing manuscript and added to it. He is acknowledged as the author of the manuscript's section on the rapier, but the rest of the manuscript was probably compiled over a period of time predating Meyer's ownership. A large amount of the material in the manuscript dates to the fifteenth and even fourteenth centuries and some of the combat arts from these time periods were mostly obsolete by Meyer's time. The manuscript is broken up into five different sections. The first section on the longsword was based on material written in the mid-1300s by Johannes Liechtenauer and was rewritten and expanded upon over time. The second section is comprised of a treatise by Johannes Leckuchner in 1478 describing combat with a single-handed, single-

³ Dupuis. *Joachim Meyer*. pp. 4-5.

⁴ Meyer, J. (2006). *The Art of Combat: A German Martial Arts Treatise of 1570.* Transl. Jeffrey L. Forgeng. London. Pp. 13.

⁵ Forgeng. *Lund Intro.* Pp. 6.

edged sword called the *lange messer*. The weapon was obsolete by Meyer's time, but many of the techniques had by then been adapted for use with the dusack. The third section contains miscellaneous combat texts that mostly date from the fifteenth century. The large fourth section on the dagger is of unknown origin, but it is closely related to the content of Paulus Hector Mair's compendium from c. 1555. The fifth section was on the rapier, a fairly new weapon that migrated to Germany from Italy. Although the weapon was fairly young, Meyer was still able to convey many of the techniques and strategies of combat with it.⁶

Meyer's *Lund Manuscript* is sometimes referred to as the *Lund Art of Combat* because many of its sections seemed to have been reused in Meyer's *The Art of Combat* book. Many of the manuscript's images also reappear in the book. The manuscript includes three sections, one each for the longsword, the dusack, and the rapier. The longsword section is much like the section of the book but less extensive. The dusack section is somewhat disordered compared to Meyer's later book and much of the material is different. This could be a result of both a flux in the practice of the dusack as well as the still-evolving thinking by Meyer of how to properly document techniques with this relatively new weapon form. The rapier section of the manuscript is very similar to the rapier section of the book in both structure and content. Even though the weapon was a fairly recent arrival in German lands, Meyer still had an impressive knowledge of its use. Perhaps the most amazing feature of this manuscript is the extensive inclusion of training drills for several of the weapons. Both Meyer's book and this manuscript describe training drills for the weapons in great detail, however the *Lund Manuscript* includes many drills that cannot be found in Meyer's later book.⁷

⁶ Forgeng. *Lund Intro.* Pp. 7-8.

⁷ Forgeng. *Lund Intro*. pp. 14-17.

Meyer's crown jewel was his *The Art of Combat*, a full-fledged book that included much of the content that was found in the Lund Manuscript. However, the book is much more extensive than the manuscript and is therefore structured differently. The longest section of the book is the longsword section; both because it is the major classical German weapon as well as the fact that Meyer uses this section to set the basis of combat. The rest of the sections build on these fundamentals and add their own techniques for their respective weapons. However, Meyer assumes that readers of his book already have a basic understanding of the martial arts, so he focuses mostly on techniques rather than the basics. For all the weapons sections he bases the techniques off the master cuts, following up with the guards and parries, and then the rest of the techniques. Although there are many different weapons techniques included in his book, Meyer bases everything on the same system to make it easier to understand.

History of Treatises

Joachim Meyer's *Art of Combat* is one of many martial arts treatises written in medieval and Renaissance times. Meyer's book is the last major martial arts treatise of which we know that follows the medieval German tradition and, in order to write it, he used information from many of the other treatises that had been written before his time. Since Meyer's book contained material on many different weapons forms, he had to gather sources from masters in every form and utilize numerous previous treatises.

He was also one of the few to create a work that contained detailed descriptions of drills and moves through both words and illustrations. Although his book is one of the greatest martial arts treatises ever discovered, it would not have been possible without many others before him.

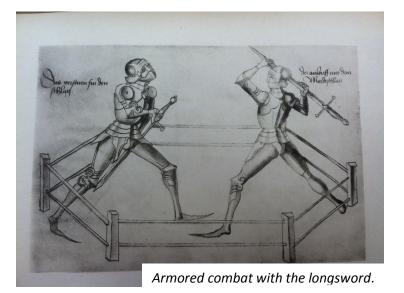
In the German *Fechtbuch* tradition, longsword treatises are the



Illustration from the Royal Armouries Manuscript. Shows combat with the sword and buckler.

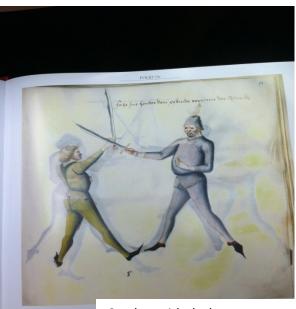
most common because it is such a versatile weapon. In medieval times, it was the weapon of choice for knights and was used for both armored and unarmored combat. However, many of the medieval treatises included other weapons such as the lance and halberd as well as wrestling techniques to use either with or without a dagger. In fact, the earliest known German martial arts treatise is the Royal Armouries Manuscript I.33 from c. 1320-30. This manuscript shows a priest

teaching his student how to fight utilizing a sword and a buckler.⁸ The techniques described by the manuscript are meant to be used in unarmored combat, with the buckler being used to defend the exposed sword hand.⁹ The next major treatise is probably the most heavily relied



upon by all German *Fechtbucher*. Johannes Liechtenauer was a sword master active during the rise of plate armor, and he wrote about his three systems of combat with the long sword:

unarmored combat, armored combat on horseback, and armored combat on foot.¹⁰ In his longsword section, he bases combat on the four major guards: Pflug, Ochs, vom Tag, and the Alber.¹¹ His verses also include descriptions of techniques in wrestling, as well as combat with the lance, spear, and *lange messer*, a one handed sword similar to a falchion.¹²



Combat with the lange messer.

⁸ Forgeng, J. L. (2012). 'Owning the Art': The German Fechtbuch Tradition. Pp. 166

The image illustrating combat with the sword and buckler is taken from this work

⁹ Forgeng, J. L., & Kiermayer, A. (2007). *The Chivalric Art: German Martial Arts Treatises of the Middle Ages and Renaissance*. Stroud, Glocs.: Tempus. Pp. 154

¹⁰ Ibid. pp. 155

¹¹ Tobler, C. H. (2010). *In Saint George's Name: An Anthology of Medieval German Fighting Arts.* Wheaton, IL: Freelance Academy Press. Pp. 59-60.

¹²Tobler. *In Saint George's Name*. Pp. 19-22

Around 1478, a priest named Johannes Leckuchner created his own treatise describing combat with the *lange messer*.¹³ This treatise drew from Liechtenauer's verses concerning the

longsword and was structured similarly to his work. However, Leckuchner also provided his own verses because techniques were different with the *lange messer* than with the longer and heavier longsword.¹⁴ Paulus Kal also includes descriptions of *lange messer* techniques in his treatise from the early 1500s. However, he focuses on defensive techniques with the weapon.¹⁵



Wrestling techniques.

Also included in Leckuchner's *Fechtbuch* is a treatise on wrestling techniques written by Ott the Jew from the medieval period.¹⁶

The first combat master to utilize extensive illustrations was Hans Talhoffer in his treatises from the mid-1400s. Talhoffer was a "professional martial arts teacher" and his treatises include techniques with a multitude of weapons including both armed and unarmed



combat with the sword, as well as combat with daggers, the poleaxe, using a shield, and

¹³ Image illustrating combat with the lange messer is taken from Tobler's *In Service of the Duke*.

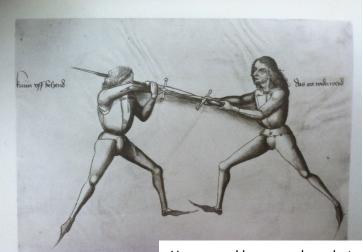
¹⁴ Forgeng & Kiermayer. *The Chivalric Art.* Pp. 157.

¹⁵ Tobler. In Saint George's Name. pp. 53

¹⁶ Forgeng. *Owning the Art.*

wrestling techniques.¹⁷ After him, Paulus Hector Mair compiled a treatise of his own from 1552 to 1558 drawing from a multitude of sources in order to include many different weapons and combat techniques. This treatise included information on the longsword, the dusack, quarterstaff, dagger, wrestling, rapier, sword and buckler, dueling weapons, armoured combat, and mounted combat. It even includes some weapons forms that were somewhat marginal such as the sickle,

spiked flail, and scythe. ¹⁸ Exercises for each weapon or technique were well-illustrated in Mair's treatise, but also included captions and descriptions for the scenes unlike Talhoffer's work. Mair's work also includes edited versions of medieval treatises on th e major weapons forms and glosses on



Unarmored longsword combat.

the Liechtenauer and Leckuchner verses. Mair's treatise was also one of the first major German

Fechtbuch that included information on the use of the rapier, which was not a traditional German weapon.

Joachim Meyer's *Art of Combat* was the last major martial arts treatise on the medieval German tradition. It included material on the longsword, dusack, rapier, dagger, staff weapons, and wrestling.



Dagger combat from Talhoffer.

¹⁷ Forgeng & Kiermayer. *The Chivalric Art.* pp. 158

¹⁸ Forgeng & Kiermayer. *The Chivalric Art.* Pp. 158-159.

Meyer's book included fantastic illustrations of techniques with the weapons, as well as exercises for practice. His book is specifically notable because it emphasized practices for each weapon with such extensive detail; both through word and image. His extensive section on combat with the rapier shows that the weapon was becoming the weapon of choice for the time, a fact supported by Mair's inclusion of the foreign weapon in his treatise as well. Meyer drew information from all of the treatises previously mentioned, but was also able to utilize much of his extensive knowledge for the book.¹⁹

¹⁹ The final five black and white images are taken from Talhoffer's *Medieval Combat*.

Historical Context

Joachim Meyer completed his book *The Art of Combat* in 1570. Although Meyer seems to have lived a pretty quiet life, he was living in a time of great activity throughout the Holy Roman Empire. The Renaissance had brought about a revival of culture and humanism as well as introducing Germans to the Italian culture. Residents in the Holy Roman Empire were growing tired of the overbearing rule of the princes of their realms and revolts were breaking out. The Protestant Reformation was in full swing and wars were occurring against religious dissidents. Even though most of these events did not seem to hinder Meyer's ability to assemble his treatise, they did affect the culture of martial arts and his ability to sell his work. Even so, it is incredible that, through all this turmoil and distraction, Meyer was still able to create the greatest martial arts treatise of his time.

According to city records, Meyer's childhood centered in Basel, an extremely diverse city that allowed him to come in contact with many different people. Due to Basel's location, it has always been somewhat of a crossroads, attracting visitors from all parts of Europe. Since Basel was influenced by the Protestant Reformation very early on, it also became a place of refuge for religious dissidents. However, the city only welcomed those refugees who could show they possessed both the skills and capital to avoid becoming a burden to the community. These



Map of Rhine River showing Basel, Strassburg, and Speyer.

useful refugees were granted citizenship for a considerable fee. With the help of this diverse mix

of cultures, Basel became a hub of humanism and scholarship. The influx of humanists from all over Europe also made Basel a center for education. It was the site of the first university in Switzerland; the only one in the country for the next three centuries. ²⁰ Although we are unsure of when Meyer's family left Basel, it is plausible that he would have grown up in the city. The diversity of the city would have helped Meyer in his early study of the martial arts because he could learn from masters arriving from all over the continent of Europe. The diversity of the people he could learn from exposed him to the vast number of weapons and techniques in martial arts and most likely gave him the open mind he shows in his study of the rapier. He had an open mind and was interested by all martial arts forms and cultures instead of focusing solely on the traditional German weapons.

Basel's culture was very similar to the one Meyer experienced throughout his adult life in Strassburg. The fact that Strassburg was also a crossroads due to its similar location on the Rhine River allowed Meyer to come into contact with people from all over Europe; anywhere from France to Italy. This wide diversity of visitors to Strassburg probably introduced Meyer to the art of fencing with the rapier. Since the rapier was a fairly recent arrival in Germany, Meyer most likely gained his understanding of the rapier from one or masters arriving from one of the countries where the rapier had been around a long time, such as Italy, Spain, or France. These masters brought with them the ideas of the Italian Renaissance. The Renaissance was a time when fashion and style became important to people, especially young men. One of the stylish trends during the time was to be a skilled fence. This led people to pursue an education in the martial arts and brought many participants to fighting competitions. This is one of the main reasons that Meyer includes extensive sections on the longsword and the dusack in his book,

²⁰ Bouvier, N.; Craig, G. A.; Gossman, L. (1994). *Geneva, Zurich, Basel: History, Culture & National Identity.* Princeton, N. J.: Princeton University Press. Pp. 66-67.

even though both weapons were used exclusively for sport by then. He sought to appeal to all crowds, whether it was the people who fought in life-or-death situations or the ones who fought in friendly non-lethal competitions.

Although Strassburg was a free and self-governing city, other cities dealt with the tyrannical rule of their princes. Beginning in 1356 with the agreement called the Golden Bull, the Holy Roman Emperor was elected by seven German princes, four secular and three ecclesiastical, on terms they negotiated and without the pope's involvement. Each of these princes controlled their own state and was able to force their laws and culture upon their subjects. Their interests were mostly egocentric and they were concerned very little by Germany's lack of national unity. This lack of unity was a great weakness of Germany. In fact, the only reason the country had any power in Europe was because of its "electoral college" of princes.²¹ The princes could get large financial or political commitments from imperial candidates seeking election to become emperor of the Holy Roman Empire. This gave them some measure of political clout. However, without the Electoral College, Germany would have been powerless compared to other nations.²²

Along with the seven prince-electors, there were also many other princes of smaller realms that made up the Empire. These princes could override local laws and dismiss local constitutions if they wanted. This limitless power for the tyrannical prince of the region was never popular with the inhabitants of the region. Their lack of freedom created a perfect environment for a revolution. In fact, the Peasants' War (1524-1525) was a direct result of the

²¹ Ozment, S. E. (2004). *A Mighty Fortress: A New History of the German People*. New York : HarperCollins. Pp. 65-66

²² Ibid. Pp. 65-67, 72-73.

territorial lords violating the rights of the peasants.²³ However, the peasants were quieted fairly quickly because they did not have the resources or the organization to match the forces of the princes.

Rather than continue to fight against the princes alone, the peasants joined a different revolution. When Martin Luther posted his 95 Theses on the door of a Catholic church in 1517, he began what was known as the Protestant Reformation. This reformation created a



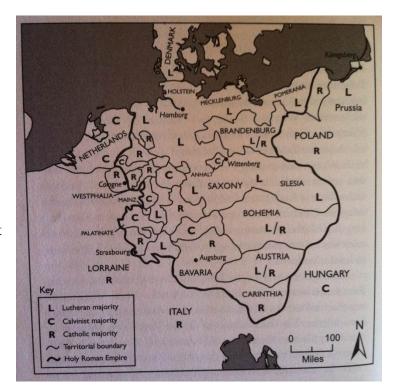
Martin Luther speaking at the Diet of Worms

schism in the Catholic Church and led to the creation of the Protestant religion. However, the creation of this new religion did not sit well with Catholics, and Protestants were prosecuted by the Catholics. When Emperor Charles V banned Martin Luther at the Diet of Worms in 1521, it led to an open conflict between Catholics and Protestants. In 1531, The Protestant princes in the Holy Roman Empire created an alliance called the Schmalkaldic League and it was led by Phillip of Hessen and Johann Friedrich of Saxony. When Emperor Charles V outlawed the two, making it clear he intended to go to war with the League, the League began mobilization. However, their inability to agree on what to do caused them to lose initiative and Phillip and Friedrich retreated to their own territories, allowing Charles to take control of Upper Germany. The territories that had revolted sought peace with the emperor and paid compensation for their acts. Near the end of

²³ Valentin, V.; Marx, O.; Teall, D. (1946). *The German People: Their History and Civilization from the Holy Roman Empire to the Third Reich*. New York: A. A. Knopf. Pp. 159-163.

winter in 1547, Charles was able to defeat and capture Friedrich at Muhlberg. However, after the

Imperial defeat at Drakenburg, Charles withdrew his forces, leaving the rebellious cities of Bremen and Magdeburg to their own devices and ending the Schmalkaldic War. Two months later, Phillip surrendered and was also incarcerated when appearing at the emperor's court to seek forgiveness. When Charles attempted to force Protestants to rejoin the Catholic Church with the Augsburg Interim, it caused another uprising. This was



Map showing religious allegiances in the Holy Roman Empire.

eventually quelled and the Protestant religion was officially recognized in the Peace of Augsburg in 1555.²⁴

Since Meyer was a Protestant, his patron pool had to be exclusively Protestant since any Catholics may have had him jailed. Lucky for him, the Imperial Diet was a place where he could find a huge group of very wealthy and powerful Protestants all in one place. The Imperial Diet was essentially a political convention of all the Imperial Estates in the realm of the Holy Roman Empire. These imperial estates, because the empire followed Roman Law, had supreme authority over their respective realms and were the highest powers in their regions other than the Emperor

²⁴ Whaley, J. (2012). *Germany and the Holy Roman Empire.* Vol. 1. Oxford; New York: Oxford University Press. Pp. 319-335.

himself.²⁵ The Diet was divided into three sections by the time Meyer attended in 1570. The two major groups were the Electoral College and the Imperial Princes. The Electoral College comprised of the seven princes who had the power to elect the Holy Roman Emperor as specified in the Golden Bull of 1356. The college of Imperial Princes included numerous different groups such as imperial counts and lords, prince-bishops, and imperial abots. Essentially, this college was made up of all the powerful rulers who had supreme authority over a realm, but were not prince-electors. The third college of the Diet, which was not created until about 1489, represented the Imperial Cities, and was led by the city council of the host city. All three colleges of the Diet were divided into two sections: a secular bench and an ecclesiastical bench. Although the Diet was officially a political convention, the gathering of so many rich and powerful entities attracted people such as Meyer who were looking to do business. Such a gathering of power gave him a great opportunity to advertise his book and eventually find a patron.

Meyer was widely considered as a master of the martial arts. His ability to gain knowledge about numerous different weapons forms was aided by the culture of the cities where he lived. He was able to get started in his childhood because Basel was a crossroads that saw people from all over from Europe, and the same was true about Strassburg in his adult life. The world of martial arts was evolving rapidly at the time, especially because of the introduction of the rapier to German martial arts with the arrival of the Italian Renaissance. However, Meyer must have felt comfortable enough about his knowledge of the weapon in order to include it in his book, showing how open he was to learning about new weapons. Although the Protestant Reformation may have caused conflicts in the Empire and somewhat limited his customer pool, Meyer was still able to find plenty of possible patrons at the Imperial Diet. Meyer's ability to

²⁵ Ozment. A Mighty Fortress. Pp. 67.

assemble such an amazing treatise during a time of such turmoil and change in the Empire just adds to his amazing resume and shows how dedicated he was to his work.

Cultural Environment of Combat Arts

During the latter half of the sixteenth century, the martial arts underwent an evolution. The spread of the Italian Renaissance brought the rapier and its techniques to the Holy Roman Empire. Along with this came a new outlook on the combat arts altogether. Whereas in medieval times combat was frequently the difference between life and death and essentially a way of life, the Renaissance made it somewhat of a fashion statement. Young men flocked to the schools of combat masters, seeking knowledge of swordplay because it was the "cool" thing to do at the time. Competitions were held frequently to showcase the skills of these students, often becoming huge spectacles that drew large crowds. In fact, the weapons themselves changed designs in order to keep up with the fashion trends of the time. The Italian Renaissance was a cultural revolution that redefined art, literature, and architecture. In fact, its effects were so widespread that they were felt even by the field of martial arts.

For the most part, the weapons covered in Joachim Meyer's *Art of Combat* were used solely for the purposes of sport by the time the book was completed. Although the longsword had been the weapon of choice for life-or-death situations for the knight, by Meyer's time it was used solely for sporting competitions. Another of the three main weapons in the book, the dusack, was a weapon that had never been used for real life combat. Meyer's extensive coverage of weapons that were not used in combat illustrates how popular martial arts as a means of friendly competition had become during Meyer's time. These competitions were popular because the Renaissance had popularized the martial arts in general and young men from all over Europe began to take an interest in learning swordplay. However, whereas skill with a longsword had been essentially a requirement of survival in medieval times, it was more of a hobby in Meyer's time. These competitions gave students an opportunity to showcase their skills against the best of

their peers in front of large audiences. The winners of these competitions were often rewarded with a monetary prize, as well as a certain amount of fame within the community. The techniques utilized in these competitions with the longsword or the dusack were the same techniques that are portrayed in the longsword and dusack sections of Meyer's book.

The rules for fencing during the time made it much less dangerous than actual combat, but it was still a dangerous sport. Since there was "scant difference - other than in degrees of ritualization – between the various modes of personal violence," many of the lethal techniques used in combat were also used in fencing.²⁶ However, the fencing swords had unsharpened blades in order to decrease the



Longsword fencing from the Lund Manuscript.

lethality of the techniques. Even so, the blunt force of a large weapon such as the longsword could definitely do some damage, leaving welts and bruises and even breaking bones. There were very few rules in fencing considering it was based on real-life combat, but the thrust was almost completely disallowed due to its lethality. "All thrusts were prohibited in fencing schools when not given to the trunk of the body, below the neck and above the waistband, and within the two shoulders."²⁷ However, Meyer still utilized the thrust in some of his techniques as an opening attack. In reality, Meyer's thrusts were normally intended to draw a reaction from the opponent rather than to actually cause damage. Although the longsword and dusack were both used as fencing weapons during Meyer's time, they were outclassed by another blade.

²⁶ Anglo, S. (2000). *The Martial Arts of Renaissance Europe*. New Haven and London. Pp. 273.

²⁷ Ibid. pp. 274.

The third major weapon in Meyer's book was the rapier, a sword designed mostly for stabbing rather than cutting. This weapon really came into its own in the 1600s because it was meant as a civilian weapon. Its stabbing techniques were also much more effective in combat than the cutting attacks of the longsword. Whereas the longsword could be utilized by any untrained soldier in an army, the rapier required much more skill and training to use correctly. The longsword was also a very versatile and stout weapon that excelled in large-scale battles. The rapier, on the other hand, was best used for single combat and was essentially designed to be a civilian weapon. In fact, during Meyer's time, the rapier, along with the dagger as a secondary

option, were the only two weapons that were in style, although the longsword and the buckler were still carried by some of the more stubborn people.²⁸ People wore the rapier on their hip at all times in public because it was an essential part of their outfit. During the sixteenth and seventeenth centuries, the

rapier became a part of the common fashion



Common attire in the late 1500s. Note the rapier and the dagger as part of the outfit.

of the period. This adoption of the rapier into the fashion world eventually led to the evolution of the rapier's hilt into the more extraordinary forms it takes in the seventeenth century. This evolution was due in large part to the need for a rapier's hilt to fulfill a certain cosmetic requirement. Numerous Italian treatises on rapier techniques in the sixteenth century also included using the rapier and cloak, a viable combination considering the popular wardrobe

²⁸Wise, A. (1971). Art and History of Personal Combat. Greenwich, CT: Arma Press. Pp. 65.

during the time.²⁹ The rapier was such a versatile weapon that it could be used in situations ranging from a friendly fencing match to a self-defense or a life-and-death duel.

Although many of the fencing treatises of the sixteenth century seemed to base their techniques on a fencing scenario, the authors believed their techniques could also be utilized for self-defense scenarios. Techniques with the single rapier could have been used either for fencing or self-defense, and the rapier and cloak combination was most likely used almost exclusively in self-defense scenarios. Numerous treatises even go so far as to account for the drawing of the weapon as one of the steps in the techniques. In fact, Giacomo di Grassi's first ward is based on the withdrawal of the rapier from its sheath. Camillo Palladini takes it even farther with the conclusion of his treatise. He includes practical advice to his reader, advising them to go out at night without a cloak so that they are free of obstacles that hinder movement and are ready for anything. He also advises they carry their sword across their arm at night so they are ready for offense or defense and also suggests readers never leave home without first checking their sword slides easily from its sheath.³⁰ This shows that authors of treatises on the rapier were aware of the different situations in which the weapon was utilized, so they included techniques and advice for any of these situations.

The duel in Meyer's time had also taken on a different form than in the medieval period. In medieval times, the duel was a part of government. If there was a disagreement between two parties, the duel was utilized by law to determine which party was right and which was wrong and they were quite often a fight to the death. However, in Meyer's time, the duel had been removed as a part of the judicial system. In fact, it was frowned upon by the government and

 ²⁹ Gaugler, W. M. (1998). *History of Fencing: Foundations of Modern European Swordplay*. Laureate Press. Pp. 6-10.
 ³⁰ Ibid. Pp.9-23.

society; although it was still used as a way of resolving personal disputes. However, it became a frequent practice in dueling to fight to first blood rather than to the death.³¹

Meyer's Germany was a place that was undergoing a transformation. The Renaissance had brought Italian culture and philosophy to the Holy Roman Empire, as well as its own martial arts forms. The introduction of the rapier transformed the culture of martial arts, focusing it on civilian situations of sport and self-defense rather than the classical German idea of battlefield scenarios. The rapier brought with it a completely new style of fighting and a variety of techniques as well. The evolving culture of Germany due to the Renaissance also made the rapier a symbol of style and fashion. Perhaps the most admirable characteristic of Meyer was his openmindedness. Although he had grown up learning about the traditional weapons of the medieval knight, he was not afraid to delve into the secrets of the rapier. He was able to see that his German weapons were quickly becoming obsolete, and that the rapier was to become the weapon of the future.

³¹ Anglo. *Martial Arts of Europe*. Pp. 279.

Longsword Jacob Coolev

Physical Form and Evolution

The German fencing master, Hanko Dobringer, once said, "No part of the Sword was invented in vain, and a fighter should use the point, both edges, hilts, pommel, and all other parts of the sword according to the particular rules that apply to each in the art of fighting." (1389)³². Though Dobringer lived nearly two centuries before Meyer, it is safe to say that the two men would have been of one accord. Since its inception more than 3000 years ago, the sword has evolved in many ways – each evolution making the weapon a more elegant and efficient instrument. Of all its different forms, however, there is most likely none that better combines efficiency, flexibility, and lethality as well as the German Longsword of Meyer's day. This sword was a culmination of a half century of development, and could be wielded to great effect regardless of an opponent's armor or lack thereof. By Meyer's day, the art of thrusting, cutting, bludgeoning, and even throwing an opponent – by utilizing any and every part of the sword – had been all but perfected.

It is important to understand exactly what type of sword we mean by the word "longsword". It is common opinion that the longsword had a blade of about three feet and a one handed hilt of about six inches. This was much different from two handed sword, which had a longer broad blade and large hilt. Then there is the short sword, by which many refer to a sword of about 30 inches wielded in one hand. These categorizations, however, are neither helpful nor accurate. The term "longsword" can be rather misleading. Where the short sword is so named because it has a shorter blade than most swords, the longsword is thus named because it has a longer hilt than standard swords. Depending on the period the sword was made, this hilt could be

³² Anglo, Sydney. "Martial Arts of Renaissance Europe.". Pg 109.

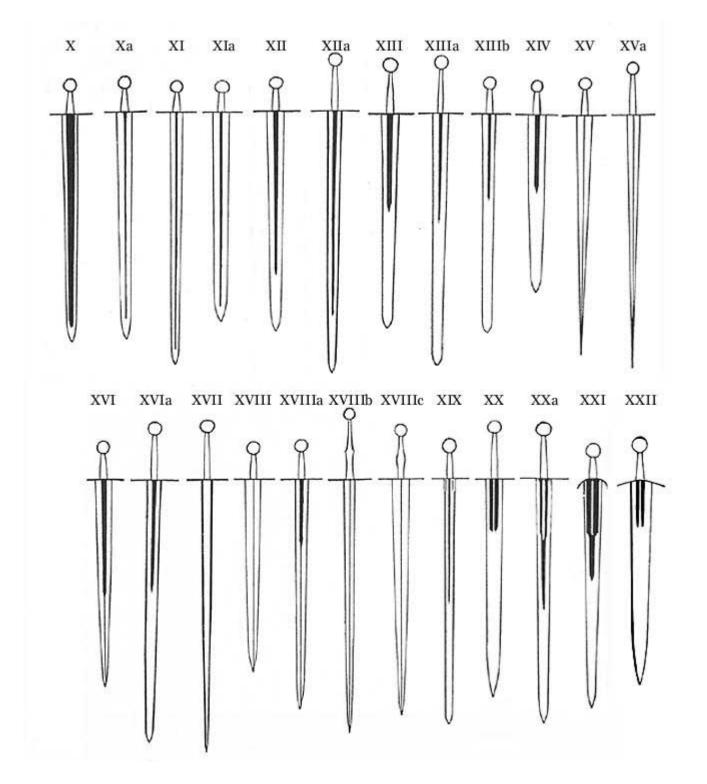
anywhere between 7 and 14 inches. Longswords were designed to be wielded in both hands, though they could be effectively used in one hand. In that sense, they were not true two handed swords – which were huge, impractical, and rarely $used^{33}$ – but were what many would refer to as bastard or hand-and-a-half swords.

Of course, the evolution of the sword, even just in Medieval Europe, was far from linear. Medieval smiths created a great variety of swords in many different designs for many different purposes. This makes it somewhat difficult to trace the development of the longsword through the Middle Ages. However, this process is greatly helped by Ewart Oakeshott's Medieval Sword Typology. Oakeshott identifies 10 general sword types and a few of their subtypes.³⁴ These types are generated based on blade length, and shape, and the period it was used in. Below is an illustration of the swords in Oakeshott's typology, which will be referred to throughout this paper³⁵.

Anglo, Sydney. Pg 96.

³⁴ Oakeshott, Ewart. "The Sword in the Age of Chivalry". Pg 25.

³⁵ http://www.oakeshott.org/Typo.html



The swords of medieval Europe all unquestionably evolved from the "Viking sword"³⁶. This type of sword had a broad blade, primarily designed for cutting, though it was perfectly adequate at thrusting as well. It was double edged, roughly 33 inches long from hilt to tip, and often had a fuller that ran a good portion of the blade. These swords were the weapons of choice for soldiers and raiders in the 10th - 11th century, and they remained popular until the 13th century³⁷. These blades, however, are not considered medieval and are not categorized by Oakeshott. Rather, they formed the base from which the medieval sword developed.

Early Medieval swords show subtle, but significant deviations from the Viking sword. They typically had longer, thinner blades, long, straight quillons, and rounded or disk-shaped pommels³⁸. Oakeshott divides these swords into four major categories: Type X, XI, XII, and XIII.

Type X swords were utilized approximately between 1050 AD and 1350 AD^{39} . They were characterized by a broad, flat blade of roughly 31 inches which had a fuller running its full length⁴⁰. This was a single handed sword with a grip of approximately 3³/₄". Type XI swords were not as popular as type X and fewer datable examples of them survive⁴¹. Oakeshott also includes two sub-types of XI. XIa typically had a shorter, broader blade; while type XIb had a blade with parallel edges, ending in an almost flat point⁴². Oakeshott postulates that these swords were used between 1000 and 1200 AD^{43} .

³⁶ Norman, Vesey. "Arms and Armor". Pg 95.

³⁷ Norman, Vesey. Pg 95.

³⁸ Norman, Vesey. Pg 97.

³⁹ Oakeshott, Ewart. Pg 30.

⁴⁰ Oakeshott, Ewart. Pg 28.

⁴¹ Oakeshott, Ewart. Pg 31.

⁴² Oakeshott, Ewart. Pg 36.

⁴³ Oakeshott, Ewart. Pg 31.

Type XII swords were widely used from c. 1200 - 1350 AD. These swords had broad, flat, evenly-tapering blades ending in a sharp point. A fuller typically extended 2/3-3/4 of the way up the blade. It had a slightly longer 4 ¹/₂" grip, but was still a single handed sword⁴⁴.

The final sword type of this era was type XIII. This sword was used c. 1240 - 1350 AD. It had a broad blade with little taper after the first few inches and ended in a spatulate point. It typically had a fuller that extended halfway up the blade. It had a much longer 6" grip that could be held in two hands occasionally⁴⁵.

From this development arose what Oakeshott classified type XIIIa, or as it is commonly called, the "hand-and-a-half sword". This incarnation of the hand-and-a-half, or bastard, sword was used from c. 1260 – 1350 AD. It had longer blade of between 37 and 40 inches, and a grip between 6 and 9 inches⁴⁶. It is often referred to in literature as a "great sword", or a "sword of war". This is not to confuse it with a two handed sword, which were even larger, having a typical blade length of about 4 feet and a hilt of nearly a full foot. These weapons were large, heavy, unwieldy, and rarely used. They do not find their way into Oakeshott's classification.

The development of plate armor in the 14th century drastically changed how swords were used, and, by extension, how they were designed. Thrusting became the preferred mode of attack. Swords began to be more tapered, often having a diamond cross-section; and were designed to target gaps in the opponent's armor⁴⁷. Oddly enough, it is during this period that the longsword became incredibly popular, especially in Northern Europe⁴⁸. It was devastating against unarmored opponents, and could strike quite a concussive blow against even the best armored of knights, though this was not necessarily how it should have been used. Many had

⁴⁴ Oakeshott, Ewart. Pg 37.

⁴⁵ Oakeshott, Ewart. Pg 41.

⁴⁶ Oakeshott, Ewart. Pg 42.

⁴⁷ Norman, Vesey. Pg 98.

⁴⁸ Norman, Vesey. Pg 105.

long ricassos, dulled portions of the blade immediately beyond the quillons, and were highly accurate and effective at thrusting when held with one hand forward. The cross-guard and pommel were also used to deliver concussive blows.

Type XV swords were used c. 1280 – 1450 AD and are the first of Oakeshott's "late" Medieval Swords. These swords were strongly tapered and acutely pointed. They had a diamond cross-section. At the hilt, the blade was between 1 ¼ and 2 ¼ inches, though it was usually greater than 2 inches⁴⁹.

Of more interest to us, however, is its sub-type XVa. This sword was used c. 1350 - 1360 and was another incarnation of the longsword. It had a somewhat longer and narrower blade than its parent type⁵⁰. It had a long grip between 7 and 10 inches, which allowed its wielder's hands to generate a considerable amount of torque. Several later examples also had a 6 inch ricasso⁵¹.

Type XVI swords were used c. 1300 - 1350 AD. These had a strongly tapering blade of 28 to 32 inches, with a deep fuller extending half of the length of the blade. It had a diamond cross-section and a surprisingly wide blade at the hilt, which tapered quickly to a very acute point. This was a transitional sword and was designed to be equally good at cutting and thrusting⁵². Its sub-type XVIa was used c. 1290 - 1360. It had a blade of the same type as XVI, but with a long 7-10 inch grip⁵³. These were widely used as military swords and can be found in numerous works of art during that period.

The type XVII sword was very similar to it. That sword had a long, slender blade, which tapered sharply from 1 ¹/₂-2 inches at the hilt to an acute point⁵⁴. It had a long hilt and was

⁴⁹ Oakeshott, Ewart. Pg 56.

⁵⁰ Oakeshott, Ewart. Pg 59.

⁵¹ Oakeshott, Ewart. Pg 60.

⁵² Oakeshott, Ewart. Pg 61.

⁵³ Oakeshott, Ewart. Pg 63.

⁵⁴ Oakeshott, Ewart. Pg 65.

designed mainly for thrusting. However, it weighed significantly more than previous longswords, about $5\frac{1}{2}$ lbs, which made it a highly effective cutting, and even concussing, weapon. These replaced type XVIa and were used c. $1355 - 1425^{55}$.

The final stages in the longsword's medieval evolution are types XVIIIb and XVIIIe. Type XVIIIb had a long and acutely pointed blade with a flattened diamond cross-section. Its most identifiable element was its 10-11 inch grip, which, unlike most swords to date, was waisted in the middle. This sword was particularly popular in Germany⁵⁶. It was used c. 1450 – 1550. XVIIIe was XVIIIb's Danish contemporary. It featured a long narrow blade that had a 5-6 inch ricasso, which was narrower than the blade itself⁵⁷.

In *The Art of Combat*, Meyer utilizes a fencing version of the longsword. This version had a long slender blade that ended in a wide trapezoidal section directly above the quillons. This was a weapon better suited to duels and other forms of unarmored combat than the battlefield. All of Meyer's techniques apply to true "sword of war", however, Meyer's primary focus (and one can assume, the primary use of a longsword of Meyer's time) lies in unarmored combat with the longsword.

Meyer's longsword was a blade perfected. It was perfectly suited to wide, powerful slashing strikes. It was capable of devastatingly precise thrusts. Even the cross-guard and pommel could be used as weapons. They were also excellent defensive weapons, which were fast enough to block and strong enough to hold nearly any attack. Even the length of the sword's handle enabled a swordsman to grapple and throw his opponent in ways that would not be possible with a normal sword. Contrary to popular opinion, these were not huge blades that were terribly impractical. If properly fitted, the pommel would come to just under its wielder's armpit

⁵⁵ Oakeshott, Ewart. Pg 66.

⁵⁶ Oakeshott, Ewart. Pg 70.

⁵⁷ Oakeshott, Ewart. Pg 72.

when stood vertically upon its tip⁵⁸. It could be and often was carried in public as well as upon the battle field. Truly, no part of this sword was "invented in vain", as Dobringer says. It was a truly incredible weapon that is so underappreciated today.

Use and Cultural Context

Joachim Meyer's *Art of Combat* remains one, if not the, most extensive compendium of medieval martial arts techniques. It is unique in its style, preservation, and its exhaustive content on a variety of weapons. This was at a time when producing such a work was an expensive and time consuming enterprise. In fact, Meyer's production of his *fectbuch* (lit. "fight book") all but ruined him. He incurred massive debt to get the book printed, which forced him to take a job as the master at arms for the Duke of Mecklenburg. He died shortly after his winter journey there in 1571⁵⁹. Paulus Hector Mair, who published a *fechtbuch* even more extensive than Meyer's in the early 1550s, experienced a similar fate. Authors of Meyer's day paid a high price for the privilege of being published and it is not invaluable to consider why the authors of *fectbuch* seem so willing to court financial ruin.

Surprisingly, it is unlikely that Meyer believed his manuscript to be particularly useful for learning swordplay or training soldiers. In fact, Meyer's work, or at least the sections dedicated to the longsword, deal almost entirely with unarmored combat – i.e. fencing with the longsword. This was substantially different in form from fighting in battle when both combatants would be armored from head to toe. Instead of the earnest, life-threatening combat of actual battle, Meyer tends to describe techniques that, while can be adapted for armored combat, are clearly geared toward a more sportive application. Both the combatants in Meyer's simulations fight unarmored and on equal footing, much as they would have in a friendly fencing match, or a more serious judicial duel. Over all, the treatment that the longsword receives is not what we would expect of the famed "Sword of War" that had carved its reputation in blood across many medieval battle

⁵⁹ Forgeng, Jeffrey. *Owning the Art*. Pg 13-14.

fields. Meyer focuses on the longsword as a sword of society. At this point in history, the longsword was falling out of use and its military applications were on the decline.

For the most part, combat with the longsword in the late 16th century was practiced and taught for three main reasons. First because the longsword symbolized *ritterlich* (German: "Chivalry") and as such had great traditional importance. It was the weapon of a proper knight, the weapon of a true man, the weapon of a true German⁶⁰. Second, techniques with the longsword have extensive applications to other weapon types. This is especially evident in Meyer, who uses the longsword as a type of superstratum that connects combat with all other types of weapons that he covers⁶¹. The German *fechtbuch*, including Meyer, teaches combat as a cohesive system; and the longsword is the core of that system. Finally, it is evident that the longsword was still widely used in the event of a judicial duel.

The longsword was a spectacular weapon that had a special place in the German heart, and its use was a well-respected tradition even after its practical purpose had faded. It is evident by Meyer's techniques that the longsword of his day held more importance as a sporting weapon than as an instrument of war. This can be seen by the way in which Meyer often replaces the thrust, which features prominently in Liechtenauer's earlier style, with a less fatal, though equally dangerous, cut. This is unlike Meyer's section on rapier combat, which makes full use of both the edge and point of the blade⁶². To the European living in the late Medieval or early Renaissance period, the longsword was much more than a weapon of war. It was the symbol of chivalry. The longsword was the weapon of a true knight⁶³. As such, it embodied all of the values of those knights – honor, courage, strength, etc. There was no place where this symbolism

⁶⁰ Forgeng, Jeffrey and Alex Kiermayer. *The Chivalric Art*. Pg 164.

⁶¹ Forgeng and Kiermayer. Pg 161.

⁶² Forgeng and Kiermayer. Pg 163-164.

⁶³ Forgeng and Kiemayer. Pg 160.

was felt more keenly than in Germany, where the longsword had been a knight's weapon of choice for hundreds of years. In Germany, the martial arts – and especially those pertaining to the longsword – were considered chivalric arts, and their practitioners followed in the footsteps of the great knights and warriors of the late medieval period⁶⁴. For this reason, the longsword was considered a mark of nobility, and its art was often practiced in order to achieve upward social mobility⁶⁵. A mere peasant who mastered martial arts, particularly the use of the longsword, could very well find himself moving in circles hitherto closed off from him. Mastery of the art of longsword combat allowed one to lay claim to a martial arts lineage that stretched back hundreds of years to Johannes Liechtenauer, the father of the German martial arts tradition. Membership in a martial arts fraternity (such as the *Marxbruder* or the *Federfechter*) gave further means of social mobility through mastery of martial arts. This is not unlike the upwards mobility afforded professional athletes today. Swordsmen were the celebrities of Meyer's day, so it is understandable why so many masters published *fechtbuch* despite the high cost. Forgeng also notes that,

"The aspirational role of these texts is especially evident in the case of Paulus Hector Mair, whose fechtbucher formed part of a broad strategy of social advancement that dominated and ultimately ruined the life of their author. The 800 florins he received from the duke of Bavaria.... may or may not have represented a meaningful profit against the princely expense of producing [his munich fechtbuch], but monetary factors were ultimately less important than the social

⁶⁴ Forgeng and Kiermayer.pg 164.

⁶⁵ Forgeng. Pg 22.

capital Mair accrued by transacting such an exchange with one of the most important men in Germany."⁶⁶.

We would also be wise to consider how the art of longsword combat was a particularly German practice. The longsword itself was an iconic weapon, not just of a knight, but of a German warrior and it had been used by Germans for hundreds of years. No other European country had a martial arts system that was as developed as Germany's. It was a system founded centuries before Meyer by Liechtenauer, who laid down the basis for the entire system. The development of the system can be traced through various masters and dozens of *fechtbucher* throughout the Middle Ages, culminating in Meyer himself. From that perspective, the longsword held further importance as the weapon of a true German. The theme of longsword combat as a specifically German art is very prominent in both Meyer and Mair⁶⁷.

In addition to its emotional and symbolic ties to the German people, the longsword also served as a sort of superstratum that tied all German martial arts together. The German martial arts are unique in that they were not developed in isolation from each other. Rather than an amalgamation of different techniques for different weapons that must be individually mastered, the German tradition presents a unified system of martial arts that applies to all weapons. The longsword was at the heart of this system. Training with the longsword helped a student understand the principles of leverage, timing, distance, footwork, speed, and strength, all of which are crucial for mastery of any weapon. The longsword itself was an extremely adaptable weapon and could effectively be used as a sword, a hammer, or a spear; it could be wielded with one or two hands and used left-handed or right-handed; and it was also extensively used for

⁶⁶ Forgeng. Pg 22.

⁶⁷ Forgeng. Pg 23.

grappling⁶⁸. This adaptability meant that its techniques were likewise adaptable to other weapon forms, such as the dagger, single sword, and even polearms.

The final reason why the longsword remained popular in Germany is quite possibly due to its use in a judicial duel. The judicial duel had been a tradition in Germany since before the Middle Ages. And it remained a part of the German judicial system up until the Renaissance. In fact, any specific references to actual combat involving the longsword are used strictly within the context of a judicial duel⁶⁹. Its prominence throughout the entirety of the *Fechtbuch* tradition indicates that it was important to the students and the masters of martial arts in Medieval Germany. It was widely used throughout the Middle Ages to resolve disputes when no witnesses were present. This effectively placed mastery of the martial arts on level with being a good German citizen.

⁶⁸ Forgeng and Kiermayer. Pg 160.

⁶⁹ Forgeng and Kiermayer. Pg 160.

Meyer's Techniques

It is clear from the start of Meyer's work that the longsword constitutes the foundation of German martial arts of the period. He wastes no time impressing upon his readers the importance of the longsword. He writes at the very beginning of his work, "...it is obvious that combat with the [long]sword is not only an origin and source of all other combat, but it is also the most artful and manliest above all other weapons..."⁷⁰. While one may initially take this to be an exaggeration by a master partial to "those knightly and manly weapons that nowadays are most used by us Germans"⁷¹, it is actually quite accurate. The German's have a long martial arts tradition centered on longsword techniques that had slowly been evolved and perfected throughout centuries of combat. To Meyer, combat was a science. Techniques, tactics, and principles of combat were derived through centuries of invention, and experimentation, and logical analysis. According to Meyer, "the practice of combat has its origin in a true rational foundation, and is not based on slipshod sword mummery."⁷². Meyer, therefore, approaches combat as a science and his book reads much like a modern textbook – defining principles, and then illustrating their correct applications.

As with any scientific text, Meyer begins by defining terms so that his readers will be able to clearly understand his content. He first defines the three stages of all combat, which one must always hold in mind. The first he refers to as the "Onset". This is the initial strike against your opponent from a guard. Immediately following the Onset is the "Handwork". This second phase constitutes the combination of cuts executed to the opponent's openings following from

⁷⁰ Meyer, Joachim. *The Art of Combat (1570)*. Translated by Jeffrey L. Forgeng. Pg 49.

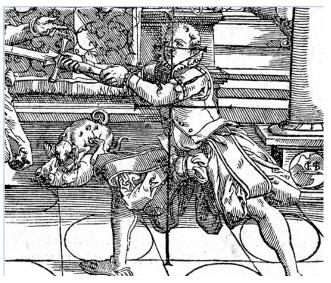
⁷¹ Meyer. Pg 49.

⁷² Ibid.

the Onset. Finally, if you have failed to vanquish your opponent, you enter "Withdrawal". Here you must know how to properly withdraw from combat without suffering injury⁷³.

Meyer also defines the divisions of the combatant himself. He divides the combatant into four quarters: left and right, and upper and lower. Similarly, Meyer also divides the head itself into the same four parts, since, "with us Germans nowadays.... attacks are made mostly and

chiefly toward the head"⁷⁴. While these divisions may seem trivial and obvious, Meyer believes it necessary to explain them plainly. Every cut targets one of the divisions listed above; and every cut for every division has an appropriate guard⁷⁵. Thus, knowing these divisions is critical for knowing how to strike an opponent, and how to protect



Woodcut illustrating the 4 divisions of the combatant and the 4 divisions of the head.

It is also important to ensure that each part of the sword is accurately understood. The longsword is somewhat unique in that every element of its construction had specific purpose and could be used as a weapon. For this reason, it is important to understand clearly what elements of the weapon are being used for each technique. Meyer defines the components of the sword as the pommel, the point, the quillons or hilt, the haft or grip, and the blade⁷⁶. Meyer further divides the blade of the sword in two ways. First, is the division between the "forte" and "foible." These terms refer to the stronger lower half of the blade and the weaker upper half. He also divides the

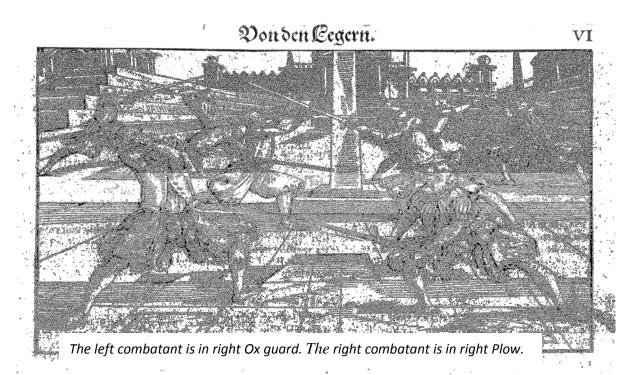
⁷³ Meyer, Pg 50.

⁷⁴ Meyer. Pg 51.

⁷⁵ Ibid.

⁷⁶ Meyer. Pg 52.

blade by "long edge" and "short edge". The long edge is the front of the blade and refers to the edge that faces outward from the fingers, while the short, back edge faces towards the thumb⁷⁷. From these components, Meyer then defines the four chief parts of the sword that are useful in combat: the grip or haft (including pommel and quillons), the forte, the midpart (referring to the middle of the blade in between forte and foible), and the foible⁷⁸.



Since the pertinent terms of the combat, combatant, and sword have now been defined, it is time to examine Meyer's techniques and principles of combat. Recall how Meyer initially divides all combat into the Onset, Handwork, and Withdrawal phases. Each phase has its own goal, techniques, and principles. Thus, it is appropriate, even necessary, to cover each within the context of its appropriate phase.

In the Onset, both combatants are initially in a guard (sometimes called "posture"). Meyer defines 12 guards: 4 chief guards, and 8 secondary guards. The chief guards are Ox, Plow,

78 Ibid.

⁷⁷ Meyer. Pg 52.

Day, and Fool. Ox protects the upper part of the combatant, and is executed on either the right or left side. The blade is held level with the head, and parallel to the ground on the appropriate side with the opposite foot forward⁷⁹. Plow protects the lower part of the combatant and can also be executed on either the right or left side. Standing with the same side foot forward, hold the sword so that the hilt is next to your leading knee and the tip is pointed at your opponent's face⁸⁰. Day guard is a high guard. It has greater use as a starting point for delivering cuts than for guarding them. With your left foot forward, hold the sword above your head with the blade rising at an angle⁸¹. The Fool is the exact opposite of the Day guard. There is no stroke that can be executed from Fool without first transitioning to a new position. Meyer is very critical of this posture, saying, "[it] is the part of a fool and simple man, to allow someone to strike him without a prepared counterstroke."⁸² It is executed with your left foot forward and the blade pointed at the ground so that the short edge faces up. Meyer also lists 8 secondary guards, namely: Wrath guard, Longpoint, Change, Side, Irongate, Crossed Guard Hanging Point, Key, and Unicorn⁸³. These guards will be covered as they come up in Meyer's devices (practice drills/scenarios).

In the Onset, each combatant is initially in one of these guards until a cut is delivered. Meyer divides all cuts into 2 categories: Straight and Reversed. Straight cuts are delivered with the long edge of the blade, while Reversed cuts are delivered with the short edge⁸⁴. Meyer lists 4 Straight cuts: High, Wrath, Middle, and Low cuts⁸⁵. From these 4 "chief" cuts are derived 12 Reversed cuts: Clashing, Short, Crown, Squinting, Crooked, Thwart, Rebound, Blind, Winding,

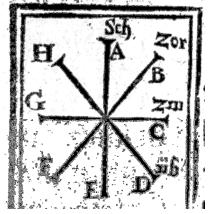
- 80 Ibid.
- 81 Meyer. Pg 53.
- 82 Meyer. Pg 53-54.
- 83 Meyer. Pg 54-55.
- 84 Meyer. Pg 56.
- 85 Meyer. Pg 57.

⁷⁹ Meyer. Pg 53.

Wrist, Plunge, and Change cuts⁸⁶. Of all 16 cuts, Meyer selects 5 that he terms "Master cuts". This does not mean that one who masters these cuts, masters the art of the sword, but rather that "they are the root of all true and artful techniques that a master ought to know; and he who can execute and use them properly should be considered a skilled combatant"⁸⁷. These 5 cuts are:

Wrath, Crooked, Thwart, Squinting, and Scalp cut. The Wrath cut is the strongest of all cuts. It is

delivered from your right shoulder so as to cut the face and/or chest⁸⁸. The Crooked cut is a counter cut. Starting from right Ox (or Wrath guard), step toward your opponent's left as he cuts at you. Cut with the long edge either against his own cut or against his hands and forearms. Your hands should be crossed when making this cut⁸⁹. The Thwart cut is also a counter cut, specifically to counter a cut



Wrath cut delivered along line H-D or B-F

from Day guard. From right Ox (or Wrath), cut with the long edge of the foible towards the opponent's head, raise the hilt and quillons above your own head to parry, and step well to his left side. This allows you to simultaneously parry and strike⁹⁰. The Squinting cut is a counter cut against strokes aimed at the head. From Day guard (or Wrath), cut vertically (A-E) as your opponent cuts at you, but rotate your blade so as to strike with the short edge. At the same time, step with your right foot to your left. In this way, you will parry your opponent's blade), and strike your

- 87 Ibid.
- 88 Ibid.
- 89 Ibid.
- 90 Meyer. Pg 57-58.

⁸⁶ Ibid.

opponent simultaneously⁹¹. Lastly, the Scalp cut, or High cut, is a straight cut along line A-E aimed at the opponent's scalp⁹².

After that initial cut, the combatants enter the Handwork phase. In Handwork, you seek to parry your opponent's cuts so as to strike to an opening on your opponent. Meyer defines two types of parrying: Purely Defensive, and Tactical. A purely defensive parry does nothing but stop an opponent's cut. Meyer warns against this type of parrying since it does nothing to seize the initiative of the combat and will likely result in you becoming overwhelmed by your opponent's numerous cuts. The tactical parry is a stroke that simultaneously parries your opponent and strikes him at the same time⁹³. Recall the Crooked, Thwart, and Squinting cuts mentioned



⁹¹ Meyer. Pg 57.

⁹² Ibid.

⁹³ Meyer. Pg 61.

previously. Each of those cuts (among many others) is also a parry. Thus, if you know how to cut correctly, you also know how to parry. Meyer writes, "Every cut is used to defend against your opponent's stroke and put it off, as well as to injure his body, therefore to teach cuts is to teach parries."⁹⁴ This is a critical principle of longsword combat. Everything about the sword – every part, every movement – is designed to harm one's opponent and protect oneself. Every parry is a cut, and every cut is a parry. That is what had made the longsword such an efficient and effective weapon in Meyer's day.

The main body of Handwork consists of many different methods for creating and exploiting openings in your opponent's guard. These methods are as follows: Binding, Chasing, Slicing, Striking Around, Running Off, Deceiving, Flitting, Setting Off, Slinging, Pulling, Doubling, Reversing, Snapping Around, Failing, Circle, Looping, Winding, Winding Through, Changing, Slicing Off, Pressing Hands, Sliding, Hanging, Wrenching, Barring, Blocking, Gripping, Running In. These techniques are too numerous and nuanced to be discussed here. Suffice it to say that they cover techniques ranging from cuts and parries, to feints, grappling, striking with the quillons, and half-swording (a technique where one hand is moved onto the blade to make the sword a more effective thrusting weapon. It is useful at close distances.). In short, Handwork is about using every part of the sword to exploit every one of the opponent's openings all the while parrying every one of your opponent's cuts. As such, it is easily the most complicated of the phases.

Following the Handwork is the Withdrawal. Even if you executed your initial cut well and successfully parried your opponent in the Handwork, you must still know how to withdraw correctly so that you are not wounded at the same time. This can be accomplished in 1 of 3 ways:

94 Meyer. Pg 60.

Before, After, or Simultaneously⁹⁵. Which method you choose is actually dependent upon how you approached the Handwork. If you wish to withdraw before your opponent, you must press your opponent with techniques and maintain the initiative, then you step away and cut through before he can pursue. On the other hand, if you wish to withdraw after your opponent, you must do so in 1 of 2 ways. You may wait for your opponent's withdrawal cut, stepping forward as he steps back, and cutting over his blade with your own. Alternatively, you may feint your own withdrawal so as to catch him as he rushes in after you with your own stroke. Finally, if you want to withdraw simultaneously with your opponent, you must position yourself such that, by stepping away from his cut, you are able to cut over his blade at the same time. Many other techniques and devices involve this principle.

All of Meyer's cuts, parries, and guards, however, are useless if one does not have the proper footwork. You may have noticed that Meyer often describes explicitly what must happen for each foot technique with each foot. The importance of correct footwork cannot be overemphasized. Meyer himself says that, "so much depends on [stepping] that as experience shows, all combat happens vainly, no matter how artful it is, if the steps for it are not executed correctly."⁹⁶ Meyer goes on to say, "Therefore, each stroke must have its own step, which shall take place at the same time as the stroke, if you wish to achieve anything with the devices you use. For if you step too soon or too late, then it is over with your device, and you thus defeat your own cuts."⁹⁷ There are three types of stepping Meyer believes are important: back and forward, side to side, and broken steps⁹⁸. Back and Forward steps are taken to and from an opponent.

⁹⁵ Meyer. Pg 68.

⁹⁶ Ibid.

⁹⁷ Ibid.

⁹⁸ Meyer. Pg 69.

you must change into the appropriate guard or cut whenever you step. With the longsword, this is rather easy as every single technique is exactly reversible and can be executed on either the right or left sides. Side-to-Side steps describe a triangle and, thus, are often called triangle steps. Standing with your feet shoulder-width apart, your back foot steps to the right or left, describing a triangle between its initial position, new position, and front foot position. The front foot may then move to continue horizontal motion. The third form of step is called broken or stolen steps. Here you act as if you intend to step forward with one foot, but then – just before you set it down – you step back with it behind your other foot. However, these steps are principally employed by the rapier and are only rarely used with the longsword. The only exception to these steps occurs during the Onset. Meyer describes a sort of stutter-step that one must employ with the initial cut. Meyer describes it as acting "as if you intended to take a big broad step, but then actually keep your feet close together; and contrarily, when he thinks you will approach him slowly, then be on him swiftly with broad stepping and lay on against him."⁹⁹

Having now covered the elements of combat, Meyer goes on to give examples of their use and means by which his readers can practice their techniques by themselves. Every device is divided into the three parts (Onset, Handwork, and Withdrawal), and illustrates how each technique should flow smoothly from the last one. Meyer draws an analogy between combat and writing where each previously explained element of combat is likened to a letter¹⁰⁰. In order to write words, we must understand the form and use of each letter and their combinations. The better we know our letters, the easier it will be to form words using them. The same is true of combat. In order to create a device from the elements of combat, we must thoroughly understand the elements themselves. Further, just as not every letter is used in every word, we must be able

⁹⁹ Meyer. Pg 68.

¹⁰⁰ Meyer. Pg 70.

to speedily tell which elements will be useful to us and which will form nonsensical combinations. However, just as we cannot learn to write by experimenting with letter combinations, one cannot learn the art of combat by randomly combining elements. One must be taught how to couple elements harmoniously by example. Only after they master given devices will they be able to create their own. This is the purpose of Meyer's devices. They serve as case studies in combat, and allow readers to understand how all the elements of combat interact with each other. He approaches this instruction from an offensive and a defensive position. He gives devices explicitly detailing how one may go about attacking each of the four openings¹⁰¹. He describes devices which attack all four openings with the long edge, short edge, and even the flat of the blade. In this way, he gives his readers ample methods by which to practice attacking those openings themselves. He also lends insight into how they themselves may be attacked so that they may better defend themselves¹⁰². This comes to bear in Meyer's next section, where he describes devices for fighting from each guard¹⁰³. This is a very extensive analysis of each guard, the cuts that can be executed from each, and the parries appropriate for defending the four openings. An example of a device is given below:

> Now if he cuts from below against your left, then step out again towards his left, and cut with the long edge on top of his forte. As soon as your sword connects or clashes on his, then pull your sword back up in the air, and strike in a flick back down with the short edge deep in at his left ear, stepping further around to his left. He will parry this rapidly and go up against it; therefore cut quickly with the long edge back at his right ear; in this striking

¹⁰¹ Meyer. Pg 72-75.

¹⁰² Meyer. Pg 72.

¹⁰³ Meyer. Pg 75-88.

around, step well towards his right as before, and keep your quillons up and over your head. And note as soon as he strikes again, and fall again with the slice on his arms; if he does not want to permit this, but seeks to work himself free, then pursue him, remaining on his arms, and when he least expects it, then let your weapon fly away to another opening, and cut away from him¹⁰⁴.

Here Meyer describes a series of cuts and parries one can execute from the High guard to counter a rising cut directed against your lower left quarter. Devices like these are especially important in that they teach one how to react when their opponent exploits an open quarter. These are by no means exhaustive, but they provide a useful example based on principles and elements that, when better understood, can be applied to any number of similar situations.

Rapier David Modica

Physical Form of the Rapier

Rapiers were first recorded in the late 15th century, being long, narrow-bladed swords with fine points for thrusting. However, this term applied to a number of different styles of sword in the 1400s, separating them from the militaristic falchion or sabre as any sword worn with a civilian outfit¹⁰⁵. It was only in the latter half of the 16th century that the term rapier became synonymous with the traditional rapiers known today, being long bladed weapons with ornate hilts and thin, piercing blades. The word "rapier" is likely Spanish in origin, coming from "espada ropa" or "robe sword", though most European languages have similar words for this style of weapon¹⁰⁶. This term again highlights the use of the rapier with everyday clothing, instead of with armor on the battlefield.

The blade was usually about 1.15 meters long¹⁰⁷, or ".... a yard and a quarter long or



more," according to Sir John Smithe, an English weapons master in the 1500s.¹⁰⁸ However, blade length was more often based on the length of the wielder's arm, giving taller swordsmen a considerable amount of reach against a shorter opponent. Blades were usually channeled or ridged,

sometimes more than once, to increase the strength of the blade while decreasing the weight.¹⁰⁹ However, not all blades were sharpened on the edges, as the rapier was not an effective slashing weapon. The sharp tip of the blade was the only part of the blade that always had an edge,

¹⁰⁵ Norman 19

¹⁰⁶ Norman 20

¹⁰⁷ LaRocca 66

¹⁰⁸ Norman 23

¹⁰⁹ LaRocca 66

though many weapons had one or both edges sharpened as well¹¹⁰. In the early 17th century, rapiers eventually evolved to become the shorter, more maneuverable shortsword. While most of the blade's characteristics remained the same, the overall length of the blade was reduced considerably, making the weapon lighter and faster than its unwieldy predecessor.

The hilt of the rapier underwent far more numerous changes than the relatively static blade. The original hilt was very similar to that of a longsword or one-handed sword, with only

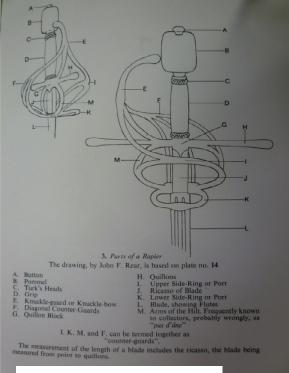


Diagram of swept hilt rapier

simple quillions, or crosshilts, perpendicular to the length of the blade. The first major evolution was the development of a hook or loop of metal from the forward quillion up towards the blade, in order to protect the forefinger. This grip allowed the wielder to have much greater control over the blade, without risking the loss of a finger when the quillions were used to parry¹¹¹. By 1450, a knuckle guard had developed out of a curved forward quillion. This knuckle guard usually ran all the way down to the pommel, though whether

or not it joined the pommel or merely touched it was dependent on the maker of the blade¹¹². The knuckle guard protected the fingers from direct attack, and became a weapon in and of itself, acting as an extremely close range weapon should an opponent get within punching range. This also led to the development of the single quillion rapier, as the knuckle guard took the place of

Photo Credit: HAM Collection 3044 ¹¹¹ Norman 32 ¹¹² Norman 33 Photo Credit: Norman 15

¹¹⁰ LaRocca 66

the forward quillion. These rapiers were uncommon, and often used a rear quillion curved towards the point of the blade, though they died out by the 15th century¹¹³.

A decade later, a second hook on the trailing quillion became popular in Italian and Iberian rapiers, to balance the weight more evenly. The two hooks became known as the arms of



the hilt¹¹⁴. The second hook had little protective value, though, and so a ring was added, running from the base of one hook to the other¹¹⁵. This acted as an early circular guard, providing more protection for the back of the hand. However, being hollow, it was ineffective against

Arms of the hilt thrusting attacks, prompting further developments. Around the time of the ring development c. 1470, knuckle guards became more and more common, to the point where finding a rapier without one was extremely uncommon¹¹⁶. The only major exception was in German rapiers, which instead used a lug attached perpendicularly to the blade and quillions to protect the back of the hand. This lug prevented wielders from placing their fingers over the forward quillion, removing the need for the forward hook¹¹⁷. It grew larger and curved over the back of the hand, similar to a sabre's basket hilt, though smaller, at the turn of the 16th century. It was not until 1515 that German rapiers began using side rings similar to that of the Italians and Iberians¹¹⁸.

The loop guard was developed in the 1520s, to provide similar protection as the German lug. It ran diagonally from the center of the knuckle guard around the back of the hand before

- ¹¹⁶ Norman 34
- ¹¹⁷ Norman 35

¹¹³ LaRocca 58

¹¹⁴ Norman 33

¹¹⁵ Norman 34

¹¹⁸ Norman 35

rejoining the rear quillion or the side ring¹¹⁹. These guards were often elaborately wrought pieces, and lacked complete coverage of the hand. This required the addition of smaller straight

bars between the loop guard and the quillions, side ring, knuckle guard, or some combination thereof¹²⁰. In the 1540s, quillions shrank, as rapier attacks tended to be more thrusting attacks than slashing, and the need to catch an opponent's blade on the quillions decreased¹²¹. This change reverted within the next decade, as longer quillions were still useful against other types of weapons.



Swept hilt rapier with multiple side rings

By 1600, multiple side rings were being used, often made side rings of very thin bars, which could easily be deformed by a powerful blow. Additional supports in the form of thin plates were incorporated into the hilt, supporting these rings and distributing the force of a blow over several of them¹²². These plate-and-bar hilts became the precursor to bowl hilts, which usually covered the guards and side rings in a light mesh, to which plates were



Disc hilted rapier

attached¹²³. These hilts were often very ornate, with many inscriptions and pictures on the plates, and not often used for actual combat. More practical than the bowl hilted rapiers were disc hilted rapiers, developed in the 1630s, which had a simple disc of metal with a radius of about half the length of the

quillions¹²⁴. The disc was sloped to allow a blade to slide off, but the slope was so shallow that a

¹¹⁹ Norman 36
Photo Credit: HAM Collection 678
¹²⁰ Norman 37
¹²¹ Norman 38
¹²² Norman 42
¹²³ Norman 43
¹²⁴ Norman 47
Photo Credit: HAM Collection 3044 and 1786.2

finger would not fit between disc and quillion, eliminating the need for the arms of the hilt. It also protected the hand quite well, though not quite as well as later cup hilts, which were developed shortly after the disc hilt. By the mid-1630s, wire cup hilts were used in England, which were formed by rings of decreasing radius being joined by curved bars, forming a hemispherical frame. Knuckle and loop guards were often present on these blades as additional protection and adornment, as well as metal panels between gaps in the framework¹²⁵.

Solid cup hilts became popular around the same time in mainland Europe, but few early examples remain. The hilt often had quillions and knuckle guard, as well as separate arms perpendicular to the quillions. These arms helped brace a hemispherical cup, which protected the hand, and allowed the placement of the forefinger over the forward quillion. While the cup provided excellent protection, it was heavy and unwieldy, and many swordsmen quickly returned to using disk hilted blades¹²⁶, which were faster. Ultimately, the change in style to lighter hilts necessitated the switch to a quicker, more agile weapon, bringing the heyday of the rapier to an end.

Photo Credit: HAM Collection 3035

¹²⁵ Norman 45

¹²⁶ LaRocca 62

Photo Credit: http://lochac.sca.org/rapier/index.php/Bella-SCA-Rapier-Garb-from-fighting-to-feasting

Historical Use and Context of the Rapier

The rapier at the time of Meyer was not just a weapon, but one of a gentleman's most important fashion accessories. Few men of class would be caught dead without a rapier in the street, starting towards the end of the 15th century¹²⁷. These blades would not be worn with armor, but instead with civilian clothing, which was often ornately decorated and expensive. Citizens with the means to afford such finery would complement their outfit with a rapier, often with a highly stylized hilt, as a means of



Soldier in civilian dress with rapier

protection against thieves¹²⁸. However, the primary use of the rapier in combat was for dueling. During the 16th century, swordfights in the streets were commonplace, and often ended with the death of one or both combatants. These battles were often fought as a matter of honor, as upperclass citizens were often proud, and even a minor insult could end with the point of a rapier at one's throat.

Duels were also conducted for sport, and it was common for young men at university to study the art of fencing with rapiers, and to hold tournaments amongst themselves¹²⁹. Many experienced weapons masters lived near large universities, and taught classes on the many techniques useful to those wielding a rapier. While this training was not affiliated with the university, university students had easy access to the art of fencing. This training led to the popularity of the rapier as a civilian weapon, as anyone who was able to attend a university usually had the opportunity to learn its use from a nearby master. Swords were no longer simply

¹²⁹ Forgeng 16

¹²⁷ Norman 30

¹²⁸ Forgeng 16 (Notes on the Lund Manuscript)

Photo Credit: <u>http://www.christies.com/lotfinder/arms-armor/a-group-of-four-rapier-pommels-17th-4953315-</u> <u>details.aspx</u>

for the soldier or knight; now anyone with the money could have one, as well as the training to use it properly.

As a fashion accessory, rapiers were often worn to official events or ceremonies. Balls and festivals were opportunities for men to show off their wealth and power, and so elaborately decorated hilts and scabbards were a necessity¹³⁰. Decorations ranged from precious metals and gemstones to ivory, bone, and horn. Pommels often had large gems set into the metal, and those



that did not were often elaborately etched or carved. Furthermore, pommels took many shapes, ranging from spherical, to cylindrical, to

Variety of rapier pommels from 17th century lenticular, to even more exotic shapes, all designed to accent the elaborate hilts of the time¹³¹, as well as improving the balance of the sword. The rapier was often worn using a hanger that attached to the belt in the front and side, and then to the scabbard in two places as well, for improved stability of the blade. This formed a backwards "N" shape, and tilted the point of the blade down and across the back of the wearer's legs¹³². This caused the pommel to be the closest part of the rapier to an observer, and so it became the most highly decorated part of the hilt. Furthermore, if the rapier was used in combat, the pommel is the part least likely to be struck, protecting these elaborate pieces of art from excessive damage.

- ¹³⁰ Norman 30
- ¹³¹ LaRocca 57

¹³² Valentine 8

Meyer's Techniques

In the third section of *The Art of Combat*, Meyer details the techniques and tactics used for combat with a rapier. Despite this weapon being strange and unfamiliar to Germans, Meyer believes it is critical to learn how to use this weapon, in order to better combat the techniques used by foreign visitors¹³³. The weapon lends itself to thrusting attacks, a technique not commonly used in German combat, to the point of being an anathema to soldiers and private combatants alike¹³⁴. However, Meyer also discusses cuts made with the rapier, implying that the blades he is using have cutting edges, allowing for the use of slashing cuts with which most Germans would be familiar.



Before one can discuss any form of attack with the rapier, however, one must first define targets which are available to attack. When using a rapier, the body is once again divided into four sections, but unlike the longsword, there are further divisions to account for the thrusting nature of the weapon. The body is divided by vertical lines, one down the center of the body, and two more through the shoulders, separating the arms from the body¹³⁵. Furthermore, new diagonal lines separate the body still further, such that when attacking each different section, a person should

hold their body in a definite manner. These lines are drawn from the left side of the neck down to the right armpit, from the left hip (shown as being closer to the bottom of the rib cage) down to the top of the right thigh, and from the outside of left thigh down to the inside of the left knee¹³⁶.

¹³³ Meyer 173

¹³⁴ Meyer 173

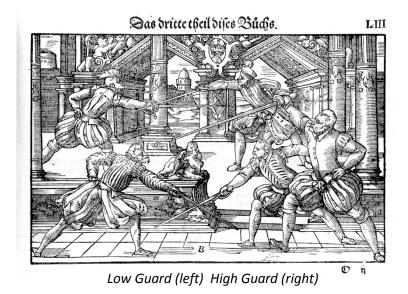
¹³⁵ Meyer 174

¹³⁶ Mever 174

These lines are repeated running from right to left, or in the case of the lowest line, from inside to outside, as shown in the diagram on the previous page. Which set of lines to follow seems to correlate to which side one's opponent has forward, with the first set being when the opponent has their dominant leg behind them. With the proper technique, attacks to each of these sections take the shortest possible path, increasing the speed of strikes and reducing an opponent's opportunity to defend against them.

In order to defend target areas on one's own body, several different postures, or guards, must be used, each with its own unique defense. There are five guards listed by Meyer, which

have both right and left versions of each posture. He begins with the High Guard, or Ox, which has the blade held above the head, with the tip angled slightly down towards one's opponent¹³⁷. This protects one side of the head, and certain parries from here protect the torso, though the legs are poorly defended



though the legs are poorly defended in this guard. The second guard, the Low Guard, does protect the legs, as the blade is held such that the tip is pointing at your opponent's feet, arm fully extended and holding the hilt at knee level¹³⁸. It is an unusual guard, but effective at defending against low attacks, though it leaves the

head vulnerable to counterattacks. Both of these can be seen in the woodcut above.

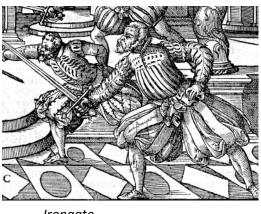
¹³⁷ Meyer 175

¹³⁸ Meyer 176

A more defensive position is Irongate, in which the tip of the blade is threatening the opponent's face, but the hilt is near one's forward knee, as seen in the woodcut below. This

posture is ideal for attack or defense, as thrusts and cuts can be executed to nearly any area of the body, and likewise parries can deflect most attacks successfully¹³⁹.

Plow, very similar to Irongate, has the blade in much the same position, but turned so that the thumb



Irongate

can be placed on the flat of the blade, with the tip pointing at the opponent's belly¹⁴⁰. This offers additional control over the blade, though it limits the ability to parry attacks to the head and upper torso.

Finally, the last guard is Longpoint. This guard is more complex, as the point of the blade can be aimed at either the face, chest, or groin of an opponent, with the arm fully extended in all three cases, both being horizontal at all times while in this stance¹⁴¹. This stance is ideal for thrusting, as the blade is already in position to strike forwards immediately.

Once defense is understood, offense can be considered. According to Meyer, there are four classes of cuts, each with several variations that can be used for different purposes. The first class is known as the High Cut, and consists of vertical attacks coming down upon an opponent's head. Its variations are the Scalp Cut, following the center vertical dividing line, the Squinting Cut, which uses the rear edge of the blade, and the Suppressing Cut, which cuts to the shoulders along the other vertical dividing lines¹⁴².

¹⁴¹ Meyer 177

¹³⁹ Meyer 176

¹⁴⁰ Meyer 177

¹⁴² Meyer 177

The second class is called the Diagonal Cut, and follows the diagonal dividing lines, cutting from neck to armpit, from belly to thigh, or from one side of the forward leg to the other. A cut along the highest line is the Wrath Cut or Defense Stroke, depending on if it is used offensively or defensively¹⁴³. A cut along the middle line is known as a Hip Cut, and along the lowest line, a Round Stroke¹⁴⁴. This last attack can be immediately followed by another Round Stroke, slashing deeper into the thigh and disabling an opponent¹⁴⁵.

The third class is known as the Middle or Horizontal Cuts, and as the name suggests, these cuts follow horizontal paths, instead of the dividing lines given previously. However, each cut is named for the line it is targeting, being the Neck, Belt, or Foot Cut¹⁴⁶. The first two are self-explanatory, being cuts to either the neck or belt, but in the case of the Foot Cut, Meyer explains that the "foot" in this case is any available part of the lower leg¹⁴⁷. However, it is a dangerous cut, and should only be attempted if the opponent is injured or disarmed¹⁴⁸.

The last class of cuts is the Low Cuts, though Meyer does not mention these much. The Low Cuts follow the same lines as the High Cuts, only to the feet and legs¹⁴⁹. These cuts are dangerous, as they expose the one attempting the cuts to counterattack. Some cuts that are not included in any class are the Hand Cut, which is any blow towards the hand of one's opponent, and the Double Cut, which is a series of slashes positioned in such a way that an opponent that is slow to parry will be out of position to parry each subsequent cut¹⁵⁰.

While the cuts that Meyer describes are effective, the most devastating attack of the

- ¹⁴⁵ Meyer 182
- ¹⁴⁶ Meyer 178
- ¹⁴⁷ Meyer 182
- ¹⁴⁸ Meyer 183
- ¹⁴⁹ Meyer 178
- ¹⁵⁰ Meyer 183

¹⁴³ Meyer 180

[.] ¹⁴⁴ Meyer 181

rapier is the thrust, as the blade is designed to enhance its ability to pierce unarmored opponents. Meyer list three main thrusts, from which any other thrust can be derived. The first of these is the Face Thrust, a simple extension of the arm such that the blade is striking towards the face of the opponent in a straight, horizontal path, ending in Longpoint¹⁵¹. The Heart and Groin Thrusts are similar, and can be done as either straight or angled thrusts, depending on where the opponent's blade is¹⁵². One of the most common elements of Meyer's techniques is catching the opponent's blade with a cut before thrusting, allowing for control over both blades, and providing a tactile warning of a new strike if the opponent attempts to draw his blade away¹⁵³. Changing between cuts and thrusts is, according to Meyer, a master technique to perform correctly, and the numerous different methods of doing so are numerous, limited only by one's creativity¹⁵⁴.

Another form of attack Meyer described is Deceiving, or feinting. This can be done with the either the weapon, or the body. Deceiving with the weapon is done by appearing to attack a particular target, and as imperceptibly and quickly as possible, changing that target before being parried to attack an undefended part of the body¹⁵⁵. If done properly, this form of attack is impossible to defend successfully against, though it is difficult to execute. Even more complicated is Deceiving with body language, whereby it is possible to appear to be about to attack a target with great ferocity, such that the opponent parries uselessly to defend that target at any indication of movement¹⁵⁶. As soon as the parry begins, the rest of the body is exposed, and a high cut can change to a low thrust, or vice versa. It is considerably more difficult against a skilled opponent; as such deception will be expected, but not impossible. Against them, Meyer

- ¹⁵³ Meyer 184-185
- ¹⁵⁴ Meyer 186
- ¹⁵⁵ Meyer 187
- ¹⁵⁶ Meyer 188

¹⁵¹ Meyer 184

¹⁵² Meyer 184

says, it becomes necessary to provoke them into parrying by attacking and falling short¹⁵⁷. If successful, such an attack will cause them to drop their guard and provide an opening.

A note that Meyer makes on the strategy of rapier combat is to let the opponent define where he should be attacked. For example, if the opponent attacks first, his cut can be parried, and from there, a return cut or thrust can be executed against him, while his blade is out of position to defend¹⁵⁸. This type of quick attack is extremely difficult to parry, though a skilled or extremely quick opponent may manage to do so. However, if the opponent will not attack first, he must be tricked into attacking and leaving himself open. Meyer says that "… you must use the first cut more to provoke and goad him than to hit, so that he cuts at the opening you have offered with this cutting, you are positioned to strike and take it out…"¹⁵⁹ This parry leaves the opponent exposed once more, and an attack meant to hit can be executed.

Meyer also discusses how different personalities affect strategy in combat, separating opponents into four different classes: Aggressive, Quick, Deceitful, and Defensive¹⁶⁰. Each of these different opponents must be treated differently, and so aspects of each must be learned to defeat an opponent rapidly. For example, against an aggressive opponent, one must be both deceitful and quick, in order to cause them to overreach themselves, leaving openings for a return cut¹⁶¹. He goes into great detail for countering quick and deceitful opponents, but very little about defensive opponents. He disregards such opponents as fools, saying "… whoever will wait for another person's device must be very adept and also trained and experienced, or else he will not accomplish much."¹⁶²

- ¹⁵⁹ Meyer 215
- ¹⁶⁰ Mever 216
- ¹⁶¹ Meyer 126

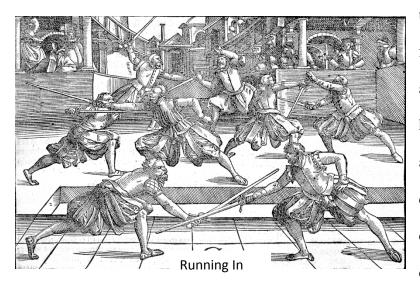
¹⁵⁷ Meyer 189

¹⁵⁸ Meyer 215

¹⁶² Meyer 216

Meyer's techniques concerning armed combat are extensive, but he does provide some instruction on combat against a rapier when both combatants are within arm's reach of each other. This is known as Running In, and is extremely dangerous, and extremely effective if the opponent is close enough to grab¹⁶³. Many of the techniques involve parrying a strike and quickly stepping inside of the arc of his swing. From this distance, it is possible to strike directly with a punch, or grab the opponent's wrist, controlling their sword. From this position, disarming is an option, by twisting the wrist away from their body and locking the elbow (see figures in upper left of diagram below). The hand reflexively opens in this position, though if the opponent resists the urge to let go of his blade, it is simple to break his grip using the pommel to strike his fingers¹⁶⁴. Thrusts are possible at this distance, though in order to perform such a thrust, control over the opponent's blade must be established, as seen in the middle left of the diagram.

Most dangerous is Running In while disarmed, but it is also the only viable option, as unarmed combat against a blade as long as a rapier is a losing proposition. It is possible to close



the distance after evading a cut, followed by grabbing the wrist and twisting the hilt out of his hand¹⁶⁵. Such techniques, if used against a skilled opponent, can degenerate into wrestling for control of the blade, and Meyer covers such techniques elsewhere.

Not all combat is done with rapier against rapier, and Meyer acknowledges this in a small

¹⁶³ Meyer 214

¹⁶⁴ Meyer 214

¹⁶⁵ Meyer 215

section about rapier combat against polearms. The key to this form of combat is very similar to Running In, in that control over the opponent's weapon must be established in order to succeed. In the left of the woodcut below, a man is clearly parrying a thrust from some form of polearm with his rapier, while grabbing the shaft of the weapon with his left hand¹⁶⁶. In this case, the rapier's length is an advantage instead of a hindrance, as an attack by a rapier is inside the



effective range of a polearm, forcing the opponent to retreat in order to have space to use his weapon¹⁶⁷. That is not to say that they are defenseless in this situation: polearms have two ends, and either can be used to strike. An unexpected strike from the rear

end of a pole arm can be just as dangerous as one from the head, and so control of the shaft is the best possible situation for such combat.

Also shown in the diagram is combat using a cloak or cape as a secondary weapon. Meyer is critical of this, as improperly wrapping the cape around the arm can lead to the cape getting caught or tangled, becoming a threat instead of an aid¹⁶⁸. Proper use of the cape is to wrap it around the opponent's blade after parrying a cut, holding it aside long enough to attack in return¹⁶⁹. The cape, being fabric, may not survive this trap for more than a few seconds, but that is more than enough time for a counterattack to be made. It is a temporary defense regardless of

¹⁶⁶ Meyer 224

¹⁶⁷ Meyer 225

¹⁶⁸ Meyer 223

¹⁶⁹ Meyer 223

how it is used, but any advantage can and should be used, if it can be used properly.

The other secondary weapon Meyer describes is a dagger in the off hand, held like in the diagram below. There are three main schools of thought when it comes to parrying with a dagger. The first is to parry every cut and thrust using only the dagger, the second is to parry

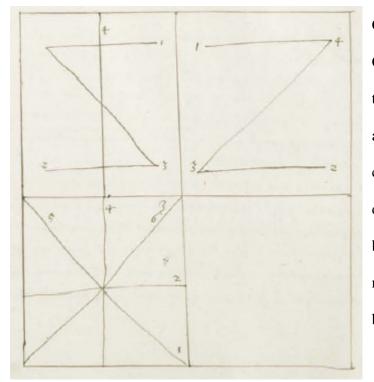
attacks to each side of the body with the weapon in that same hand (rapier defends the right side, dagger the left), and the third is that both weapons parry each blow¹⁷⁰. Each of these has its merits, and Meyer explains each in depth, though he recommends that



Germans become familiar with using both dagger and rapier to parry together, and to keep both weapons close to each other, so as to make such a parry that much faster¹⁷¹. Meyer even goes so far as to say that Germans should disregard parrying with only the dagger, as it is "... contrary to their character and nature..."¹⁷² While this may be his personal experience concerning parrying with only the dagger, it is logical, as parrying an attack to the right side of the body with a dagger in the left hand would not be an easy or comfortable movement, and would take time to recover from, time in which an opponent might strike to the unprotected left side.

- ¹⁷⁰ Meyer 218-219
- ¹⁷¹ Meyer 223
- ¹⁷² Meyer 223

Though there are no diagrams of this in *The Art of Combat*, Meyer does discuss several drills and sequences that can be done in training in an earlier document known as the Lund Manuscript. These drills were drawn as numbered lines, as seen in the example below, with each number indicating which end of the line a strike started¹⁷³. These drills are not unique to the rapier, but these specific drills do appear to be similar to some of the techniques Meyer describes in *The Art of Combat*. For instance, the drill in the upper right seems similar to the Double Cut technique, where a Neck Cut is followed by a Foot Cut, a rising Hip Cut, and lastly a falling Hip



Cut. The Hip Cuts could also be Wrath Cuts, but the diagrams are not clear about this. These drills could be practiced alone against a target, or against a partner, who could attempt to parry, increasing the difficulty of the drills. These drills would be invaluable practice for students of rapier combat, and mastering them would be a significant advantage in battle.

¹⁷³ Lund Manuscript 70

Miscellaneous Weapons Wesley Morawiec

Dusack

The dusack is a one handed weapon used in the medieval period primarily by the Germans. It featured a long cutting edge in the front with a shorter one in the back, giving it a curved appearance. With no hilt or guard the grip is a hole cut in the blade. Illustrations and descriptions of the weapons show that most were made of wood or leather, however, due to the nature of such materials, there are no surviving examples. The design of the dusack is most closely related to the falchion, a broad slightly curved single handed sword used throughout the Middle Ages.

The traditional single handed swords in medieval times were double edged, long, broad, and straight, with a large pommel to balance it. This style of sword was probably derived from early Celtic swords working primarily as cutting weapons and a rounded tip. This style of weapon was common before the thirteenth century¹⁷⁴. During the thirteenth century, plate armor was developed. This made the point of the sword the most powerful so swords began to be designed around piercing techniques. It was also during this period that the hilt was extended to accommodate two hands, creating the longsword. The fourteenth century saw continued emphasis on a long point and narrow blade and in the fifteenth century each sword had distinct characteristics depending on the country in which it was made¹⁷⁵.

The development path of the traditional straight sword culminated in the construction of the rapier during the 1500s. The

Langes Messer. HAM accession number 2036.3

¹⁷⁴ North, An Introduction to European Swords, pg. 5

¹⁷⁵ Ibid.

dusack came from a different path that ended with weapons such as the cavalry saber used in the American Civil War. These swords had only a single edge and some amount of curvature in the blade, the dusack has more than most. They ranged in size from a long knife to a short sword. Some examples of this type of weapon are the Messer, Saxe, Falchion, Sabre, and machete¹⁷⁶.

The techniques used in fighting with the dusack are the same ones that can be used while fighting with other one handed weapons. They are also very closely related to longsword techniques, but with one hand instead of two. There are several types of techniques; the Guards, or postures, which are starting positions from which to deliver or defend against an attack. Cuts are used to strike at the opponent and are therefore the main element of combat. Lastly, parrying is the defense against the opponent's cuts. All techniques will be described from a right-handed perspective as that is the way Meyer has written it, though any of the techniques can be performed the same way on the opposite side.

¹⁷⁶ Talhoffer, *Medieval Combat: A Fifteenth-century Illustrated Manual of Swordfighting and Close-Quarter Combat*, pg. 17



Meyer's way of dividing the body to give targets for cuts and parries; they must be understood as Meyer makes constant reference to them. First, the Scalp Line goes vertically through

the middle of the body. The Wrath Line is diagonal the side depending on whether the swordsman is left or right handed. The Thwart or Middle line is horizontal at the level of the chin. The second diagonal is not specifically named but is used to guide the Low Cut. All of these lines intersect in the middle of the body at chin level.

There are five main guards: Watch, Steer, Wrath, Bow, Boar, Middle, and Change¹⁷⁷. The Watch guard is the preparation for the High Cut and so is also called the High guard. The position is with the dusack over the head with the point aimed backwards. The Steer is one of the most versatile postures; many techniques can be performed from this position. The left foot is forward and the dusack hilt is beside the head as if to prepare for a forward thrust, the point is directly toward the opponent's face. The Wrath guard is the same as the Steer except with the point of the weapon pointing downwards and thus threatening a cut instead of a thrust; it is the prime position from which to deliver the powerful wrath cuts.

There are four main cuts, each of which is oriented through one of the four lines. These lines are

¹⁷⁷ Meyer, *The Art of Combat*, pg. 122

There are two types of guards, high and low; the Wrath guard was the last of the high guards. The high guards allow strikes from above and low guards strikes from below, a high guard should be fought with a low guard and vice versa. The Bow posture allows parries from below, it features the right foot forward and the dusack held out to the left side point downward and short side facing the opponent. The Boar is unusual in that it can only be used from a single side, the right in this case. The left foot is forward while the right hand holds the dusack back beside the body with the point facing the opponent. The Middle guard is like the Wrath guard but with the dusack positioned lower on the body, in the middle. This posture is easy to get into at the end of most cuts. The last guard is the Change which has the dusack forward and extended towards the opponent. It is called Change because it is the guard used after a Change cut¹⁷⁸.

Each of the main cuts strikes at different portions of the body and from different directions; it is important to note that all techniques can be done on both sides of the body and with either hand. The High Cut is delivered through the Scalp Line from above. The Wrath Cut follows the aptly named Wrath Line and is delivered from above. The Middle Cut is horizontal through the Middle Line. The Low Cut slopes upward perpendicular to the Wrath Cut and is delivered from below.

There are also several secondary cuts which are based on the main cuts, many of these incorporate the opponent's reactions to the main cut and provide options for a counterattack. The Plunge Cut is essentially a High cut, but after the cut the dusack moves above the head as if in a Steer posture, but with the point extended further toward the opponent. The Crooked Cut is any main cut done with the dusack flipped so the short side makes contact. The Short Cut is used when the opponent pulls back his weapon for a high cut. The dusack is moved to the left shoulder and the Short cut is made with the short edge of the sword along the middle line. This

¹⁷⁸ Meyer, *The Art of Combat*, pg. 128

blocks the opponent's stroke and hits him simultaneously. The Constrainer Cut starts from the Middle guard on the left when the opponent executes a Middle cut, lean backwards to avoid his attack and cut sideways at his head. The Roarer Cut is used when the opponent has moved his weapon high to parry and the dusack strikes his extended arm. A High Cut turned into a thrust when parried is called the Waker. If the opponent is waiting in the Bow posture, then move to strike the head but bring the weapon down and around to the other side and strike at his head. This is called a Rose Cut. The Danger Cut must be performed quickly when the opponent lifts his weapon to perform a cut. Cut around his hilt and at the body. The Anger cut intercepts a high cut perpendicular to the blade; both hands may be used so the dusack lies on the left arm, after the clash thrust at his face. Another cut to be used when the opponent is in the Bow posture, the Failing Cut, is a fake cut from above at the right arm to force the opponent to frantically parry. The technique is finished by a step to the right (opponent's left) and middle cut to the face. The Blind Cut starts with a block from above just as the Anger Cut; step towards his left and cut at his face. The Flicking cut is delivered from the Bow posture and used against an opponent who is unwilling to strike. It consists of a "flick" towards his right arm and a side cut from the left shoulder. The Winding (Knocking) Cut is used when the opponent is in the Bow and neither side is willing to cut first, so the hilt is used to strike the opponent's chest in order to force him to move and create an opening. The Change Cut allows the posture to shift to the opposite side after a strike. The Cross Cut is two Wrath cuts delivered one after the other to each diagonal.

Dagger & Wrestling

"The fourth part of this book discusses combat with the dagger, from which one can learn how one shall use all kinds of similar short weapons, along with many fine wrestling techniques included with it.¹⁷⁹, This quote from Meyer's book prefaces the section on dagger and wrestling techniques and emphasizes the connection between them. Unlike a longsword, daggers had applications outside of combat and were even used as eating utensils. For this reason they were the most common weapon in the Middle Ages¹⁸⁰. It is because of this commonality, along with their small size and combatant's physical proximity, that Meyer describes wrestling techniques in the same section as dagger combat.

Wrestling was as important to the medieval knight as the longsword. Armor was effective, it required precision to pierce, and it is much easier to attack an opponent pinned on the ground than one who is standing and balanced. Wrestling allowed a knight to get the upper hand in combat by utilizing an unexpected weapon, their body. Specific wrestling techniques were often based on grappling with the opponent.¹⁸¹ Meyer includes a section on grappling or running in within each section of his book, showing that wrestling is a common thread throughout all weapon styles.

German martial arts lack the ritualized instruction for which eastern martial arts styles are known, but the techniques are similar. No matter what type of style, the techniques have a similar pattern and methods. When wrestling, a fighter targets limbs and large joints; elbows, wrists, shoulder, feet, and sometimes knees, in order to control the entire body. Each technique progresses in the same three steps. First, block or trap, the start of any technique has to be

¹⁷⁹ Meyer, The Art of Combat, pg. 235

¹⁸⁰ Blair, European and American Arms, pg. 15

¹⁸¹ Talhoffer, Medieval Combat: A Fifteenth-century Illustrated Manual of Swordfighting and Close-Quarter Combat, pg. 223

making contact with the opponent and foiling their attack. Second, off-balance, generally the hardest part of any technique, this puts the person in an advantageous position. Finally, counter, attacking or immobilizing the opponent is the final step.

In Meyer's time the most common form of dagger was the "rondel" or "ballock." These daggers had a design optimized for strong thrusts. The blade was straight and thin with a "strong triangular cross section"¹⁸² that was able to slip through weak spots in armor. The guard was formed by a flat disk mirrored at the pommel. The rondel dagger was in use from the fourteenth to sixteenth centuries though this general form of dagger persisted throughout the Middle Ages. Blades after this time gained a larger cross style guard and a cutting edge. Despite its general use, the dagger was considered a chivalric or "knightly" weapon and so was carried by knights in combat.



Daggers were typically worn on the belt on the side of the dominant hand so when it was drawn the natural position was to hold it with the dagger protruding from the pinky side of the hand. As with all weapons there are guards that a person can assume to defend against and launch attacks. For the dagger there are four: High, Low, Middle, and Cross. ¹⁸³Again, as with all weapons, these techniques are ambidextrous and can be used with either hand. For each guard, keep the same foot forward as the hand holding the dagger. The High guard is accomplished by merely holding the dagger point downwards in front of your face, high enough not to obscure vision. The Low guard is naturally the exact opposite of the High guard, hold the dagger over your thigh

¹⁸² Edge, Arms and Armor, pg. 125
¹⁸³ Meyer, *The Art of Combat*, pg. 236

pointing upwards at the opponent's face. In the Middle guard hold the dagger at belt level or straight outwards in front. Lastly, the Cross guard is the chief parrying guard.

Staff Weapons

Halberd, bill, poleaxe, glaive, quarterstaff, pike, battle-axe, raven's tooth, scythe; while the longsword is the most well-known medieval weapon, staff weapons were also prevalent. Staff weapons are two handed weapons with a wooden haft.¹⁸⁴ Most had some form of metal head to inflict greater damage and were about 6 to 8 ft. long. They were widely used in the military where their greater length allowed foot soldiers to combat cavalry. Meyer describes three staff weapons in *The Art of Combat*; the quarterstaff, the halberd, and the pike, though there are numerous other types as well.

There is relatively little written about staff weapons both in medieval and modern sources. In modern times, this may be because of the great variety of the weapons, a vague classification system used in the past and the fact that medieval weapons masters did not think very highly of staff weapons¹⁸⁵. The few medieval works that include sections on staff weapons do not give it the same quality and detail that can be seen in other sections.

¹⁸⁴ Forgeng, *Higgins Armory Swordplay Program*, pg. 51

¹⁸⁵ Anglo, *The Martial Arts of Renaissance Europe*, pg. 148



Combat with the quarterstaff. Meyer pg. 276

The quarterstaff is the most basic staff weapon possible; it consists of a six foot long wooden pole sometimes capped with metal at each end. Its size allows for powerful cuts and thrusts and is useful keeping opponents with shorter weapons at a distance. Blunt ends mean that it has little to no effect on an armored opponent and for this reason it was mainly a civilian weapon. Meyer, however, describes the quarterstaff as "a basis of all long weapons¹⁸⁶," and uses it to teach techniques applicable to all staff weapons.



Halberd, 1500-1550, HAM Accession Number 68

¹⁸⁶ Meyer, *The Art of Combat*, pg. 249

While most weapons masters seemed to hold staff weapons in low esteem, the halberd was one of the few weapons that was considered chivalric, or something that a knight would use. The halberd has both a spear point and an axe head with a fluke in back mounted on top of the shaft. It is therefore considerably more deadly than the quarterstaff, even capable of piercing plate armor. The dual weapons made both cuts and thrusts effective and the flange on back could be used for hooking techniques to take the opponent off balance.



Designs of the halberd vary greatly based on where it was made, who was using it, and what type of opponent it was facing. The earliest examples have an "elongated axe-like blade¹⁸⁷" that was more suitable for cuts. Over time the point became more pronounced until it was completely separate from the axe blade. The fifteenth century saw new designs for the blade with concave shapes. By the sixteenth century, when Meyer lived, the fluke on the back side and point of the

¹⁸⁷ Waldman, Hafted Weapons in the Medieval and Renaissance Europe, pg. 19

weapon had become longer while the head became smaller¹⁸⁸. Depictions in *The Art of Combat* show training halberds with a straight or convex axe blade, spike, and long point with a ball on the tip for protection.

The pike is the last staff weapon covered by Meyer; it consists of a very long pole topped with a point. Ranging from 12 to 24 ft. in length the pike is by far the longest staff weapon. This made it next to useless for civilian use because it was hard to transport, and even then there are very few situations outside of a tournament setting where there would be combat at that range. However, for military use, the pike was an excellent weapon as it was longer than a knight's lance. Formations of pike men were very effective against cavalry.

As before in the section concerning the dusack, Meyer uses a single weapon to teach the principles of combat; here the quarterstaff is used. The following describes techniques using staff weapons. Any staff weapon can be divided into four sections. The tip or foible is the foremost part of the weapon. Forepart is in front of the forward hand. Midstaff is between the hands. Butt is behind the rear hand. There are five main guards, these are the starting point for any parry, thrust, or cut. It is important to note that the quarterstaff is an ambidextrous weapon so all guards and cuts can be executed on the left side as well as the right and vice versa.

The high guard has the left foot forward with the staff at your chest and the point straight up toward the sky. In the low guard the butt of the staff is at your hip with the point extended past the feet. Parrying involves intercepting an incoming staff with your own. The most commonly used is the straight parry in which the staff is extended straight towards the opponent and parallel to the ground. This is also called the middle guard and is the main position to fight from. The rudder guard has the left foot forward, arms extended, and the tip of the staff in front

¹⁸⁸ Waldman, pg. 105

of the left foot while the butt is in front of the face¹⁸⁹. The guards are starting points for all techniques, thrusts, cuts, and parries.



Figure on left: rudder guard. Figure on right: side guard. Meyer pg. 276

¹⁸⁹ Meyer, pg. 249

Conclusion

The knowledge we gained from our research on the topics of *The Art of Combat 1570* was an extremely useful supplement to the book itself. We divided the research into four sections, partially following the book's divisions. The first section studied Meyer's life and the time period in which he lived, giving us insight into his reasons for creating such an expensive piece of work. It also allowed us to understand the struggles Meyer faced in both producing and attempting to market and sell his book. The next section researched the history and evolution of the longsword, explaining why it has such a substantial section in Meyer's book even though it was only a sporting weapon during his life. The love of the German people for the medieval weapons and their noble heritage caused them to have an ingrained love for the longsword, even though it was outdated. This also explained why Meyer chose to use the longsword section to set the basis of his system of martial arts. The dusack, dagger, wrestling, and polearms were all included in the same section of research. The Germans' love of the medieval period played a part in Meyer's inclusion of polearms in his book, even though they were hardly used at the time. The Germans' romantic view of the Middle Ages also gave Meyer a reason to explain the classic wrestling techniques with or without the dagger that had been used by knights. The dusack's inclusion in Meyer's book was puzzling until we actually read the book. We realized that Meyer used it to teach techniques applicable to any one-handed sword; those used both before and after the book's publication. The other section of research was on the rapier. It revealed that the most impressive segment of Meyer's book is his rapier section. This is the second largest section of the book even though the weapon was relatively new to the German people. Meyer's knowledge of the weapon sets him apart from his peers because it shows how eager he was to learn about all martial arts forms, regardless of their place of origin.

For the most part, our research was extremely successful and beneficial. We were able to gain a great amount of insight into Meyer himself, as well as the stories of the weapons he included in his book. The creation of the instructional video did not go quite as smoothly. One of the most difficult things to do in filming was determining which techniques we wanted to include in the video and which ones had to be cut. It was also challenging to recreate some of the techniques using only descriptions from the book and woodcuts. We also struggled to find a reasonable balance in the video between the historical content and the instructional content, making it difficult to construct sections of the video in logical progressions. However, once we were able to determine the structure of the video, our execution was commendable. The scenes and techniques we simulate in our video are realistic renditions of Meyer's own lessons, allowing a viewer to better understand his teachings with a real-time demonstration. The historical information included in the video about Meyer and the weapons in the book allow the viewer to put themselves in Meyer's own time and act as one of his pupils.

In hindsight, this project could have been easier if we had done some things differently. The most important thing we can recommend to future groups is to begin filming early. Even if you are unsure as to the direction you want to take with your video, begin determining what you want to film early on in the project. Not only will this put you ahead of your timeline, it will also aid you in determining the overall structure of your video. It is also important to become comfortable with the technology you will be using before you begin using it. Set time aside to familiarize yourself with audio and video editing software so that you will be able to meet your deadlines. Each member of our group learned to use the editing software, which allowed us to edit our own sections individually. This made the group more productive than using a single editor because it allowed each member to put more thought into their sections than if a single person edited every section. It also ensured that group meeting time was used for writing sections of the overall research document rather than editing individual videos.

During the process of creating our video, we tossed around numerous ideas that could have added unique aspects to the video. Some of the ideas worked out and were included in the video, but others never made it into the video for various reasons. One such idea was to have a native German speaker read the quotes we used from Meyer's book. We believed such a voice would have better represented Meyer's own talking voice. However, we were never able to find a suitable candidate and ended up using an English speaking reader. Another idea we had was to include a talking heads segment with an expert on Meyer from another country. However, this idea never materialized due to scheduling conflicts. These ideas would have added interesting aspects to the video, but luckily, they were not vital to the overall success of the project.

The main goal of our project was to research Meyer's techniques and bring them into the modern world for the use of others. By doing this, we hoped to open the doors for others to use Meyer's knowledge for their own use. With knowledge of Meyer's system of combat, others could possibly apply concepts from it to modern day martial arts. Another follow-up project would be to focus on a specific section of Meyer's book. Since our project was an overview of the entire book, we were not able to include all of the content for each section. A project that focused on just one section would be able to go into much greater depth than our project did. Another interesting follow-up project would be to compare German martial arts to other European systems. These could also be compared to some of the Eastern disciplines. Along the same lines, Meyer's system specifically could be compared to those of Johannes Liechtenauer or Giacomo di Grassi. These projects would allow future groups to further research Meyer's system of combat, a system for which we have only just scratched the surface.

Team Biographies





Jacob Cooley

I am a junior at Worcester Polytechnic Institute majoring in Electrical and Computer Engineering. I am an officer for our club Lacrosse team and a Midshipman 2nd Class in the NROTC unit stationed at Holy Cross – upon graduation, I will commission as an Ensign in the U.S. Navy. I am originally from Annapolis, MD, so, yes, I eat crabs and put Old Bay on everything.... everything. Our state sport is Jousting, and I originally chose this project in order to hone my techniques. Unfortunately, I realized too late that we were not learning to joust. However, my sword fighting skills have improved, so I should be able to at least put a few points up at the local Tourney.





David Modica

I have been interested in martial arts and combat since I was very young. I have studied kempo karate for thirteen years, and saber fencing for three. Visiting the Higgins Armory Museum as a child played a large role in my love for medieval weaponry and swords in particular. I also love computers and programming, which has unfortunately dashed my childhood dreams of becoming a knight and riding off into the sunset on a quest to slay dragons.

Wesley Morawiec

An Aerospace Engineering major at Worcester Polytechnic Institute and a junior at the completion of this project. Wesley has been a member of Christian Bible Fellowship since freshman year, holds a black belt in Shotokan Karate, and enjoys downhill skiing. His contributions to this project include research and production of the Dusack, Staff Weapons, and Dagger & Wrestling sections.



I am a chemical engineering major at WPI. I was born in Illinois, but call Winchendon, MA my hometown. As one of six children, I had to learn hand-to-hand combat early on, but I have never had formal training. I also have a great love for sports and I enjoy both watching and playing them. After graduating from WPI, I hope to work in the pharmaceutical or fuels industry.



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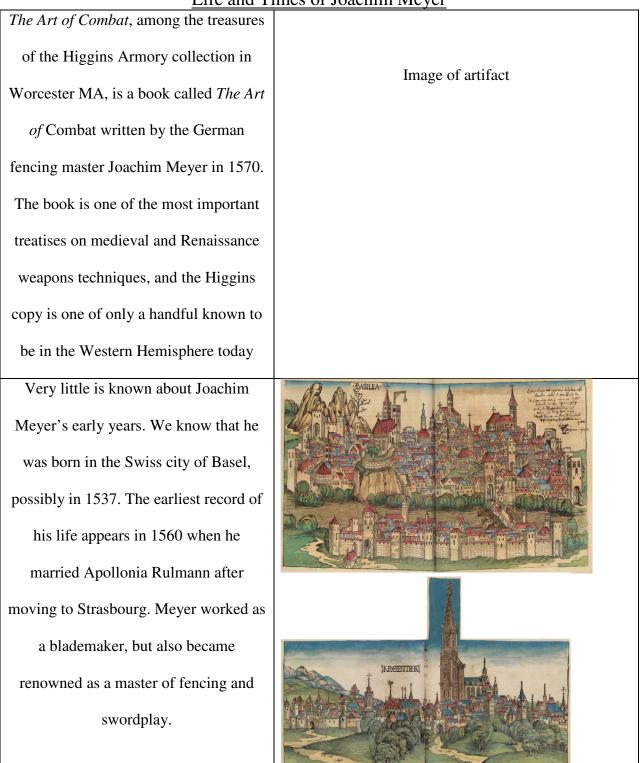
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Appendix

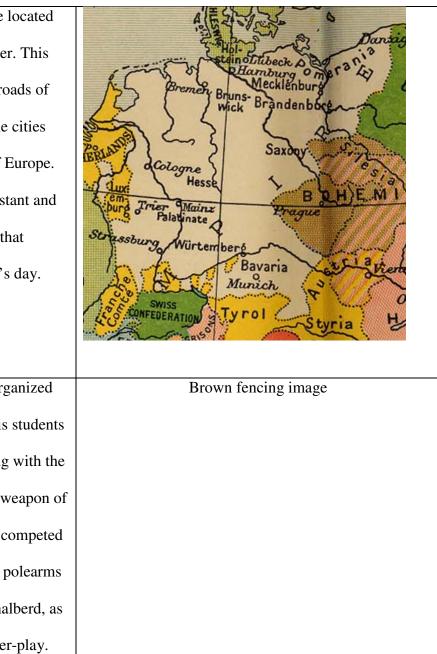
• The appendix includes the storyboards used to create each section of the video.



Life and Times of Joachim Meyer

Both Basel and Strasbourg are located on the banks of the Rhine River. This location put them at the crossroads of the European continent and the cities saw travelers from all parts of Europe. Both cities were largely Protestant and became important centers for that religious movement in Meyer's day.

During the 1560s, Meyer organized numerous competitions for his students to showcase their skills. Along with the rapier, the newly fashionable weapon of fencing, Meyer's pupils also competed with the longsword and with polearms such as the quarterstaff and halberd, as well as wrestling and dagger-play.



In addition to organizing competitions, Meyer also assembled his own martial arts treatises. His first major treatise is known as the *Rostock* Manuscript and includes sections on the longsword, the rapier, the dagger, and a one-handed sword called the Lange Messer. This manuscript was a compilation of earlier martial arts treatises along with Meyer's comments and additions.

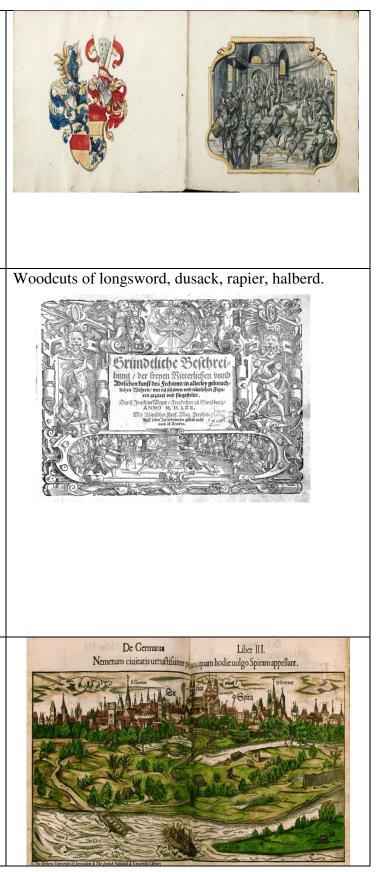
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The most well-known martial arts master Meyer included in this compilation was Johannes Liechtenauer, an influential sword master who wrote about combat with the longsword 300 years before Meyer. Liechtenauer's system was the basis for German longsword combat. Meyer's second major treatise is called the Lund manuscript. This manuscript dates to about 1568 and includes sections on swordplay with a variety of weapons. This manuscript is a single work by Meyer, rather than a compilation of prior treatises.

Meyer went on to revise the content of the Lund manuscript for publication, culminating in his crown jewel "The Art of Combat" in 1570. The book includes extensive sections on numerous weapons and was richly illustrated with woodcuts, making it very expensive to print. Meyer was forced to borrow money in order to pay for its production.

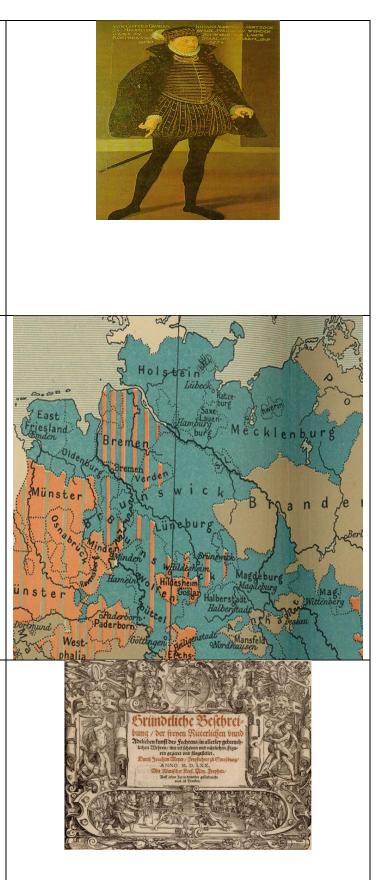
In order to promote his book and find a sponsor to help him get out of debt, Meyer attended the Imperial Diet, a political gathering of the nobles of the Holy Roman Empire at Speyer in 1570.



At the Diet, Meyer was able to secure a contract as fencing master to Duke Johann-Albrecht I of Mecklenburg-Schwerin. Not only would this position bring him prestige, recognition, and a salary, but it would also give him access to wealthy customers who could buy his book.

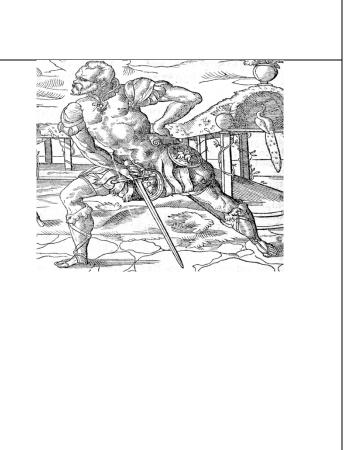
After returning home, Meyer shipped his books to Schwerin and set out in January 1571. His 500 mile journey in the middle of winter took a severe toll on his health. He arrived at the duke's court on February 10 and died on February 24. His brother-in-law took over Meyer's debts and became the guardian of Meyer's widow.

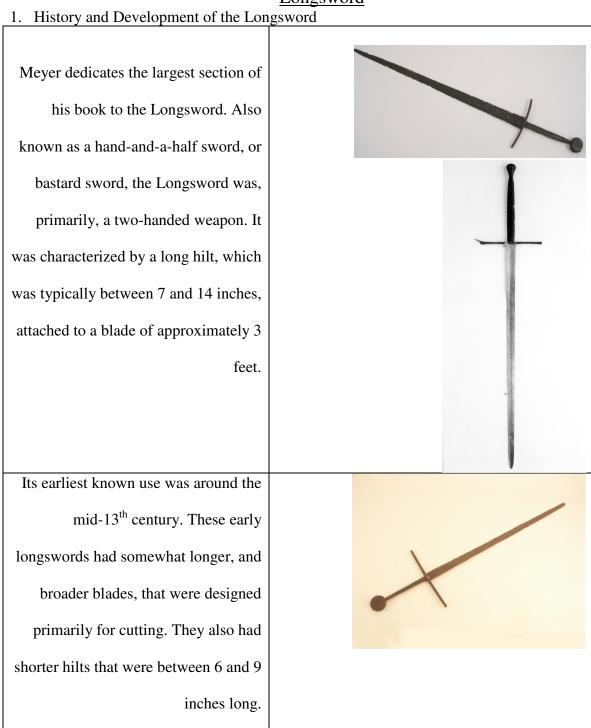
The duke claimed that all the copies of Meyer's books were ruined by water damage. The plates and the woodcuts of the book were sold to pay off Meyer's debts and were used to print a second edition of the book in Augsburg in



1600. Meyer's manuscripts found their way to Rostock University and Lund University, which lend the documents their names. The Higgins copy of "The Art of Combat" is from the 2nd printing in Augsburg.

The Art of Combat is the work that secured Meyer's place in the history of martial arts. His book was the last major treatise in the medieval German tradition documenting centuries-old techniques with the methodical thoroughness of a Renaissance scholar. Today, students around the world are rediscovering his techniques, bringing the pages of his book to life again at the Higgins Armory and beyond.





Longsword

The development of plate armor in the 14th century drastically changed how swords were used. Thrusts that targeted gaps in an opponent's armor became the most popular mode of attack. As a result, swords made after the 14th century tended to have thinner blades. It is during this period in history that the longsword became the weapon of choice for medieval knights.

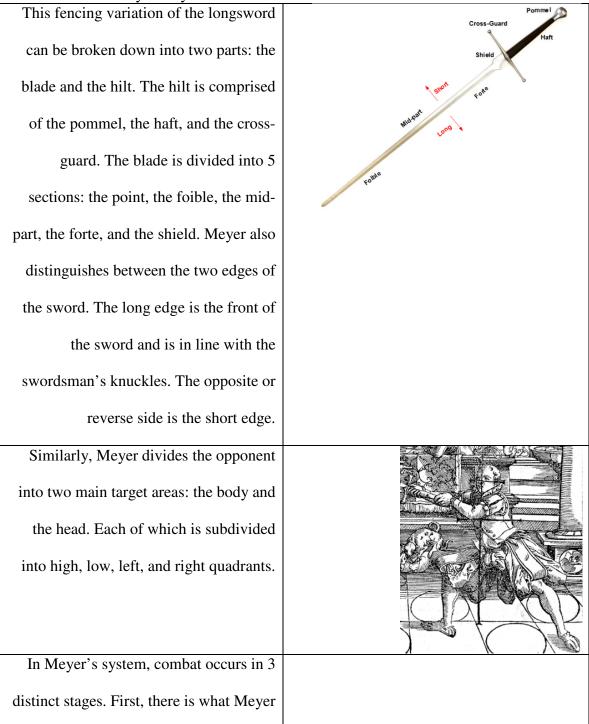
It proved excellent for both cutting and thrusting. It was also light enough that mounted knights could wield the weapon with one hand. Additionally, an armored knight could move one or both of his hands onto the blade of the sword to make a very precise thrust or strike a powerful concussive blow. While its versatility and effectiveness made the longsword popular all across Europe, it was in Germany that the



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1	primarily a fencing weapon used in
	unarmored combat.

2. Overview of Meyer's System



calls the Onset. This is the initial cut that	
one swordsman makes, from a guard, at	
his opponent. The second stage is called	
the Handwork. It consists of the cuts,	
parries, and devices used by both	
combatants following the initial stroke.	
Lastly, having failed to slay their	
opponent, either or both combatants will	
withdraw. These three stages repeat until	
combat is ended.	

3. Onset

J. Oliset	
There are 12 guards in Meyer's longsword	Show woodcuts for and film examples of each of the chief guards, the wrath guard,
system. 4 of which he names "Chief	and the change guard.
Guards". These are: Ox guard, Plow guard,	
High Guard, and Fool.	
Ox guard protects from cuts aimed at the	
head. It is executed with the hilt held	
beside and slightly above the head and the	
blade angled slightly downward to point at the opponent's face. This can be executed	
with the sword on the right side of the head	
with the right foot back, or the left side of	

the head with the left foot back.

Plow guard protects the body. It is executed with the hilt held low, inside the forward knee with the blade directed toward the opponent's face. This guard can be executed with either the left or the right foot forward.

High guard is not so much a guard as the initial position of the high cut. It is executed with the hilt held above the swordsman's head and the blade angled back at roughly 45°.

Fool guard represents the final position of the high cut. The sword is held out in front of the swordsman with the point directed at the ground. Both High and fool guards can be executed with either the left or the right foot forward.

The 8 remaining "secondary" guards are as	
follows: Longpoint, Window, Irongate,	
Crossed Guard, Side Guard, Wrath Guard,	
Change guard, Middle Guard, Hanging	
Point, Key, and Unicorn.	
Meyer also describes 16 types of cuts that	Film examples of the 5 master cuts and use woodcuts where appropriate.
can be made with a longsword. These are	woodedits where appropriate.
divided into "straight" cuts, which are	
delivered with the long edge, and	F T D ^{üb}
"reversed" cuts, which are delivered with	
the short edge. Of these, Meyer lists 5	
"master" cuts, which he considers to be the	
most useful in combat. These are the High	
cut, Wrath cut, Thwart cut, Crooked cut,	
and Squinting cut.	
The High cut, or vertical cut, is delivered	
by cutting downwards at your opponent's	
head with the long edge.	
The Wrath cut is delivered by cutting	
downwards with the long edge from either	
right to left or left to right. The cut should	

end with the hilt held by the swordsman's hip so that the blade points downward, and extends out at a 90° angle. This position is known as Change guard.

The thwart cut is delivered with the hands pointing upwards and the thumb on the underside of the shield. The hilt is held slightly above the head, and the blade angles downward to strike the opponent's head. It can be delivered with the short edge from the swordsman's right side with uncrossed hands, or with the long edge from the swordsman's left side with crossed hands. This is generally used as a counter-cut against a strike targeting the head. It is one of the most common cuts in Meyer's system.

Similar to the Thwart cut, the Crooked cut is also executed by crossing or uncrossing one's hands. It is a counter-cut that can be aimed either at the opponent's sword, to

deflect an incoming strike, or at their	
hands. With the sword held in front, the	
swordsman steps out to the right or the left,	
crossing or uncrossing his hands in order to	
bring the sword around in a circle	
perpendicular to the line of encounter. This	
deflects the opponent's blade and leaves	
him open for attack.	
The Squinter cut is a variation of the high	
cut executed with the short edge. It is	
delivered at the opponent's head with the	
hilt held next to the swordsman's head on	
the opposite side of the lead foot.	

4. Handwork

• Slicing – 18r.2
• Striking Around – 18r.3
• Slinging – 19r.1
• Doubling – 19r.3
• Winding – 21r.1
• Hanging – 22r.2

around, Slinging, Doubling, Winding, and	
Hanging.	
Slicing	
Slicing:	
The Swordsman in white attacks and the	
Swordsman in black binds against it. As	
Black feels White pull away from the bind,	
he pursues to press the long edge of the	
forte against his arms. He then draws the	
blade back in a slicing motion.	
Striking Around:	
The Swordsman in white cuts from the	
right. The swordsman in black parries, then	
steps out to the left and strikes around to the	
opposite side of his white's head.	
Slinging:	
Slinging can be used to strike an opponent	
who is out of range or retreating. If	
executed properly, a swordsman can	
generate enough whip to bend the blade	
around an opponent's guard, striking the	

head. Here, the swordsman in black pulls his sword back to his right. He then steps forward with his right foot and whips his sword around at the white swordsman's head.

Doubling:

The swordsman in Black aims a cut at the swordsman in white's left ear. White parries. On contact, Black pushes the pommel under his right arm to direct a cut at White's opposite ear with the short edge.

Winding:

The Swordsman in white delivers a high cut. The swordsman in black parries, than pushes the pommel under his right arm to strike with the short edge against white's left ear or neck. This is similar to Doubling.

Hanging:

The swordsman in white delivers a wrath cut at the head of the swordsman in black.

Black steps out to the right, and lifts the hilt	
of the sword over his head (with his thumb	
on the shield), catching the cut on the flat of	
his blade. This is known as a hanging parry.	
From here, Black winds in to direct a cut	
with the short edge against White's right	
ear.	

5. Withdrawal

J. Williawai	
After a few exchanges, it will be necessary	Use one of the clips of 26r.1 that shows the swordsmen withdrawing from each other.
for either or both combatants to withdraw.	
It is important, when withdrawing to cut as	
you do so to prevent your opponent from	
pressing you. Here, Both combatants take	
two withdrawal steps cutting with each.	

6. Devices

The following is a drill that simulates all	Film 26r.1a,b
three elements.	
The swordsman in white steps forward and	
delivers a high cut to the Swordsman in	
black's head. This is the onset.	
The Swordsman in Black steps out to the	

right and parries with a thwart cut at White's left ear using the long edge.

Seeing the danger, White redirects his cut to parry Black's thwart. Black then steps out to the left, redirecting his thwart cut toward White's right ear using the short edge.

White brings his sword across his body to parry black's second Thwart. Black unwinds and extends his hands to place the short edge of his forte against the short edge of White's mid-part. Black then pulls back on White's sword, forcing it down and to the right. This is a technique called wrenching. Black executes a Squinter cut at White's right ear.

White parries Black's cut. Both combatants now withdraw. Each take two steps backwards cutting with each step.

I	Rapier
Script/Description of Audio	Visuals
Even though the rapier was a relatively new	Instructor in Cutting Diagram Woodcut,
weapon in Germany, Meyer believed that it	
was important for Germans to learn and	
understand this new style of combat.	
Knowing the techniques used by swordsmen	
of other nations would give German	
swordsmen an advantage when fighting	
them, and make victory more likely.	
The rapier evolved as a weapon for civilian	
combat whether for duels, self-defense on	
the street, or the popular sport of fencing.	
The blade of the rapier was about 3½ feet	
long, maximizing a swordsman's reach. The	
blades were also narrow, to decrease the	
total weight of the sword.	
The hilt evolved from the basic crosshilt	Ports of a Swant Hilt
found on older swords, adding arms of the	Parts of a Swept Hilt
hilt to protect the fingers, and side rings and	Pommel Side Ring
various other guards to protect the	Button Quillon block
unarmored hand.	Knuckle guard Arms of the hilt
	Loop guard Counterguard (in back)

Talking head talks about who would have used a rapier, and what for Questions:

- Who would have access to this weapon, as well as instruction in how to use it?
- What sort of combat could someone with a rapier expect to get into, i.e what weapon(s) would an opponent typically have?
- What was the typical form of rapier hilts during Meyer's day?

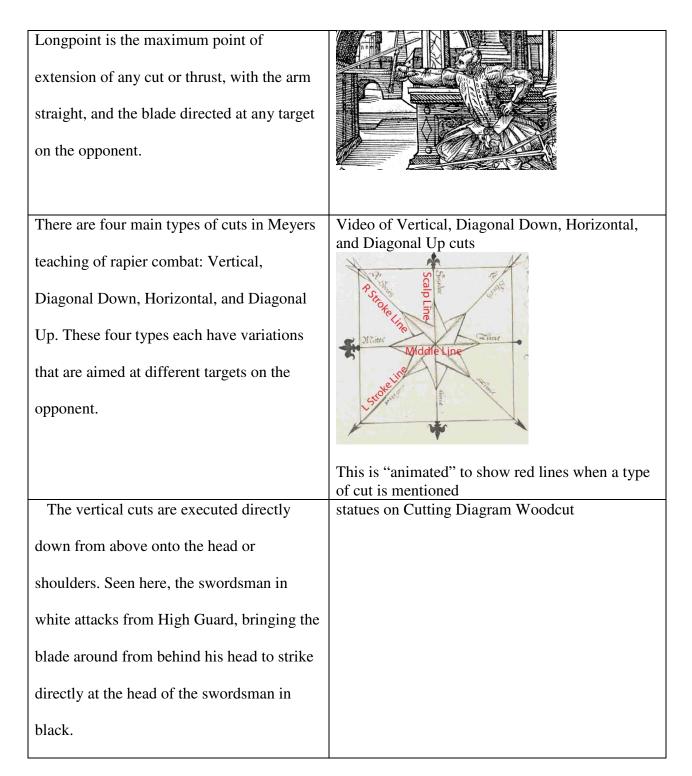
One of the greatest differences from longsword combat that Meyer notes is that in rapier combat, the dominant foot is almost always forward. This keeps the rapier between a swordsman and his opponent, for more efficient attacks and

Short video demonstrating stepping and circling, lasting as long as it takes to say scripted part.

¹⁹⁰ http://world4.eu/spanish-fashion-nobility/

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parries.	
There are seven different guard positions	
that Meyer mentions, each of which defends	
different areas of the body. These guards	
have further divisions to guard the right and	
left sides of the body, as well as variations	
that promote thrusting or cutting.	
High Guard has the hilt held above head	Stills of me, woodcut of High Guard (thrusting)
level, with the blade angled down towards	
the opponents head. This guard protects the	
head and shoulders, but leaves the lower	
torso and legs exposed. It is typically used	
for thrusting attacks, but there is also a	
variation used for cutting.	
Irongate covers much more of the	
body, and is a more versatile stance than	
High guard, as the hilt is held low, with the	
blade angled up to threaten the opponent's	
face. The blade can be held to either side of	MOCTRANS
the body. From this guard, most strikes or	
thrusts can be parried, whether to the head	

or legs.



The Diagonal attacks follow three pairs of	
lines through the body: from shoulder to	
armpit, from hip to thigh, and from low	
thigh to high calf. These cuts can be	
executed from left to right or right to left,	
and either downwards or upwards, making	
this the most variable class of cuts.	
	Animated like other cutting diagram. One X each time. statues on Cutting Diagram Woodcut
The swordsman in white executes two	Video
Diagonal Down cuts here, slashing through	
the chest of the swordsman in black. This	
attack can also be done using two Diagonal	
Up cuts, in the same X pattern.	
The Horizontal cuts also follow three lines,	Video, statues on Cutting Diagram Woodcut
through the neck, the belly, and the knee.	
Here, the swordsman in black attacks with a	
Diagonal Up cut, which the swordsman in	
white parries, and then follows with a	
Horizontal cut at neck level.	

 While thrusting attacks were not new to combat in 1570, the concept of a lunge was. In the armored combat of the Middle Ages, a lunge could put a swordsman dangerously off balance. In the rapier fights of Meyer's day, lunges provided a quick, reasonably safe method of attack that could catch an opponent by surprise. 	
The proper technique for lunging, as seen in	Video
this demonstration, is to step forward with	
the dominant foot only, leaning out over the	
knee, while thrusting to the head or chest	
with a straight arm, before recovering to	
guard.	
Lunges can be executed from any guard,	
and target any part of the body, but in	
combat to the death, the head or chest is	
more likely to deliver a lethal hit.	
As with any weapon, attacking is only half	A Re-
of the battle. Defense is just as important,	
and Meyer describes several methods of	
parrying the cuts and lunges just mentioned.	

Setting off is the first type of parrying, and	Video
consists of catching an attack on the	
forward, or long, edge of the blade, and	
extending the arm into Longpoint, to	
counter with a thrust.	
The second type of parrying is the hanging	Video
parry, with the blade lower than the hilt.	
This is typically done against low attacks,	
but attacks at any target can be parried in	
this manner. Here, the swordsman in white	
parries a Horizontal cut at the neck with a	
hanging parry, and follows through with a	
high Diagonal Down cut.	
A third type of parrying is called, going	Video
through. This parry sweeps the blade around	
to the opposite side of an opponent's sword	
before deflecting it to the side and leaving	
the opponent exposed to a countering cut or	
thrust.	

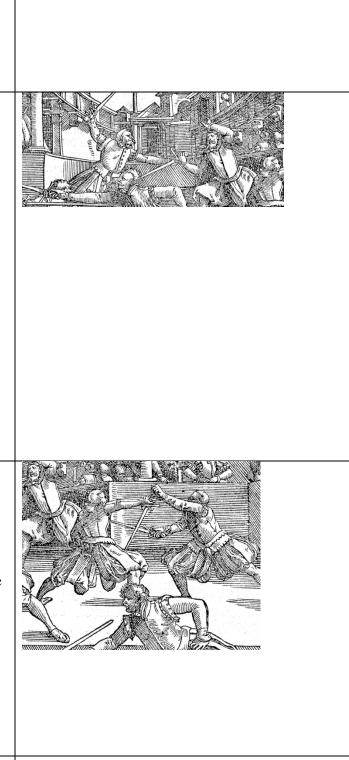
Drills are an important part of any weapons	
practice, and in his Lund Manuscript of	+
1568, Meyer left diagrams of some of his	
drills. These diagrams represent attack	
combinations that could be practiced alone	2 3 3 2
against a target. Lines represent cuts, while	e + 3
the number indicates the order and direction.	
Circular dots are also numbered, and	
indicate thrusts, as well as roughly where	
each thrust should be aimed.	
In the first drill shown, the initial cut is a	Video
high Horizontal from the right, followed by	
a low Horizontal cut from the left. This is	
followed by a middle Diagonal Up cut, and	
ends with a Vertical cut.	
The second drill incorporates lunges, and	
starts with two Horizontal cuts in opposite	
directions, followed by a vertical Cut and a	
Diagonal Up cut. The lunge is made against	
the same shoulder the Diagonal cut went	
through.	
The set of techniques known as Running In	Video of techniques 2.97r.2, 2.97v.1, 2.97v.3
involves closing with an opponent, to	

grappling distance. Many of these techniques are designed to disarm, and would have been useful for unarmed selfdefense.

The first Running In technique here counters a vertical cut. The swordsman in white steps forward with his *left* foot, and parries the cut by raising his blade to be nearly horizontal over his head. When the blades connect, the swordsman in white reaches in under his blade to grab the pommel of the swordsman in black with a reversed grip, twisting the arm to the outside, and taking the blade.

The second technique begins much the same. Once the blades have connected as before, the swordsman in white grabs the entirety of the knuckle guard, and twists the arm to the inside. At the same time, he forces his blade in and down, driving the other blade back towards the swordsman in black.

In this third technique, the swordsman in

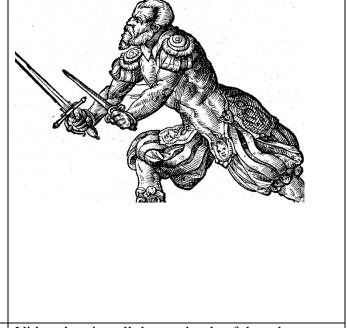


white is unarmed. The swordsman in black attacks with a Vertical cut, and the swordsman in white steps in to the left and slides to the side, to avoid the cut. He then grabs his opponent by the wrist, and traps the black swordsman's arm against his body. With a reversed grip, he then takes the pommel of the sword and twists it outwards, wrenching it out of the grip of the swordsman in black.

Meyer also talks about how to use a dagger in the non-dominant hand as a defensive weapon while wielding a rapier in the dominant hand. This style is effective against an opponent with one blade or two, and even multiple opponents, as each blade can counter a weapon, though it requires considerable skill to master these techniques. Meyer mentions three schools of thought on how to use the dagger: One believed it was

better to parry only with the dagger, leaving

the rapier free to attack, the second that

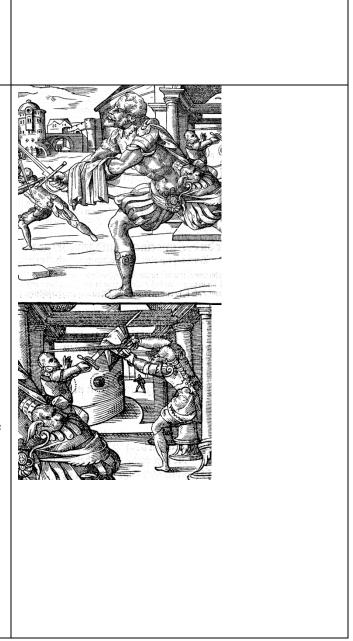


on Video showing all three schools of thought

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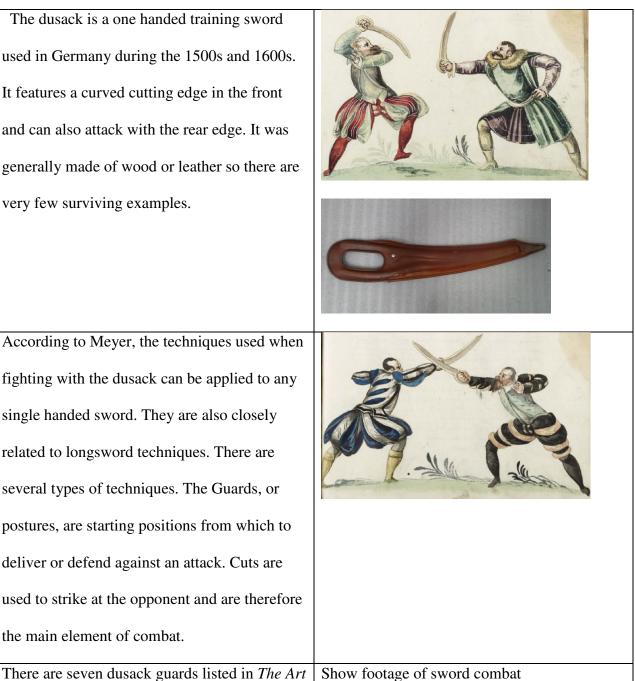
whichever side was attacked, the weapon in that hand should be used to parry, and the third that both weapons should be used to parry attacks.

Meyer briefly mentions using a cloak as a defensive tool as well, but strongly discourages use of these techniques. While they can be effective at trapping an opponent's blade, they can just as easily become a distraction to the user, hampering his defense. Meyer recommends that only people well trained in wrapping a cape properly around the arm should attempt this in combat, and even then counsels that these techniques all depend on cloth not being cut by a sword. These techniques require trapping the opponent's blade within the folds of the cape, for as long as is needed to make a cut or thrust against them.

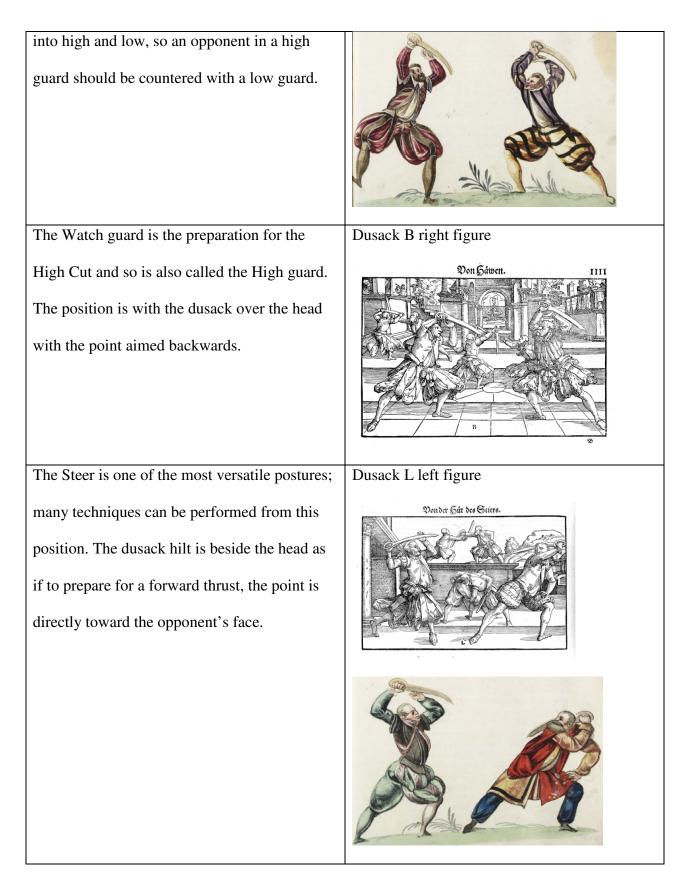


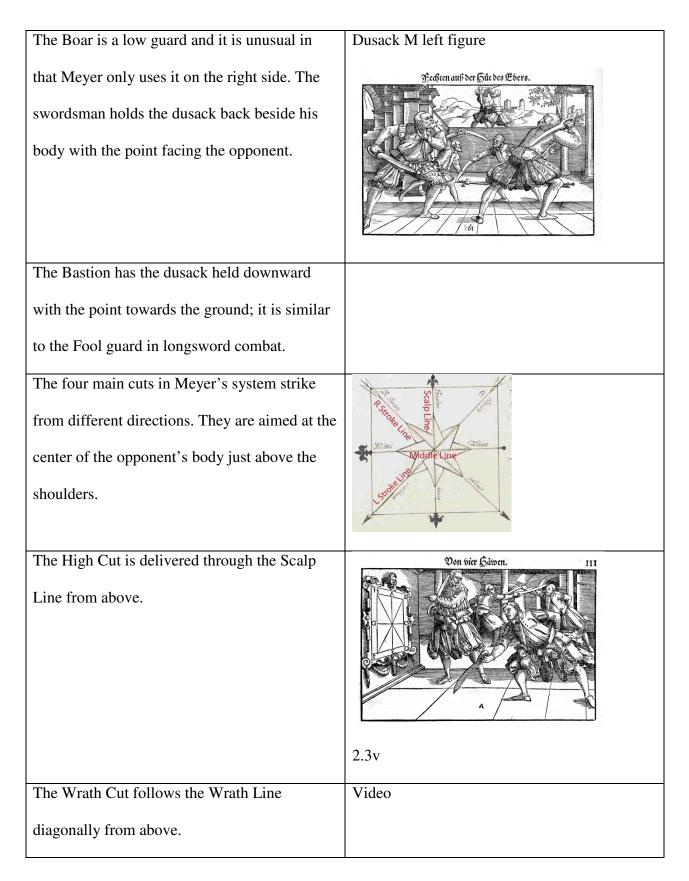
Dusack

The dusack is a one handed training sword used in Germany during the 1500s and 1600s. It features a curved cutting edge in the front and can also attack with the rear edge. It was generally made of wood or leather so there are very few surviving examples.



fighting with the dusack can be applied to any single handed sword. They are also closely related to longsword techniques. There are several types of techniques. The Guards, or postures, are starting positions from which to deliver or defend against an attack. Cuts are used to strike at the opponent and are therefore the main element of combat. There are seven dusack guards listed in The Art of Combat. Each one protects a certain part of the body and can be executed on both left and right sides. These guards can also be divided





The Middle Cut is horizontal through the	Video
Middle Line.	
The Low Cut follows the same line as the	Video
Wrath but starts from below.	
Once a student learned basic guards and cuts	Video
he could apply them in drills. Meyer is the only	
early master to give drills in his books; though	
they are an important part of any weapons	
training.	
The first drill begins in the steer. The	2.4v.1
swordsman in white steps forward to deliver a	Dusack image B
High cut no lower than the shoulders, then	video
brings his dusack around for a second. The	Port Gáwen. 1111
same cuts are done stepping backward to the	
original position. This drill teaches control of	
when to stop the dusack and how to step	
correctly.	B B
Meyer also gives variations on this drill. In the	2.5v.1
first the swordsman performs a high cut all the	
way through, then brings his left foot to a	
standing position while recovering into the	
Watch. He then executes a second high cut	

while stepping forward with the right foot.	
The second variation is the same but with a	2.5v.2
diagonal cut from below.	
In the second drill, the swordsman steps	2.6r.1
forward with a high cut, followed by a cut	
from below along the same line	
The third drill involves pulling back from a cut	2.6v.1
in order to attack from an unexpected direction.	Dusack image D, figure on right cuts up from
Here the swordsman in white begins a high cut,	below
but when black begins to parry he pulls back and cuts from below along the same line.	Pon Gâuen. VII
Meyer also gives an example of a cut along the	2.6v.2
wrath line. The swordsman in white cuts	
diagonally from below but pulls back and cuts	
diagonally from above.	
This can also be executed with a middle cut.	2.6v.3
The fourth and final drill teaches how to	2.6v.4
change cuts quickly and smoothly. It begins	
with a Wrath cut from the right, quickly	
followed by a Middle cut from the left.	

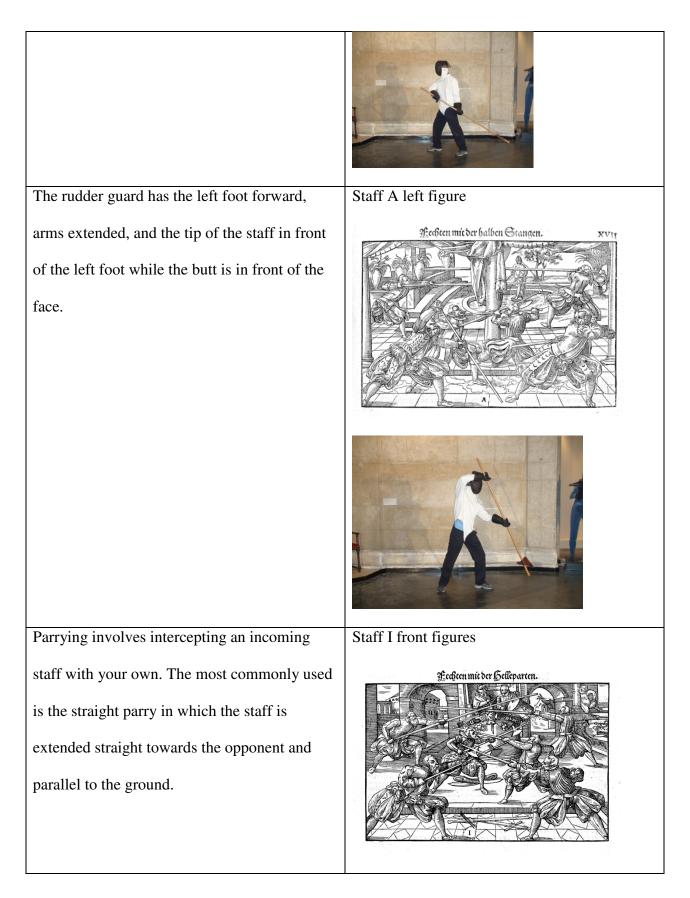
This drill can also be done with six cuts. The	2.7v.2
swordsman first delivers a wrath cut downward	
from the right, then a middle cut from the left,	
a Low cut finishing at the left shoulder, a	
second Low cut from the left, a Middle cut	
from the right, and a high cut.	

Staff Weapons

Meyer covers three types of staff weapons in	
his book, quarterstaff, the halberd and the pike.	
The quarterstaff is the most basic staff weapon	
possible; it consists of a six foot long wooden	
pole sometimes capped with metal at each end.	
Its size allows for powerful blows and thrusts	
and is useful for keeping opponents with	
shorter weapons at a distance. Meyer uses the	
quarterstaff to teach techniques applicable to	
all staff weapons.	
The halberd has both a spear point and an axe	the second se
head, with a fluke in back. It can both cut and	
thrust, and the fluke on back can be used for	and the second s
hooking techniques to take the opponent off	
balance. It is therefore considerably more	
deadly than the quarterstaff, even capable of	
piercing plate armor.	
The pike is the last staff weapon covered in	Zoom in on left back figure.
Meyer; it consists of a very long pole topped	
with a point. Ranging from 12 to 24 ft. in	
length the pike is by far the longest staff	
weapon. This size limited its use to tournament	
L	1

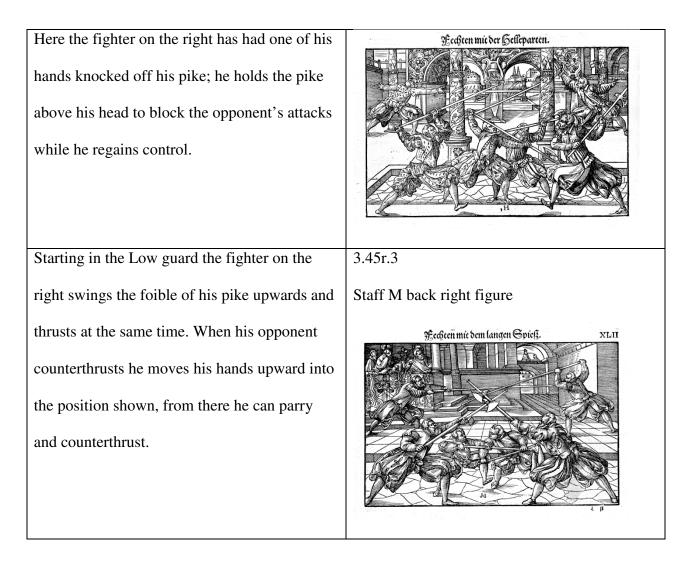
and military settings, where pike men were very effective against cavalry.	Ecchtenmit ber halben Grangen. XXIII
According to Meyer, a staff weapon can be	Diagram
divided into four sections. The tip or foible is	
the foremost part of the weapon. The forepart	
is in front of the forward hand. The midstaff is	
between the hands. The butt is behind the rear	
hand.	
Meyer describes five main guards. These are	
the starting point for any parry, thrust or cut	
and are the same for most staff weapons.	
The high guard has the left foot forward with	Staff G front left
the staff at your chest and the point straight up	
toward the sky	

	£c6ten mit ber felleparten.
In the low guard the butt of the staff is at the	Staff C front figures
hip with the point extended past the feet.	Fecter mit ber halben Stangen.
In the side guard the staff is at the hip with the	Staff G lower right
tip extended backwards.	Ecolen mit ber Gelleparten.



[
A typical technique in Meyer's system of staff	18r.1
weapon combat involves a thrust which is met	Fechtenmitder halben Stangen. XXIII
by a parry and counterthrust. Here, starting in	
the high guard, the fighter in black thrusts his	
staff forward while white steps to his right and	
counterthrusts.	
Here from the low guard a straight parry is	19v.1
used to block an attack. White then counters	
with a lunge and thrust.	
Drills are series of techniques that condition a	
fighter to execute techniques correctly and	
effectively. Meyer is the only early master to	
offer extensive drills in his books, though they	
are an important part of any weapons training.	
Meyer's first staff weapon drill is called the	3.32r.1
cross cut. Starting from high guard with the left	
hand in front, step forward and cut diagonally	
downwards from the left, bring the point of the	
halberd to point at the opponent's face, and cut	
downwards with the hook.	
This technique can also be done with a cut	32r.2
from below.	
This next drill is called driving and starts in a	32v.1

37r.1
30r.3
3.45r.2
Staff H back right figure



Dagger & Wrestling

Carried both by knights on the battlefield and	
by civilians for self-defense, the dagger was	
the most common weapon of the middle ages.	
This was due to its small size, ease of use and	
ability to pierce between the plates of a suit of	
armor.	
In medieval times the most common form of	
dagger was the "rondel" or "ballock." These	
daggers had a design optimized for strong	
thrusts. The blade was straight and thin to be	
able to slip through weak spots in armor. The	
guard was formed by a flat disk, with another	
at the pommel.	
The rondel dagger was not commonly used in	Image D back far left figure
Meyer's time. It had been replaced by double-	Cas vierde cheil difes Båchs
edged daggers seen in this woodcut. However,	
a wooden version of the rondel dagger	
continued to be used for sport and training.	
Dagger combat in Meyer also includes a lot of	
wrestling techniques due to the size of the	

weapons and the close proximity of the	
fighters. In fact wrestling techniques are one of	
the most important forms of medieval combat	
as grappling techniques are used in every	
weapon form. Meyer teaches dagger and	
wrestling as a single unified form.	
In Meyer's system of dagger combat, there are	
four main guards used as a starting point to	
defend against and launch attacks.	
The High guard is executed by merely holding	Dagger A right figure
the dagger point downwards in front of the face, high enough not to obscure vision.	Das vierbe eßeilbifes Båche.
The Low guard is the exact opposite of the	Dagger A left figure
High guard, with the dagger held over the thigh	(Image same as previous)
pointing upwards at the opponent's face.	
In the Middle guard the dagger is held at belt	Dagger F
level or straight outwards in front.	

	As vierbe theil bifes 336ds.
Lastly, the cross guard has the hands crossed in	
front of the body, right over left. This is the	
chief parrying guard and a starting point for	
many of Meyer's wrestling techniques.	
There are several different types of techniques	
possible with the dagger. Aside from thrusting	
with the blade Meyer describes striking with	
the pommel, disarms, and using wrestling	
techniques to throw an opponent.	
Here, starting with the dagger in front of the	3.3r.1
chest, the fighter in black thrusts from the high	Dagger B back left figures
guard. The fighter in white grabs his hand and	Das vierde cheil difes Buchs
twists it away, finishing with a pommel strike	
to the elbow.	

In this technique white blocks a thrust from	3.3r.2
high guard with the left hand. He then brings	Dagger B front figures
his right hand to help while stepping behind	Das vierde cheil disco Bucho
the opponent, putting him off balance. From	
here he steps forward again to take down the	
opponent.	
This technique is done when one opponent is	
about to draw his dagger.	
When black reaches for his dagger with his	3.10r.3
right hand, white grabs his opponent's left	Video
hand with his left and pulls towards him. At	Dagger D far left figures
the same time grasping black's right arm and	
pushing. This prevents black from drawing his	
dagger.	