



THE UNIVERSITY *of* EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

Recreating Medieval and Renaissance European combat systems:
A Critical Review of
The Art of Sword Fighting in Earnest, Mastering the Art of Arms vol 1: The Medieval Dagger, and The Duellist's Companion,
Submitted for examination for the degree of
PhD by Publication.

Guy Windsor

The University of Edinburgh
2018

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where stated otherwise by reference or acknowledgment, the work presented is entirely my own.

Guy Windsor

Ipswich, March 1st 2018

Table of Contents

Abstract	4
Lay Summary	6
Introduction	8
The Primary Sources for the Submitted Works	25
Methodology	43
Results: The Submitted Works	48
Conclusion	66
Works Cited	75

Abstract

The three publications offered for evaluation, *The Art of Sword Fighting in Earnest*, *Mastering the Art of Arms vol 1: The Medieval Dagger*, and *The Duellist's Companion*, establish by example the relatively young discipline of the accurate recreation of historical martial skills. This discipline includes the following elements:

- Textual analysis of historical sources (*The Art of Sword Fighting in Earnest*).
- Image analysis for the purpose of establishing details of the execution of the illustrated action (all three works).

Mechanical or kinesthetic analysis of the actions described and depicted (*The Medieval Dagger*, *The Duellist's Companion*).

- Determination of the historical and combat context in which the system is intended to work. In these cases, a formal duel or tournament contest between knights (*The Art of Sword Fighting in Earnest*, *The Medieval Dagger*), or illegal but socially acceptable unarmoured duelling (*The Duellist's Companion*).
- Observation of the overall tactical and mechanical preferences of the martial system represented (*The Medieval Dagger*, *The Duellist's Companion*).
- Organisation of the material into a syllabus for study and practice (*The Medieval Dagger*, *The Duellist's Companion*).

The submitted works demonstrate the discipline as applied to the extant works of three historical masters: Filippo Vadi (ca 1440–1500), Fiore dei Liberi (ca 1350–1420), and Ridolfo Capoferro (ca 1557–1620). The unified body of work is the ap-

proach to the material as represented by these books.

The submitted works:

1. *The Art of Sword Fighting in Earnest* (2018) is a translation and commentary on the late 15th-century Italian manuscript *De Arte Gladiatoria Dimicandi*. It makes the content of the manuscript available to anglophone non-paleographers, in a transparent way. The translation itself has also been released as a free download, with the original images in colour reproduction.
2. *Mastering the Art of Arms vol 1: The Medieval Dagger* (2012) is a practical syllabus for understanding and executing the dagger combat skills represented in Fiore dei Liberi's 1410 manuscript *Il Fior di Battaglia*. It includes detailed reference to the source, but also provides a template for martial skill development, such as ways to gradually increase the intensity and complexity of the drill until it approaches an actual combat environment.
3. *The Duellist's Companion* (2006) is a training guide for the style of rapier combat represented in Ridolfo Capoferro's 1610 work *Gran Simulacro dell'Arte e dell'uso della scherma*. Rapier mechanics and actions are refined and complex, so this book covers mechanics in some detail, and provides comprehensive instructions for making Capoferro's techniques and theory accessible to the modern reader.

Taken as a whole, these publications represent a new form of manuscript study: the recreation from textual sources of our hitherto lost martial heritage, and the development of a pedagogical method by which these arts can be safely taught and practised.

Lay Summary

This document is a critical review of three published books which taken together represent the process of recreating historical swordsmanship styles from historical sources, and have been submitted for the degree of PhD by Research Publications. From the early fourteenth century, experts in the arts of combat have produced written and illustrated works that represent these combat arts. Three such experts were Fiore dei Liberi, who lived from about 1360 to about 1420, Filippo Vadi, who lived from about 1440 to 1500, and Ridolfo Capoferro, who lived from about 1557-1620.

- Fiore dei Liberi wrote *Il Fior di Battaglia* (The Flower of Battle) in about 1405, a treatise that survives in four extant manuscripts, and covers knightly combat on foot and on horseback, in armour and without, with dagger, sword, spear, pollax, and unarmed, illustrated throughout.
- Filippo Vadi wrote *De Arte Gladiatoria Dimicandi* (The Art of Sword Fighting in Earnest) in about 1480, a treatise that survives in one manuscript, which includes 16 chapters of written fencing theory which are followed by illustrated techniques with sword, spear, pollax and dagger, in armour and without.
- Ridolfo Capoferro wrote *Il Gran Simulacro dell'arte e dell'uso della scherma* (The Great Representation of the Art and Use of Fencing), published in 1610. This includes a long theory section, followed by illustrated plays detailing combat with the rapier alone, and accompanied with a dagger, a cloak, or a shield.

The three submitted works are:

1. *The Art of Sword Fighting in Earnest* (2018) is a translation and commentary on *De Arte Gladiatoria Dimicandi*. It makes the content of the manuscript available to

the lay person in a transparent way. The translation itself has also been released as a free download, with the original images in colour reproduction.

2. *Mastering the Art of Arms vol 1: The Medieval Dagger* (2012) is a practical syllabus for understanding and executing the dagger combat skills represented in *Il Fior di Battaglia*. It includes detailed reference to the source, but also provides a template for martial skill development, such as ways to gradually increase the intensity and complexity of the drill until it approaches an actual combat environment.
3. *The Duellist's Companion* (2006) is a training guide for the style of rapier combat represented in *Gran Simulacro dell'Arte e dell'uso della scherma*. Rapier mechanics and actions are refined and complex, so this book covers mechanics in some detail, and provides comprehensive instructions for making Capoferro's techniques and theory accessible to the modern reader.

Taken as a whole, these publications represent a new form of manuscript study: the recreation from textual sources of our hitherto lost martial heritage, and the development of a pedagogical method by which these arts can be safely taught and practised.

Introduction

The aims of this research on historical methods of combat are threefold: historical knowledge for its own sake, the reconstruction of these lost combat arts, and the development of pedagogical methods by which these arts can be taught. The objectives are to develop and present working interpretations of three particular sources, Fiore dei Liberi's *Il Fior di Battaglia* (1410) Filippo Vadi's *De Arte Gladiatoria Dimicandi* (ca 1480) and Ridolfo Capoferro's *Gran Simulacro* (1610). By "working interpretations" I mean a clear and reasonably complete training method for acquiring the necessary skills to execute these styles of swordsmanship in practice: so a technical, tactical, and pedagogical method for each style. The methodology includes transcription and translation (where necessary), close reading, topological analysis, practical experiment, technical practice, and presentation of findings. The results include but are not limited to the three publications submitted for examination, which are:

Veni Vadi Vici, published in 2012, which is a transcription, translation and commentary on *De Arte Gladiatoria Dimicandi*: this has been extensively corrected and updated, and re-submitted for a second examination after which it will be published.

Mastering the Art of Arms vol 1: the Medieval Dagger, published in 2012, which is a detailed training method for the dagger combat section of *Il Fior di Battaglia*.

The Duellist's Companion, published in 2006, which is a detailed training method for the rapier and rapier and dagger system of *Gran Simulacro*.

I have organised them in reverse order of publication, as that reflects the order of the method of study they represent: creating a usable text; analysis of its parts; analysis of the whole text. I will present my conclusions at the end of this review.

I began doing this kind of research and recreation in 1993, and in 2001 opened a school in Helsinki, Finland, to research and teach historical swordsmanship styles full-time. The School has since expanded to serve groups all over the world. The students in these branches are in effect my grant-giving body; their enthusiasm, dedication, and financial support, have made this work possible.

The Aims

There is no substitute for experience. Studying these combat manuals allows us to expand and deepen our understanding of a vital aspect of European culture in the medieval and renaissance periods. We cannot realistically reproduce the experience of a duel, but many of those who would have trained in these systems in the past would never have called on them in earnest. This is especially true of the later systems. But we can, through diligent study of the sources, train in the same skills, towards the same end. In this way we can gain unparalleled insight into an important aspect of life in the past, for an important subset of the population.

The reconstruction of these arts from the sources requires development of systems of swordsmanship practice, so that we may gain through physical practice the experience of expertise in these arts. The sources on their own are not sufficient to recreate the systems, as a lot of essential information is assumed on the part of the authors and therefore left out. Underlying principles must be rediscovered, such as grounding (the creation of passive structures in the skeleton that route incoming force through the body and into the ground, which creates a sense of effortless strength), timing (for which a study of contemporary music is enlightening), and the will to face sharp steel. The material must also be reorganised so it can be optimally absorbed and assimilated, as the historical sources are rarely, if ever, organised as how-to books. They are usually designed as pictures of the system. It is up to us to

discover the fundamentals, and practise them until the more advanced applications become possible. The techniques in the sources represent what you should do in certain circumstances. They do not include skill-development exercises, nor a complete curriculum for training. By way of analogy, they are like concerti, not sets of scales and technical studies. So I have had to extrapolate from the techniques the technical skills required, and develop technical and tactical drills to develop those skills.

The development of teaching methods enables students to acquire skill at arms without injury. It is simply unacceptable these days for students to face serious injury in their martial arts training. This is in marked contrast to the “good old days”; there is abundant evidence of fencing matches being fought to first blood or the incapacity of one fencer.¹ And there is no equipment, however modern and high-tech, that can guarantee safety. Swords can kill men in armour, as can be seen from the sources, and as common sense demands. So I have had to develop ways to approach these skills that do not expose the students to unacceptable risks.

The Field of Study

Since the late 1980s there has been a surge of interest in recreating medieval and renaissance arts of various kinds. Perhaps the most visible example of this is Shakespeare’s Globe theatre, which was opened in 1997 close to the site of the original. Not content with recreating the physical theatre, the Globe are now offering performances with the original pronunciation (or as close to it as scholarship can develop). Similarly, contemporary musicians have recorded classical, baroque, and medieval music on reproductions of historical instruments, which sound very

¹ For a description of sixteenth century fencing matches fought to first blood or incapacity, see Amberger, 113-119.

different to their modern counterparts. There is an entire academic field now assembled under the umbrella of “Historically Informed Performance”². The process requires musicological scholarship, but also high-level practical skills in playing, and a restoration of the ancient arts of instrument-making.

The earliest glimmerings of this trend as regards swordsmanship can be seen in Turner and Soper’s 1990 book, *Methods and Practice of Elizabethan Swordplay*. It is less commonly known that there was a revival of the lost martial arts of Europe that occurred in the late 19th century, and required a similar mix of academic and practical skills.³ With the Victorian nostalgia for the “old ways”, scholars and classical fencers⁴ such as Alfred Hutton, Egerton Castle, and Cyril Matthey, discovered treatises on fencing dating back to the sixteenth century, recreated the systems of combat they found, and organised public demonstrations of the new, old, Art. A combination of factors lead to this movement running out of steam, but they left behind several excellent books (Castle’s *Schools and Masters of Fence* (1892), Hutton’s *The Sword and the Centuries* (1901), Matthey’s edition of George Silver’s *Brief Instructions on my Paradoxes of Defence* (1898), and others). Classical fencing remained, of course, and developed into the modern sport.

Late in the 20th century, with the Victorians’s legacy as a starting point, various groups in Europe and the Americas began again to recreate these arts. By 1992 the first publishing company dedicated to the subject was founded; Chivalry Bookshelf, which began with a quarterly magazine, but by 1996 was producing books aimed at

² For information regarding this movement’s early stages, see Kenyon and Sherman.

³ Military technology has ruled the European battlefield since the introduction of gunpowder. Rapid changes in technology, and rapid social changes, meant that unlike in other, more tradition-oriented parts of the world, European martial arts have changed very quickly, with little serious effort given to retaining the older traditions. So the old ways were not so much lost, as developed into unrecognisably new forms.

⁴ Classical fencing is the term given to fencing with foil, epee, or sabre, after duelling with the sword became outmoded, and before the development of modern electronic scoring methods which began in the 1930s. It was termed “classical” by its nineteenth-century practitioners.

the historical swordsmanship practitioner. Other notable publications in the field at this time were Terry Brown's 1997 *English Martial Arts* and a year later *Medieval Swordsmanship* by John Clements. The idea of accurately recreating historical swordsmanship styles from existing texts had hit a nerve. Groups began springing up independently of each other: when I founded the Edinburgh-based Dawn Duelist's Society in 1994, I had no idea that there were people in other countries interested in the same pursuit.

With the help of the newly available internet, local, national, and international bodies began to form (such as the British Federation for Historical Swordplay in 1998, which is still qualifying instructors today), and major conferences were organised, the first of which was the Swordplay Symposium International, in Houston, Texas, in May 2000. This was followed by the International Swordfighting and Martial Arts Convention in Lansing, Michigan, in September of the same year. Since then, there has been an explosion of interest, with literally dozens of events every year, and a natural division of the field into areas of interest, preferred training foci, and methodologies.

Publications in this field come in basically three types: how-to manuals, communicating basic technical skills; translations and reproductions of the historical primary sources; and analyses of those sources.

Perhaps the most important work in the early years was Christian Tobler's 2002 *Secrets of German Medieval Swordsmanship*, as it included a transcription and translation of Johannes Liechtenauer's mnemonic verses (from the Nuremberg Ms. 3227a, written in 1389), then translations of Sigmund Ringeck's glosses on the verses from *Codex Ringeck*, from the early 1500s, and Tobler's interpretation of those glosses, sword in hand, with photos. In other words, at each stage the source is clear: first the original verses, then the later glosses, then what Mr Tobler makes

of them. This book effectively defined the process of, and set the standard for transparency in, historical swordsmanship research.

Unlike Tobler's *Secrets*, my own first book, *The Swordsman's Companion* is a training manual for students of the longsword, drawing on the 15th-century Italian authors, Fiore dei Liberi (ca 1350-ca 1420), and Filippo Vadi (MS dated to 1482-1487, life unknown). I wrote this book at a time when my research into our medieval combat heritage was at a very basic level. I knew at the time that I, and the wider swordsmanship community, had not even begun to understand the depths of these arts. But there seemed to me to be a need for a basic primer in the use of a longsword, so that people who wanted to take up the practice of the art could do so in a useful and systematic way. My book introduced readers to the existence of the Italian sources, and provided them with the means of developing certain key skills, such as control of body and weapon, judgement of timing and distance, power generation, and tactical awareness.⁵ At the same time, Tobler produced *Fighting with the German Longsword*, which was the training manual for the German style as it was then understood, much like my own *Companion* was for the Italian style.

Perhaps the first training manual for historical swordsmanship was William Wilson's *Arte of Defence*, published in 2002, which is a relatively superficial overview of the early 17th-century Italian rapier system, and its 16th-century predecessor, known as the Bolognese school, with additional drills and tips for training. This work attempts to teach rapier to beginners, but suffers from a confusing organisation

⁵ As it depended very heavily on my previous martial arts and fencing training, and relatively little on my academic research, I have not submitted it to the examiners.

and a lack of accuracy⁶. My second book, *The Duellist's Companion* was written in some sense as a reply to Wilson. I also wanted to take a system that was unfamiliar to me (17th century Italian rapier), and apply my methodology to it, to see whether I could accurately recreate a swordsmanship style I knew little about directly from the source. I chose Capoferro's 1610 work *Gran Simulacro dell'arte e dell'uso della scherma*, partly because William Wilson and Jherek Swanger had just finished a translation (Capoferro, 2002), which made the source more popular in the wider swordsmanship community. My book was published in 2006, and was quickly adopted by several schools as their curriculum, and it has remained a standard work on training Italian rapier among practitioners of historical fencing ever since. It is an analysis of Capoferro's book, not a reproduction of it. It also partakes of the how-to manual, as rapier actions are mechanically challenging for most people, so it goes into detail regarding how to stand in guard, how to lunge, etc. While Wilson and I do not disagree on any major points of interpretation, his prior work illustrates only a handful of techniques, and does so without citing a specific source for them. As this book is one of my submitted works, I will discuss it in detail later.

Since the above-mentioned books were published, interest in historical swordsmanship has grown with astonishing speed: with many events every year, and new publications coming out at least quarterly. It has inevitably become much more specialised, with some groups focussing on creating a historically-inspired competitive sport; others taking the work of one historical master and studying that to the exclusion of all else; and most existing somewhere in between. Academically speaking the field includes relatively few trained researchers. Most practitioners and

⁶ For example, on p.14 Wilson states "throughout Europe during the 15th through the early 17th centuries, the prevalent religion of the time was Catholicism". It's as if Martin Luther never existed and the 30 years war never happened. Also, he makes several statements in direct contradiction to his stated sources: such as on p 79 he states "do not automatically riposte after a parry". But Capoferro (and indeed many others) explicitly say otherwise: "A good fencer should never parry without riposting" Leoni 2011, 21.

interpreters lack even a basic grounding in academic skills, which means that much of the work is based on very loose foundations. But at the other end of the scale we have a few professional academics, such as Kenneth Mondschein, Claus Sørensen, and Milo Thurston, who are setting an example for the rest to follow.

In recent years there have been dozens of translations, commentaries, training guides, and analyses made of the various sources, ranging from the early 1300s to 1940s military combatives. Taking only those that directly relate to the sources of my three submitted books, we have:

1) Regarding Vadi's *De Arte Gladiatoria Dimicandi*: there are only four secondary sources, a full-colour facsimile and translation, *De Art Gladiatoria Dimicandi*, by Luca Porzio and Greg Mele (Porzio 2002), an Italian reproduction of the source, *L'arte cavalleresca del combattimento* edited by Marco Rubboli and Luca Cesari (Rubboli 2005), an incomplete transcription and commentary by Carlo Bascetta as part of a much wider topic, *Sporti e giuochi: Trattati e scritti dal XV al XVII secolo* (Sport and Games in the 15th-17th centuries), and the Sotheby's auction catalogue from 1967 for the sale at which the Biblioteca nazionale di Roma bought it. Mele and Porzio's work was the standard reference for the anglosphere, and while it is largely excellent, the translation suffers from an attempt to reproduce the verse as verse. There are also issues with some of the interpretations of the techniques (presented in the footnotes), as one would expect from work over a decade old. My *Veni Vadi Vici* is an updated translation, which owes a debt to Porzio and Mele's work, and most importantly for most readers includes a detailed summary of and commentary on its contents. Bascetta is a very useful resource, and credited with providing the definitive dating of the manuscript in a published book, but is not a complete treatment of the source. Bascetta cites the auction catalogue from Sotheby's. I tracked down a copy in an antiques shop (it is not in any library) and found it has a wealth of

information on the source, including its collation, and provided Bascetta with his dating information.

2) Regarding Fiore's dagger material: there are five significant secondary sources. Tom Leoni's translation, *Fiore de' Liberi's Fior di Battaglia translation into English*, is the standard resource for most researchers. It is a complete rendering of the Getty manuscript into clear English. *Fiore dei Liberi 1409 Wrestling and Dagger*, self-published by Colin Richards in 2008 is an attempt to instruct the reader in Fiore's wrestling and dagger plays. It is problematic, as experiment shows that Richards' interpretation does not work well against a resistant opponent. Academically, it also suffers from relying on inaccurate translations of Fiore's work (it predates Leoni's translation). *Medieval And Renaissance Dagger Combat* by Jason Vail is generally considered a useful overview of the medieval and renaissance sources for dagger combat. It is a basic dagger combat primer drawn from many sources, and as such is not historically precise, but contains some sound practical advice. *The Knightly Art of Battle* by Kenneth Mondschein is a short overview of the manuscript, published through the Getty museum, which does not go into any details of interpretation. Last but not least, *Fiore dei Liberi's Armizare: The Chivalric Martial Arts System of Il Fior di Battaglia* by Robert N. Charette is a descriptive overview of the entire system of *Armizare* (the Art of Arms). It is generally considered a quality secondary source for Fiore scholars. My own *The Medieval Dagger*, which is a training method for practising the dagger combat element of Fiore's Art, serves a different purpose: it is organised and presented for practical skills development (*how* to do these techniques) and tactical understanding (*when* and *why* to do which technique), rather than a survey of *what* techniques there are.

3) Regarding Capoferro's *Gran Simulacro*: at the time of writing *The Duellist's Companion* (2006) there were only the aforementioned translation by Wilson and

Swanger, Wilson's *Arte of Defence*, and Jared Kirby's *Italian Rapier Combat: Ridolfo Capo Ferro's 'Gran Simulacro'*, which is a translation with some commentary. This latter translation is not highly regarded as it leaves many words untranslated and in whatever grammatical form they appear at that point in the text. This makes the book basically unusable for readers unfamiliar with Italian. In 2011, Leoni produced a better translation, under the title *The Art and Practice of Fencing*.

I hope it is clear that I am not working in a vacuum; there are many other scholars in this field, and while I take a different approach to many of my colleagues, and we are sometimes in lively disagreement, my work adds to, replies to, expands on, or is the basis of, theirs. This field is still so young and small that it is still possible to have read every book on a given source. And for a single additional work to make a major contribution.

Swordsmanship Sources from 1310 to 1610

Given the relative specialisation of my field, and medieval and Renaissance combat studies in general, an overview of the most significant historical sources may be useful. I will organise them by date, and highlight those sources that the submitted works are concerned with, which will be described in more detail in the next section. The current state of manuscript studies as regards combat sources is quite underdeveloped. Most academics are entirely unaware of the rich vein of artistic, literary, and cultural material they represent. There are one or two PhDs granted for work on these sources,⁷ and one or two publications by career academics that refer to them (notably Sydney Anglo's *The Martial Arts of Renaissance Europe*).

Pre-1400

⁷ Such as "Single Combat and Warfare in German Literature of the High Middle Ages: Stricker's *Karl der Grosse* and *Daniel von dem Blühenden Tal*", Rachel E. Kellett. 2008.

1320s: Our earliest source is the Royal Armouries Ms I.33, which according to the latest scholarship, dates to about 1320 (Forgeng 2013, 2). This is a beautifully illustrated manuscript detailing lessons in sword and buckler combat between a priest⁸ and his scholar. It takes the form of a series of lessons, in which the Priest trains the scholar in his own method, explicitly contrasted to that of the “common fencer”. This was translated and published by Jeffrey Forgeng in 2003 as *The Medieval Art of Swordsmanship: A Facsimile & Translation of Europe's Oldest Personal Combat Treatise, Royal Armouries MS I.33 (Royal Armouries Monograph)*, and again in 2013 in the companion volume of the truly extraordinary Extraordinary Editions version.

1389: Ms. 3227a (Germanisches Nationalmuseum, Nuremberg) is a *hausbuch* that has sections on all sorts of things (such as fireworks, alchemy and astrology), including several on swordsmanship, the most important of these being a record of the *merkeverse* (mnemonic verses) of Johannes Liechtenauer. It is the earliest reference we have for the Liechtenauer school of longsword combat, which spawned a plethora of illustrated glossa in the following century.

There are no other manuals definitively dated to the 1300s, though it is likely that the bulk of Fiore dei Liberi's treatise was written at the end of the 1300s.

The Fifteenth Century:

1410: *Il Fior di Battaglia*: the work of the Friulian master Fiore dei Liberi, which exists in four known manuscripts. This is a complete system for all the knightly weapons (sword, dagger, spear and pollax), on foot and on horseback, in armour

⁸ Forgeng suggests that these characters are members of a Cathedral school. Forgeng 2013, 2-3. It was not uncommon for priests to be armed in this period, and this work even shows a female combatant in its final folio. One of the joys of this research is that it provides counter-examples to the common view of medieval society as being extremely rigid in its permitted roles.

and without. This is one of my primary sources and will be discussed in detail in the following section.

The majority of sources from the 1400s are German in language and origin, and are almost all essentially glosses on Liechtenauer's verses. There are at least 40 manuscripts to choose from, and another 50 or so from the following century. The most studied of these include:

Ca 1430: *Gladiatoria*, MS KK5013 (Kunsthistorisches Museum, Vienna) a treatise of knightly combat with spears, longswords and daggers, in armour, and a section on wrestling.

1443: (and later copies from 1446 and 1459) Talhoffer's *Fechtbuch*, MS Chart.A. 558 (Universitäts- und Forschungsbibliothek Erfurt/ Gotha) published in translation by Mark Rector, *Medieval Combat: A Fifteenth-Century Manual of Swordfighting and Close-Quarter Combat* in 2000. This is a treatise of knightly combat with all sorts of weapons in and out of armour, and includes an array of judicial duelling techniques, including duelling shields, and duels of men against women.

1452: Codex Danzig, Cod.44.A.8, (Biblioteca dell'Accademia Nazionale dei Lincei e Corsiniana, Rome) is a treatise that includes but is not limited to glosses on Liechtenauer's verses, and has section by the following authors: Peter von Danzig zum Ingolstadt, Martin Huntfeltz, Jud Lew, Johannes Liechtenauer, Andre Liegnicz-er, and Ott Jud.

1470 (and two slightly later versions): Paulus Kal's *Fechtbuch* (Cgm 1507, Bayerische Staatsbibliothek, Munich). This is again a wide-reaching treatise with sec-

tions on all the knightly arms, and some judicial combat, and was published in translation by Christian Tobler (Tobler 2006).

1482-7: *De Arte Gladiatoria Dimicandi*, (Biblioteca Nazionale, Rome) by Filippo Vadi, from Pisa. This book is a detailed discussion of swordsmanship theory, and contains illustrated plays with all the knightly weapons (sword, axe, spear and dagger). As it is one of my primary sources it will be discussed in detail in the next section.

There is also one 15th century treatise in French, on the use of the pollax: *Le Jeu de la Hache*, MS Francais 1996, (Bibliotheque Nationale Francaise, Paris). Its exact date is unknown.

The Sixteenth Century

The 1500s saw an explosion of swordsmanship treatises, driven by the twin engines of social change (the rise of the merchant classes, who demanded and could afford training in the art of the sword, and books on their art) and the printing press: almost all swordsmanship texts from here on are printed. The most important works of this period are:

1509: *Exercitiorum Atque Artis Militaris Collectanea* by Pedro Monte, in Latin, published in Milan. Unusually, the original draft seems to have survived; it is in Spanish, and is at the Escorial (MS A.IV.23). This work surveys the martial arts of the time, and as Sydney Anglo writes: "No master was more comprehensive than Pedro Monte in 1509. He not only deals with wrestling, dagger fighting, the use of long and short lance, two-handed sword and the single-sword on its own or in combination with various types of shield and buckler and cape; he also discusses the various types of pole arm such as the partisan, the ronca, spetum, and halberd. He

examines in detail fencing and wrestling on horseback, along with various types of mounted lance combat; treats of physical exercises such as running, jumping, and vaulting; provides a little encyclopaedia of contemporary arms and armour; and finally places the entire corpus of material within a broader context of the art of war.” (Anglo, 26). Monte is also interesting because he probably knew of Vadi; he is mentioned (in glowing terms) in Castiglione’s *Libro del Cortegiano*, which was based on the court of Guidobaldo da Montefeltro, to whom Vadi’s treatise is dedicated.

1531: *Opera Nova* (Venice, unknown publisher, 1531) by Antonio Manciolino (published in translation in 2010 by Tom Leoni as *The Complete Renaissance Swordsman*). This is a thorough and readable description of the style of swordsmanship commonly referred to as Bolognese (as most of its author exponents hail from there). It is also the earliest source for this particular style.

1536: *Opera Nova* (Modena, unknown publisher, 1536) by Achille Marozzo, republished in 1546, 1550, 1568, and 1615. This is a very comprehensive description of the Bolognese style, and is thought to be very influential in its time, as witness its many editions.

1553: *Trattato di Scientia d'Arme, con vn Dialogo di Filosofia*, by Camillo Agrippa (Rome, Antonio Blado, 1553). This was the famous architect’s attempt to use geometry and reason to create a system of swordsmanship from first principles. Its influence is a matter of debate. It has been published in translation by Dr Ken Mondschein as *Fencing: A Renaissance Treatise*.

1570: *Ragione di adoprare sicuramente l'Arme* by Giacomo di Grassi (Venice, Giordano Ziletti, 1570). This work has the distinction of being the first Italian

swordsmanship treatise to be translated into English, in 1594 by “I. G.” an anonymous “gentleman”.

1570: *Gründtliche Beschreibung der Kunst des Fechtens* (A Foundational Description of the Art of Fencing) by Joachim Meyer (Strasburg, self-published (at ruinous cost), 1570). It was republished in 1590, 1600, 1610 and 1660, and published in translation by Jeffrey Forgeng in *The Art of Combat: A German Martial Arts Treatise of 1570*. This covers not only the longsword, but also the *rappir* (a long single handed sword much like a rapier, though the method of use is quite different to the Italian) and the *dusack*, a single-edged military type sword.

1575 *Lo Schermo*, by Angelo Viggiani (Venice, Giorgio Angelieri, 1575). This book is the Rosetta Stone of Italian fencing theory, as it details the function of the guards, the Aristotelean basis for the theory of tempo, and goes into detail regarding matters of mechanics that shine a necessary light on the earlier works, especially Fiore.

1599: *Paradoxes of Defence*, by George Silver (London, Edward Blount, 1599). This is not the earliest work in English, but it is by far the most influential, and has a wide following of exponents. It concerns itself with two main themes: the utter wretchedness of all Italian fencing and fencers, and the solid English principles on which swordsmanship is, or should be, based. Taken with his unpublished manuscript *Brief Instructions upon my Paradoxes of Defence* (Sloane MS No.376, which was discovered and published by Cyril Matthey in 1898) we have a detailed and complete theory of fencing, based on principles such as the four grounds (judgement, distance, time, and place). Most famously though he details the True Times, determining what part of the body should move first: time of the hand; time of the

hand and body; time of the hand, body and foot; and time of the hand, body and feet. His work has been republished and annotated in several places, notably Paul Wagner's *Master of Defence* (2003) and Stephen Hand's *English Swordsmanship* (2006).

The late 1500s saw the emergence of treatises on the longer, thinner rapier (despised by Silver). Perhaps the first of these was Giacomo di Grassi's *Ragione*, which lead up to the "big three" rapier treatises: Fabris, Giganti and Capoferro.

The Early Seventeenth Century

1606: Salvator Fabris published his monumental *Lo Schermo, overo Scienza d'Arme* (published in translation by Tom Leoni in 2005 as *The Art of Dueling: Salvator Fabris' rapier fencing treatise of 1606*). This was so successful it was republished in 1622, 1624, 1672, 1676, and 1713. It is a very thorough and clear explanation of the art of fencing.

1606: Nicoletto Giganti published *La Schola overo Teatro* (translated by Tom Leoni as *Venetian Rapier, Nicoletto Giganti's 1606 Rapier Fencing Curriculum*, 2010), which is a much simpler exposition of the art. Leoni calls it a curriculum, and that is close to the truth. Giganti spends much less time on theory, and presents the material in a logical order. A second book published in 1608 by Giganti, thought lost for centuries, was discovered in the summer of 2012 by Piermarco Terminiello, who published it in translation in 2013 as *The Lost Second Book of Nicoletto Giganti (1608)*.

1610: Ridolfo Capoferro published *Il Gran Simulacro dell'arte e dell'uso della scherma* (The Great Representation of the Art and the Use of Fencing). It is perhaps the most famous fencing treatise ever written, and in its time went through many

editions. For such a famous work, we know almost nothing about the author, save that which he tells us himself: he was 52 at the time of writing, and he came from Cagli, in Italy. As it is one of my primary sources I will discuss it in more detail in the next section.

The Primary Sources for the Submitted Works

In this section I will describe my primary sources in the order of their production.

This is different to my presentation of the submitted works, which follows the logic of the methodology, not the chronology of my sources or the publication order of the submitted works.

Il Fior di Battaglia, by Fiore dei Liberi, 1410

(The source for: *Mastering the Art of Arms vol. 1: The Medieval Dagger*, Wheaton, IL., Freelance Academy Press, 2012.)

Around the turn of the fifteenth century, Fiore dei Liberi wrote a treatise called *Il Fior di Battaglia* (a play on his own name, of course), for his patron Niccolo d'Este, Marquis of Ferrara (1383 – 1441). Fiore was probably born around 1350 and died sometime after 1410. He was an expert in *Armizare* (the Art of Arms), and claimed many famous knights as his students. There is record of him being tasked by the grand council of Udine with inspection and maintenance of the town's artillery in 1383, during the Aquileian War of Succession. There are also records of him working variously as a magistrate, peace officer, and agent of the grand council during the course of 1384 and the main street in his home town (Premariacco, Italy) is still named after him. (Malipiero 85)

The four extant mss of *Il Fior di Battaglia* discovered to date are:

- *Il Fior di Battaglia* (MS Ludwig XV13), held in the J. P. Getty museum in Los Angeles. "The Getty", as it is generally known, covers wrestling, dagger, dagger against sword, longsword, sword in armour, pollax, spear, lance on horseback, sword on horseback and wrestling on horseback. The text in-

cludes detailed instructions for the plays. Regarding dating, in this ms Fiore mentions a duel between Galeazzo da Mantova and Jean le Maingre (Boucicault), which we know took place in 1395 (Mele, 2103, 4). He does not mention Galeazzo's death, which occurred in 1406 (a crossbow bolt in the eye at Medolago) (Mele, 2013, 4). So it seems likely that the manuscript was made between 1395 and 1406. The treatise has been published in facsimile by Massimo Malipiero in 2006, and a full translation into English by Tom Leoni in 2009.

- *Flos Duellatorum*, in private hands in Italy, but published in facsimile in 1902 by Francesco Novati. "The Novati" or "the Pisani-Dossi" follows more or less the same order and has more or less the same content as the Getty. The main differences are that the spear section comes between the dagger and the sword, and the dagger against sword material is at the end. The text is generally far less specific than in the Getty, but it is the only version that is dated by the author,⁹ who states (on folio 1, second paragraph) that he is writing on February 10th 1409 (1410 by modern reckoning.) He also states that he has been studying for 50 years, which would put his date of birth around 1350, assuming he began training at the usual age of 10 or 12.
- *Il Fior di Battaglia* (Morgan MS M 383), "The Morgan", held in the Pierpont Morgan museum in New York, proceeds more like a passage of arms: first comes mounted combat with lance, sword, and unarmed; then on foot, spear, sword in armour, sword out of armour, and sword against dagger. There is no wrestling or dagger combat shown except against a sword,

⁹ The introductions to all four versions are written in Fiore's voice. This does not of course mean that Fiore himself wrote any of them, or even necessarily saw any of them.

though they are mentioned in the introduction. I conclude that the ms is incomplete. Most of the specific plays shown here are also in the Getty MS, and these have almost identical texts.¹⁰

- *Florius de Arte Luctandi* (MSS LATIN 11269), recently discovered in the Bibliothèque Nationale Française in Paris¹¹, is probably a later copy. “Florius” has Latin text and is beautifully coloured. It follows the approximate order of the Morgan, though is more complete, containing all the sections seen in the Getty and the Novati.

The Structure of *Il Fior di Battaglia*, Getty MS:

This is a vast and complex treatise, covering an enormous range of weapons combinations, techniques, counters and fundamental concepts, spread over some 90-odd sides of vellum (foliated 1 to 47). The first three written sides (Fol 3r to Fol 4r) are taken up with a text-only introduction.¹² This covers the following points:

- A brief biography of Fiore himself.
- A list of his more famous students and some of their feats of arms.

¹⁰ Malipiero includes the relevant transcriptions from the Morgan side by side with his full transcription of the Getty, with points of difference helpfully italicised. (Malipiero 431-497) There can be no doubt that whichever text was written second, the scribe had the prior to hand.

¹¹ By Ken Mondschein and, independently, by Fabrice Cognot, both in 2008.

¹² The pagination in general use and which I am using here is different to that employed by the Getty museum; because the first page has a three written into the corner, we number the treatise from page three onwards; the Getty numbers the pages from the first extant page. Malipiero gives both uses, the Getty's version in brackets.

We should also note here that the page numbers we are using are as the manuscript is currently bound; it is clear from the content of fol 40, which contains the fourth and fifth masters of the dagger, that this page became detached at some point in the manuscript's history and was rebound in the wrong place. It belongs between folia 16 and 17. It is conceivable that this page was originally drawn in its current place, but given the overall attention to detail, and the logical progression of the material, I find this latter vanishingly unlikely. Careful examination of the original manuscript may solve the question once and for all, but access to it is extremely difficult to obtain.

- A brief discussion of the secret nature of the art, and Fiore's opinions about different modes of combat (fighting in the lists, versus fighting in arming doublets with sharp swords).
- A further description of Fiore's training, and his opinions regarding the necessity of books in general for mastering the art.
- A connection of Fiore himself and the book with higher authority (Niccolo, Marquis of Este) who commissioned the work.
- An overview of the book and its didactic conventions: beginning with some background information on wrestling, and advice to the student on what is required.
- Discussion of *posta*: "...*E tanto e adire posta cho modo de apostar lo inimigo suo per offenderlo senca priculo di se instesso*" (... which is as much to say *posta* is a method of lying in wait for your enemy in order to harm him without danger to yourself").
- A description of the crown and garter convention, by which one can tell at a glance who is winning the fight in any given image. The masters that begin each section are shown standing in guard, and wear a crown to indicate their masterly status. They are the "first masters". Following them are one or more "remedy masters" (also called the "second masters"), who illustrate a defence against an attack. Following each of them in turn are their scholars, who are identified by a garter, who execute the techniques that follow the previous master's remedy. After a scholar or master may come a "counter-remedy master" (the "third master"), wearing a crown and a garter, who illustrates the counter to that remedy, or to a specific scholar. Occasionally, there

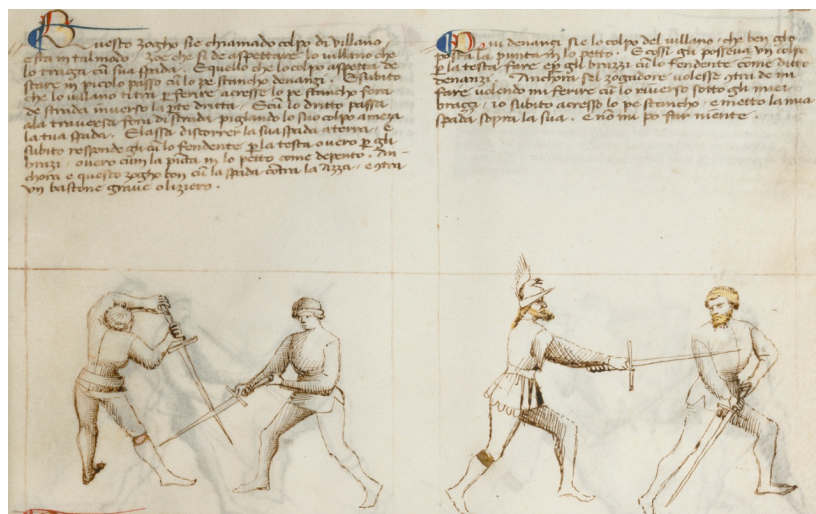
is a fourth master, who may be called the “counter-counter-remedy master”, who wears the crown and garter too. Fiore specifies that most sequences don't get beyond the third master (i.e. the attack is met by the remedy, which the attacker counters), and it is perilous (perhaps because it is insecure) to go beyond three or four. This visual convention is unique to Fiore as far as we know, and makes it easy to be sure who is supposed to win from any illustrated position, and what stage of the fight (principle or guard; defence; counter to the defence; counter to the counter) is being shown.

The conclusion to the introduction is particularly interesting: "*Ben che le rubriche e le figure eli zoghi mostrarana tutta larte si bene che tutta la si pora inteniere*" (Anyway, the rubric and the figures and the plays will reveal all of the art so well that everything can be understood). In other words, this book should be enough to transmit the art completely. A bold claim, but one that is borne out, I think, once the conventions are understood.

Directly after the introduction begins the illustrated treatise. Each page is divided in quarters, with an illustration (usually) in each quarter. On one page there are five illustrations, arranged like the five mark on a die (f9r); on two others, the entire page is given over to one core illustration (the so-called *segno* (“sign”) pages, the first illustrating the blows of the dagger (f9v), and the second illustrating the blows of the sword (32r). Five of the pages have only three illustrations, usually at the end of a given section. Four have only two, either at the beginning of a section (such as the sword in two hands, f25r) or at the end. For techniques on foot, each play, including (usually) two combatants, occupies one quarter, so there are four plays per page. The primary exceptions to this are the three occasions where a lone master faces two or three opponents (on 19r, 20r, and 31r), which occupy two quar-

ters (one for the defender, one for the attackers). Mounted combat naturally occupies more space in the early stages of the fight, so the first 12 plays occupy six pages (ff39r-43v). Once the combatants have closed enough to strike with the sword, or to grapple, the plays are again shown four to a page.

Every image has accompanying explanatory text, that often goes into extraordinary detail, such as the description of the *colpo de villano* on 26r. This play continues over three illustrations, including the illustration of the initial crossing of the swords on 25v. You can see the play and its continuation here:



The text of the first of the images is translated by Leoni thus:

This action, called the peasant's strike, is performed as follows. Wait for the peasant to launch his cut with his sword. As you wait, stand in a narrow stance with your left foot forward. When he attacks, step with your left foot offline to the opponent's right, then perform an oblique pass with your right foot, catching his cut with the middle of your sword. Let his sword glide to the ground, and immediately respond with a fendente to the head or arms, or with a thrust to the chest as you will see next. This play is also effective us-

ing a sword against an axe as well as against a heavy or light staff. (Leoni 2012, 49)

Though we assume the intended readership to be Fiore's patron and the lords, knights and squires" that are his students (as he states on f1r), and there are still major challenges to interpreting this source, it is astonishing that one of the earliest sources we have should be so detailed and thorough. It is quite unlike its contemporary German sources, which tend to show one illustration per technique, with a very brief statement of what is being shown.

The contexts in which the Art is shown (and there is no doubt that this is one Art, to be applied to whichever weapon you were required to wield) each have their own section, which usually begins with a set of guard positions (*poste*), then a basic defence against an attack, followed by variations on the defence, and counters to it.

The sections are:

On foot, out of armour:

- *Abrazare*: wrestling. This starts with four guard positions, and has just one remedy master, who uses arm breaks, knee strikes, nerve strikes, and even a short stick (*bastoncello*). This section comprises 20 plays, in the last two of which the master is sat on a bench defending against a dagger attack with the *bastoncello*.
- *Daga*: dagger. This begins with five ways of holding one of the first four guards, with and without the dagger. Then an illustration of the four dagger strikes, and the four main types of technique: disarm, breaking the arms,

locks, and throws. The technical section is divided into nine remedy masters, three of which are holding a dagger themselves (6, 7 and 8), and two of which are only to be used in armour¹³. This is the largest single section, comprising 76 plays. It is followed by a section of dagger defences against the sword, and scabbarded sword against the dagger. My book *Mastering the Art of Arms, vol 1: the Medieval Dagger* is a complete training method for assimilating this part of the system.

- *Spada in un solo mano*: the sword in one hand. This section has a single master facing three *cativi* (ruffians). The Master defends against a cut, thrust and thrown sword with a parry, which results in one of the eleven plays that follow.
- *Spada a due mane*: the sword in two hands. This section is the most sophisticated and developed of them all. It begins with the definitions of some footwork terms, then shows six ways to hold the sword, then 7 blows, and 12 guards. This is followed by two subsections: 20 plays of “*Zogho Largo*” (wide play) and 23 plays of “*Zogho Stretto*” (constrained play). My forthcoming book *Mastering the Art of Arms, vol 2: Longsword Fundamentals* is a complete training method for assimilating this part of the system.

On foot, in armour:

- *Spada in arme*: sword in armour. This section begins with six guards, followed by 16 plays. There is no remedy master shown.

¹³ Masters two and seven. There is no specific armoured dagger section, and indeed in the unarmoured longsword section there is at least one action shown that would be “better done in armour”: the *punta falsa* (false thrust) on f27v. Given the way experience shows that techniques in armour overlap with those out of armour, this is unsurprising. It is likely that these techniques that appear to be out of context are placed there for pedagogical reasons.

- *Azza*: the pollax. This section begins with six guards, followed by 10 plays, including the use of two specialised axes: one with a weight attached to a rope, for wrapping the opponent's legs, the other with a box of poison dust for blinding the opponent with.
- *Lanza*: the spear. This is the smallest section, with six guards followed by only three plays.

On horseback, with and without armour:

- *Lanza*: lance on horseback. This section has half a dozen plays of lance against lance, then two of lance against sword.
- *Spada*: sword on horseback. This begins with two different masters, and is followed by nine plays of sword against sword, then seven of wrestling on horseback.
- Defence on foot against mounted opponents. The treatise ends with three plays done by a man on foot armed with a *giaverina* (a heavy spear), defeating mounted opponents.

This is a truly monumental work, and represents an overview of knightly combat that is far more systematic and complete than that of any other source.

***De Arte Gladiatoria Dimicandi*, by Filippo Vadi, ca 1482**

(The source for *The Art of Sword Fighting in Earnest*, Ipswich, Spada Press 2018.)

The second of our medieval Italian sources, *De Arte Gladiatoria Dimicandi*, was written between 1482 and 1487 by a Pisan master, Filippo Vadi. We know al-

most nothing concrete about Vadi's life. His treatise shows a clear correlation with Fiore's art. One interesting difference, however, is that Vadi includes a lot of theoretical discussion in his introduction, and very little actual instruction in the text supporting the pictures. This manuscript has been published with text, pictures and translation, by Luca Porzio and Greg Mele in 2003, and my own transcription, translation, and commentary volume titled *Veni Vadi Vici* was published in 2012. For most readers the added value is in the introduction and the commentary, which take into account the intervening decade of research into these arts.

There is no doubt that Vadi is building on Fiore's prior work. Some parts are lifted whole while some others are modified. For example, the text from Fiore's Pisani-Dossi MS (carta 18A) regarding the guard *tutta porta di ferro* reads:

Tuta porta di fero son la piana terena

Che tagli e punte sempre si refrena

I am the whole iron gate, the flat ground,

That always impedes cuts and thrusts.

Which is almost identical to the text Vadi uses for his third guard on f16v, also *porta di ferro*:

Son porta di ferro piana terrena

Che tagliae et punte sempre si rafrena

I am the flat ground iron door

That always impedes cuts and thrusts.

This does not mean that Vadi trained in a direct lineage from Fiore: indeed he makes no mention of Fiore at all. It is therefore more likely that his training came

from a related style, for if he was a representative of the earlier master's art, he would surely say so (as indeed the Liechtenauer descendants do in the contemporary German treatises). It is perhaps more likely that Vadi came upon a copy of Fiore's work and copied parts of it. The material that makes this book so much more than simply a rehash of Fiore is Vadi's explanation of the principles of swordsmanship, which I discuss in detail in the commentary section of *The Art of Sword Fighting in Earnest*. He also introduced many new guards, some of which reappear in later sources. I discuss these in some detail in the book, but in summary, this material does support, at least in part, Vadi's repeated claim that he is representing a new way of fencing.

Dating the text

There is only one known copy of this manuscript, and it is in the Biblioteca Nazionale di Roma, Fondo Vittorio Emanuele, Codice 1324. It is dated from 1482-1487. It cannot really be older because it is dedicated to Guidobaldo da Montefeltro as Duke of Urbino. Guido inherited the title in 1482. The latter date, 1487, comes from this book's presence in the Catalogue of the Urbino library, which was completed in 1487. (Sotheby, 94)

From the point of view of the fencing historian, this is perfectly consistent with the book's content. It covers the sword, spear, axe and dagger on foot, in and out of armour, which places it firmly in the fifteenth century. By the turn of the 1500s, the art of fencing had changed significantly, not least the longsword being largely abandoned in favour of a single-handed sword. The longsword as a sidearm was out of fashion before 1500; it grew into the mighty two handed spadone, which is far too big to wear on the hip. Vadi's sword appears from his description and the illustra-

tions to be significantly longer than the longsword we associate with knightly combat: surviving examples from the early 1400s tend to be no longer than would reach to the sternum: Vadi's reaches the armpit. This is a difference on most people of about three inches which may not seem that much in real terms, but does quite dramatically alter the sensible use of the weapon, and the measure at which it is fought. Vadi's sword is perhaps a developmental stage between Fiore's *spada a due mane* and the Bolognese *spadone*.

The Structure of *De Arte Gladiatoria Dimicandi*:

This book begins with a dedication to the young Duke, in execrable Latin, and follows it with:

- An introduction in prose extolling the virtues of the Art.
- 16 chapters in verse regarding swordsmanship, first defining it as a true science, then going into some detail regarding the principles of swordsmanship.
- A *segno* (sign, in this case and elsewhere, a full-page illustration) showing the virtues of a swordsman. (From here on every page has illustrations.)
- A *segno* (sign) showing the paths of the seven blows, with idiosyncratic nomenclature unlike that of any other source.
- The 12 guards of the sword.
- 25 sword plays.
- Four guards of the pollax, and four plays.
- Four guards of the sword in armour, and five plays.

- Three plays of the spear.
- 34 rather disorganised dagger plays.
- Some sword defences against spears and javelins.
- And finally an extraordinary set of eight dagger plays, with the least helpful text imaginable: each play is shown in two images, one with the text *partito de daga*, (dagger technique) the other with the text *finire del partito* (end of technique). No further commentary is provided.

It is interesting that the author has put almost all his effort into the discussion of swordsmanship. It is clear that for Vadi, the swordsmanship is the core and centre of the Art; he seems to include the other weapons as an aside or because they are expected. This is quite unlike Fiore, but is a pattern that persisted from here on. By the end of the next century almost all Italian treatises focussed on the sword. This is probably due to the changing importance of the weapon. To a knight or foot-soldier of the 14th century, the sword was a back-up weapon. Most killing was done with artillery (such as bows), and polearms such as spears, glaives, and lances. With the advent of gunpowder in the 15th century the sword became less important on the battlefield but found a greater importance in civil culture.

Vadi's contribution goes beyond his illustrated content though: this is the first time in a combat treatise that we find a lengthy discussion of theory followed by exemplary plays, a pattern that became the norm in the following century.

Gran Simulacro dell'arte e dell'uso della scherma, Ridolfo Capoferro, 1610.
(The source for *The Duellist's Companion*, San Francisco, CA., Chivalry Bookshelf, 2006.)

Ridolfo Capoferro's *Gran Simulacro* was published in 1610, and was reprinted in 1629, 1632, and 1652. Despite this, it was apparently not generally well thought of in its own century, with other masters, such as Alfieri, disparaging it. The book had to wait until the nineteenth century before becoming widely known and highly regarded (Leoni 2011, xiv). It is now probably the best known of all Italian rapier treatises, and has been translated at least four times in the last decade (Wilson and Swanger 2002, Kirby 2004, Thomas 2007, Leoni 2011). It is hard to account for its popularity, as compared to the other two contemporary works, Fabris 1606 and Giganti 1606, it is badly organised, and not very well written. But for those of us for whom it is their primary rapier source, it has a charm that the other two can't touch. I think the reason we love it so is partly due to its quirky writing, and partly due to its organisational eccentricities, both of which I will illustrate below.

To get the flavour of the language, this from plate 15:

Cognoscendo, quanto sia utile per esperienza, il saper guadagnare la spada dell'inimico, non ho voluto tralasciare di dire il modo, il quale si deve tenere in andare a stringere, & prima volendo andare a stringere di dentro, come di fuori, secondo l'occasione, la spada dell'Aversario, si dovera prima stringer la medesima di lontano circa la punta un palmo, quale se accorrera, che s'habbia stringere di dentro si fara, che la punta della spada, guardi la spalla destra dell'Aversario: e se di fuori, che guardi la sua spalla sinistra, il se fatto si andera caminando verso la spada dell'Aversario... (I am less than half way through this sentence).

A straight translation would read:

Knowing, how useful it is from experience, to know how to gain the sword of the enemy, I did not want to omit to tell the method, with which you should go to constrain, and first wishing to go to constrain on the inside, as on the outside, according to the occasion, the sword of the Adversary, one should first constrain the same distance from the point a handspan, which will hasten if, that you have constrained on the inside, that the point of the sword points at the right shoulder of the Adversary: and if on the outside, it points to his left shoulder, that done one should go walking towards the sword of the Adversary...

This is not the clearest way to communicate! The rambling nature of Capoferro's prose is echoed in the overall structure of the book.

The Structure of *Gran Simulacro*:

- *Tavola Generale dell'arte della scherma*: "General Table of the Art of Fencing". The Table is subdivided into 13 named chapters, and 118 numbered paragraphs (for example chapter 11 contains paragraphs 104 to 111). They are a thorough attempt to describe the theory of the Art, and include sections on topics such as "measure", "tempo", "the body", "the arms". This is the "Art" section; hereafter Capoferro is describing the "Use".
- *Alcuni Ricordi, o vero avvertimenti della scherma*: "Some Admonitions, or Advice, on Fencing". These comprise 13 named and numbered paragraphs. They include such gems as *Modo che si deve tener contra un'huomo bestiale* (way to hold yourself against a bestial man) and *modo di venir perfetto giocatore* (way to become a perfect player [fencer]). Capoferro also insists here, in the paragraph titled *delle vanita delle finte*, that feints are useless.

He goes on to show a feint being used to counter the primary technique on no less than a quarter of the plates that follow.

- *Dichiaratione d'alcuni termini della scherma*: “Explanations of Some Terms of Fencing”. These comprise 17 numbered paragraphs, some of which do explain terms such as “tempo” and “measure”, and others which are instead advice for various situations, such as how to deal with opponents who circle, or with those that lead with their left leg.
- The Plates: The plates are numbered from 1 to 43. The ordering of the plates is quixotic. The first shows how to lay your hand on your sword if challenged, then there are six guards (plates 2-4) then the lunge (plate 5). How to approach the opponent on the inside¹⁴ is on plate 6, then plates 7-12 show what may happen from there. On plate 13 he suddenly skips to the outside¹⁵ for the action called the *scannatura* (which, to be fair, was described as a counter on plate 12), then back to the inside for plate 14. Plate 15 has more instructions regarding the approach, then there are techniques begun on the outside (plates 16-19). Plate 20 is almost (but not quite) a duplicate of plate 2, showing the stringering¹⁶ with sword and dagger. Then plates 21-35 show sword and dagger techniques in no discernible order, then 36 and 37 show the sword and cloak; back to sword and dagger for 38-41, and finally two plates of sword and rotella shield.
- *D'Alcuni Termini del taglio*: “Of some Terms of the cut”, a single page in which Capoferro discusses the uses of and defences against cuts.

¹⁴ i.e. to the left of your opponent's sword as he sees it.

¹⁵ i.e. to the right of your opponent's sword as he sees it.

¹⁶ constraining your opponent's sword with yours such that he cannot attack directly.

- *Modo Sicuro de difendersi da ogni sorte di colpi*: “A Secure Way to defend oneself from every sort of blow”. This is a fascinating throwback to earlier styles: as with Fiore, Vadi, Viggiani, Manciolino and others, the basic defensive idea is this: wait with your sword down and on your left. When your opponent attacks, beat his sword away to the right, and strike. This is clearly a general theme in Italian swordsmanship (it does not appear in, for instance, contemporary German sources, though the very first action in the oldest treatise we have, I.33, (which is German in origin) has as its very first action, a rising blow from the left against a sword coming towards you from above) (I.33, f2r). It is also interesting to note that here that on plate 42 and elsewhere, Capoferro makes reference to the opponent being in guards using Bolognese terminology (*stretta* and *larga*), and the advice in *D’Alcuni Termini del taglio* could be taken straight out of any Bolognese treatise. This provides interesting evidence for the development of the rapier system from the earlier style, and suggests that it was not simply invented from whole cloth (As, for instance, Agrippa claims he did).¹⁷

Despite this opaque language and organisational eccentricity, *Gran Simulacro* managed to become famous from the 19th century onwards. It somehow became thought of as a work of clarity and precision. Modern examples of this inexplicable opinion include William Gaugler’s assertion in his *History of Fencing*: “*Gran Simulacro* ... establishes, in an absolutely clear and precise manner, the principles underlying Italian fencing theory.”(39) Gaugler is echoed by Tobias Capwell in *The Noble Art of the Sword*: “probably the clearest, most concise synthesis of Italian fenc-

¹⁷ In terms such as “my new discovery”. Mondschein 2009, 7.

ing” (118). It is precisely because Capoferro is not clear or concise that it was necessary to write *The Duellist’s Companion*.

Methodology

On the basis of the historical material discussed above, the field of historical swordsmanship has developed into a mixture of manuscript studies, cultural history, and the embodied practice of a historically contextualised art.

As Prof Andrew Lawrence-King wrote in “Links to Early Music”:

As in Historically Informed Performance of music, actions in historical swordsmanship are based on period treatises. Best practice in the teaching and performance of Historical Swordsmanship is rather ahead of today’s early music, in evidence-based teaching, in uniting academic theory with practical performance, in the use of historically precise terminology, and in the detailed study of specific sources.

Where early musicians study, say, early 17th-century style in general, swordsmanship scholars will base an entire practical method on one specific source, distinguishing between fighting Capoferro-style or Fabris-style. The comparison would be to distinguish between the fundamentals of continuo-playing for Caccini and Monteverdi...¹⁸

There is still much to be done though to bring the profile of the study of swordsmanship up to the level of the study of early music. There is a large amount of source material available these days, largely thanks to amateur researchers in the field scanning everything they find and putting it online for free. My work to date has focussed primarily on the sources I can read in the original (English, Spanish, French and Italian), and within that, most of my work has been on 15th, 16th, and 17th century Italian sources. The publications I have submitted for examination are concerned primarily with Fiore, Vadi, and Capoferro, and my intention in every case is to

¹⁸ Andrew Lawrence-King, “Links to Early Music”, 5. Submitted to the Australian Research Council Centre of Excellence for the History of Emotions, and shared with me via email, April 16th, 2012.

make the physical practice of the combat arts represented in my primary sources available to the modern student, staying as faithful to the source material as possible.

As Lawrence-King points out, the work is multi-disciplinary, requiring a broad range of skills: from locating documents long forgotten in the archives, to hitting hard and accurately with four feet of sharp steel; from developing training methods for combat skills, to keeping control of a class full of armed young men high on testosterone and adrenaline.

Thus the process of historical swordsmanship has two distinct parts: working out the system itself, and teaching it. The process is not linear; insights in reading are fed into class practice, which may yield further insights that change the reading. As we cannot come to a definitive reading without having applied every action, and yet we require the text to determine those actions, the process grows organically, with academic study and embodied practice feeding into each other.

Working out the system:

1. Find the sources. These can be as obscure as a single copy of a single manuscript, or as easily found as a simple library search. During the past 10 years much of the material located through archival methods has been made available online.
2. Manuscript study: transcription and image analysis. The usual approach to the pre-1500 manuscripts is to create a transcription, so that colleagues can immediately see the reading decisions you have made, which may affect your interpretation. The images, if any, may be intended to represent a single moment in time, or a set of options, or a variation on the technique referred to in the text. They may be more or less accurate to life. All of these points

must be addressed. Dating is also often an issue, and is necessary for the next step.

3. Determine the context for the combat system being represented. There is a huge difference in the physical and psychological environment between, for example, a knightly tournament fought for prizes; a judicial duel, in which one combatant must die if he fails to prove his case; a fencing match between equals; and the training of soldiers. We need to know the social rank of the combatants, and the social expectations of behaviour, as they determine what the art represented is intended to accomplish.
4. Determine the nature of the weapons, clothing and armour in use, and acquire accurate facsimiles. This is expensive, of course, and the source of much debate within the field. Much of my recreative practice is done with accurate, sharp, modern copies of period weapons. It is necessary to test all interpretations in period clothing, especially footwear, as it can affect movement considerably.
5. Reconstruct the techniques. This single step can take many years to get right, as it is intimately connected with the next step, which is to determine the patterns of tactical choices represented by the text. The pattern can suggest how a technique is done, and how the technique is done of course affects the pattern. Some authors do provide tactical and theoretical introductions to their work, but that is not as common as one might wish, especially prior to 1500.
6. Pattern analysis: determine the general rules behind the specific technical examples given, and note the consistency between any theoretical points in the text and the technical examples.

7. Test the interpretation: this step is usually done in the following contexts: slow with blunt swords; fast and hard with blunt swords; slow with sharp swords; fast and hard with sharp swords; in set drills done competitively; and in free fencing.
8. Identify or extrapolate heuristics: rules of thumb that apply to the main body of the text, and to which specific exceptions may apply.
9. Compare the resulting interpretation with other contemporary systems for which a record exists, if any.
10. Place the system within its historical context: determine how this system fits with those that came before and after. Sometimes we see a clear step from one system to another (see my article “Italian Longsword Guards: comparing Vadi to Fiore and Marozzo” for an example), whereas sometimes the system in question appears to be a complete outlier, or even the work of a crank.

At this stage, we have a working interpretation of one system of combat. We must now figure out how to teach it.

Teaching the system:

1. Determine the necessary skill set. This will include control of body and weapon, judgement of timing and distance, power generation, tactical awareness, and the ability to think and act “in-system”.
2. Develop training methods to impart these skills, and organise them into a coherent syllabus.
3. Test the syllabus: do the students following it act under stress according to the precepts of the system?

4. Given that the students are not living a period lifestyle, and therefore tend to be physically less active, it is also necessary to provide general physical conditioning.
5. Given our culture's attitude to violence in general, and killing with swords in particular, it is also necessary to provide students with critical philosophical tools, so that they can engage with the ethics of what we are doing, which is, from one perspective, training in murder; from another, gaining control of violent tendencies. Combat psychology, stress management (accessing your training under the stress of someone trying to kill you), the moral justifications, if any, for duelling: all of these topics fall within our purview.

It is clear then that a large measure of the work required falls into academic fields of study such as cultural history and manuscript studies. But some is also drawn from sports coaching, sports science, traditional martial arts practices, experimental archeology, material culture studies, classical fencing pedagogy, and other fields, all with one end in mind: to recreate as faithfully as possible the physical practice of the Art as represented by the authors.

Results: The Submitted Works

The Art of Sword Fighting in Earnest: a translation and commentary of Philip-po Vadi's "De Arte Gladiatoria Dimicandi"
(Ipswich, Spada Press, 2018.)

This work was originally published as *Veni Vadi Vici* in 2012 (Helsinki, The School of European Swordsmanship), which was submitted to the examiners in 2014. Based on the results of the first viva (on November 28th 2014), it was resubmitted in a second edition, titled *The Art of Sword Fighting in Earnest*.

The aim of the original edition was to create a resource for students interested in recreating Vadi's style of swordsmanship, so it included a complete transcription and translation, and a commentary intended for such readers. It represents all 10 steps of working out the system, as it includes practical synopses of how certain techniques should be done, as well as placing the system in its historical context. It was written for its patrons,¹⁹ and so it necessarily reflects their preferences: they explicitly requested a translation that was as literal as possible.

The necessary first step was to create a transcription. This is especially useful as the work was made available in electronic formats: a searchable electronic text document is much easier to browse for specific references than an image file. It was also a necessary step in creating a translatable text. However in preparing the second edition it was pointed out to me that the substantive work of creating a transcription had already been done, by Rubboli and Cesari, so producing my own was unnecessary. I have cut the transcription out of the second edition, and focussed instead on improving the translation and commentary.

¹⁹ This work was funded through the crowd-funding website Indiegogo. So it was written for a very specific readership, who were not shy in expressing their preferences. Most of the patrons were active members of the swordsmanship community.

The new edition also has a greatly expanded introduction, going into detail regarding the provenance and structure of the manuscript, what is known about its author, and some background regarding the dedicatee, Guidobaldo da Montefeltro, Duke of Urbino.

It is worth taking some time to consider the images. It is hard to say exactly how representative medieval art in general, and Vadi's images in particular, are intended to be. For instance, on f20V Vadi shows a play in which one fencer appears to be hooking his opponent's blade with his wrist. Common sense suggests that this would lead to injury, and so the reader may think that the image is not an accurate representation of the play. But by trying it out with sharp swords I found that to the contrary, the hooking action secures the sword without much likelihood of getting cut, and makes the throw described in Vadi's text easier. In this case I conclude that the play should be performed exactly as shown.



I have described here some of the difficulties of interpretive decisions and editorial choices required to make this text accessible to its modern audience, and in the book I explain many of these choices so that it is clear to the reader why I translate a certain way. Additionally, where there is significant ambiguity in the text and images, I break the actions down into drills to make them easy to follow. For example, in Chapter 11 a complex, eight-step drill is buried in the text, with no images at all. I figured it out with the help of my students, and have written it out as instructions in

the Commentary section. Sometimes, such as in the first play of the sword (f17v), apparent contradictions in the text make it practically impossible to follow the text precisely and still end up looking like the picture. There are several possible interpretations that make physical sense, all of which compromise in some way with the text or images. Let us take this first play as a concrete example:



The text that goes with the image is clear enough:

E reuerso fendente ho tratto sul pe stanco

Senza scanbiar pe voltando el galone

Traro el dritto senza mouerme anco.

I have made a *roverso fendente* on the left foot

Without changing the foot turning the hips

I will strike a *dritto* without further movement.

There is, unfortunately, no similar play in any of Fiore's Mss. The image shows the player on the left standing left foot forwards, the player on the right, right foot forwards. We assume the player on the left is following the instructions as he has his left foot forwards. The text states that the *roverso* has been done, and the *dritto* is yet to be done ("I will strike..."), which would suggest that the position shown is after

the *roverso* and before the *dritto*. The player on the right appears to be parrying the blow, or trying to.

This can be set up in at least four ways:

1. You may attack with a *roverso fendente*, which if it is beaten wide from a left side guard (e.g. Boar's tooth) gives a follow-up attack of a *dritto* (forehand), striking either *volante* (horizontal) or *fendente* (descending) blow. This makes sense but does not lead to the crossed-hands position of the picture.
2. Alternatively, you may attack the same way, but bind the opponent's parry, and immediately turn your hand over to strike a false edge *dritto fendente*. This follows the text and picture but violates Vadi's earlier instruction in the third verse of chapter five that the *fendente* "wants the true edge".
3. You can use the *roverso fendente* to parry against a *mandritto* (leading the opponent into a right-foot forwards stance as in the picture), but this is difficult to do; it's much easier to parry *roversi* with *roversi* and vice versa.
4. Working from the position of the swords crossed in *meza spada*, as is emphasised in the text, especially chapter 13, strike a *roverso* on the other side of the opponent's sword, and immediately strike a *mandritto fendente*. If they don't parry the *roverso*, the *mandritto* acts as a second attack; if they do parry it, then the *roverso* works as a feint, and the *mandritto* strikes on the other side.

There is not enough internal evidence, or evidence from practical embodiment, to state definitively which way this play should be done. All of the above can be made to work sword-in-hand, and I set it up like so:

1. Begin with both players right foot forwards, swords crossed middle to middle. (You can get into this with a *fendente*/counter-attack/parry combination as discussed above.)

2. You strike a *roverso* on the other side of your opponent's sword, passing out of the way with your left foot. Be careful to turn your sword around the middle of the blade, keeping your sword in the way of theirs as you turn.

3. As they parry, strike a *mandritto* on the other side of their blade, turning your hips (but don't step).

If there isn't a clear tempo to make the *mandritto* in, you can create one by feinting a thrust from the crossing, to cause your opponent to parry, moving their sword over to their left. In practice this is how we usually begin when doing this exercise in class.

By laying out the options, I make it easy for the reader/practitioner to come to their own conclusion, or be stimulated to seek out yet another interpretation should these fail to satisfy. I also include various suggestions for making these actions work better, based on my practical experience in this field. For example, regarding the ninth play of the longsword (f19v):



My commentary reads: "This has no exact correlation to Fiore. Using the crossguard to break the elbow as shown here is easy enough when you get their left

hand off their sword and their arm extended, but it is a tricky play to set up. Generally, I do it as a defence against the opponent entering to wrap with their left arm, as in the fourth or fifth play. So, they have opened your inside line, and are reaching over your arms with their left hand. As they do so, intercept their left wrist with your own left hand, stepping out of the way with your right foot, turning it to the left behind you, and placing your crossguard on their elbow as shown. It's a nasty feeling for the player, so be especially careful if you are not experienced with joint locks."

In this way I hope to create a bridge between the reader and the practice of the Art of Arms: a bridge that works in both directions, bringing practitioners to the book, and readers to the practice.

Mastering the Art of Arms vol 1: The Medieval Dagger
(Wheaton, IL., Freelance Academy Press, 2012)

This book goes into detail regarding the development of combat skills from a written source, and takes one section of Fiore's *Il Fior di Battaglia* and interprets it in detail. I place it in the context of the treatise as a whole, and also examine the content and structure of the section in particular. Unlike *Veni Vadi Vici*, this book does not explicitly concern itself with the translation of the source.

The dagger material is the largest single section of *Il Fior di Battaglia*, comprising 76 plays, on folia 9R-19V (and the mis-bound 38R and V). In this book I have outlined the key skills required, added a great deal of additional information that Fiore omits (how arms actually break, for instance), and reorganised Fiore's material into a pattern that is more accessible to the modern reader. These skills are necessary to anyone wanting to master the swordsmanship material, as the counters to the

close-quarter sword techniques, such as pommel strikes, are not shown at all; the reader is expected to know all the material in the system, and to apply the lessons of one weapon to another. Of course, I have left out many of Fiore's plays, but with the knowledge represented in this book the reader can reconstruct any of Fiore's dagger plays, figure out the context in which it is likely to work best, and train the necessary skills in a structured and consistent way. This is because I include detailed instruction on how to set up drills for training these actions at the most basic level, gentle and co-operative practice with a partner, and increasing in sophistication and complexity up to the point where the practitioners are dealing with a vigorous, imaginative, and non-compliant opponent.

The aim of the work is to provide the interested reader with the means to learn the attacks, defences, and counters to the defences of Fiore's system, in such a way that they can go to the manuscript and recreate any of the dagger plays, and also actually execute the correct play when attacking or defending at high levels of speed and force. This is accomplished by:

- Presenting an overview of the components of the system using Fiore's terminology, such as the lines of attack (*mandritto*, *roverso*, *fendente*, *sottano*), the division of the parts of the fight into attack, remedy (the initial defence and counter), and counter-remedy, the nine remedy masters, etc.
- Placing the dagger material in context with the rest of the manuscript (it is preceded by wrestling, and followed by the sword): the book includes the defences of the dagger against the sword, and the sword in the scabbard against the dagger.

- Providing detail not present in the original source, such as the mechanics of applying arm-locks by hyperextension of the elbow, or by using the bent arm as a crank to apply force to dislocate the shoulder.
- Providing step-by-step instructions on the execution of basic actions, such as a simple disarm.
- Re-organising the material into gradually increasing levels of complexity, and introducing sensitivity training (to apply the correct technique depending on exactly what the opponent is doing).
- Providing instruction on systematic skill development, with tools such as flow drills, stress drills, and freeplay.

It is difficult to create correct movement from written instruction, so the book is supported by video footage of the key plays and drills, made freely available on my website, www.swordschool.com.

One example of the way that re-organising the material, and putting it together in new ways, has led to a useful new way of using it, can be found in chapter 11, pp 87-94, where I took three of the plays of the fourth master of the dagger, who defends against a downwards blow by grabbing the attacker's wrist with both hands, and showed how each would work in three specific scenarios. These scenarios were, as the defence is made, "attacker does nothing", "attacker pulls back" and "attacker pushes in". The defender's actions should be the fifth, second and fourth plays of the fourth master²⁰, respectively. I start by describing each action in detail, with no need on the attacker or defender's part to think about why they would be doing this particular action.

Then I examine how these scenarios may occur as a matter of informed and intelligent choice on the part of the attacker. What kind of counter-remedies do his

²⁰ The fifth is on Getty MS f38r, the second and fourth are on Getty MS f14v.

action lead to? Fiore shows us one specific counter-remedy to the fourth master, which is a trapping action, on f38r. In the moment of the contact the attacker will probably pause slightly to acquire the trapping grip with his left hand. This gives the defender the occasion for the fifth play, a disarm. Or, we can set it up so that as the defence is made, the attacker withdraws his arm to strike with a *mandritto* (fore-hand)— the defender experiences this as pulling back, so leading him to the second play, a high arm-break. If the attacker, on contact with the defensive cover, redirects to strike a *roverso* (backhand), the defender experiences this as pushing in, giving rise to the fourth play, a low arm-break. These actions and intentions on the part of the attacker are not described in Fiore's text, but without them there is no particular way to select one technique over another.

The possibility of choice on the part of the attacker creates a training opportunity for the defender to develop sensitivity skills. So we set up these plays so that the attacker will go for one of these counters (grab blade, redirect right or left) and the defender has to apply the correct play to pre-empt the attacker's action. Starting out coöperatively, we build up the speed and intention until it becomes a game: the winner gets the play or the strike.

In terms of skill development, this goes far beyond what can be done by simply repeating every play in the treatise by rote.

This book is intended to serve as a blueprint for taking embodied practice beyond rote repetition of specific plays, and towards real skill in the Art of Arms. The dagger is a natural place to start this process, as it is small and easily controlled, much more so than the longsword, making it much more accessible to beginners. The actions are also naturally simpler; there is no consideration of blade on blade contact, or blade relationships, and very little skill is required to strike well with this weapon. In contrast, the sword takes much more skill to wield, and because of its

length, most interactions are done blade to blade, which is much more difficult than hand-to-hand. By laying out the principles with this simpler weapon, I hope to create a foundation for the more complex longsword material in the second volume of the series (published in 2014).

The Duellist's Companion

(San Francisco, CA., Chivalry Bookshelf, 2006.)

This book is a complete training method in Ridolfo Capoferro's style of the rapier, as presented in *Il Gran Simulacro dell'arte e dell'uso della scherma*. The aim of the work is to provide the interested reader with the means to learn Capoferro's system, in such a way that they can go to Capoferro's book and recreate any of the actions, and also actually execute the correct action when attacking or defending. *As Gran Simulacro* concerns itself only with the rapier and its companion weapons²¹, and is a relatively short book (compare Capoferro's 43 illustrated plates with Fiore's 76 for the dagger alone), it is possible to present a complete interpretation in a single volume. A quick glance at the source (see above p. 33-37) will indicate the need for a primer.

My main goal for this book was therefore to provide clear instruction derived from the text, re-order the material in a way that would make sense for modern practitioners, and to add the necessary skill-development aspect, with exercises for developing the student's ability to actually perform the required actions. This is accomplished by:

- Presenting an overview of the components of the system, such as the positions of the sword hand (*prima, seconda, terza, quarta*), the footwork actions

²¹ Those held in the non-sword hand, such as a dagger, cloak or rotella shield.

such as the lunge or the *scanso della vita*²², and the tactical components, such as attacks, defences in a single time, and defences in two times²³.

- Providing detail not present in the original source, such as the mechanics of making a lunge without destroying your knees.
- Providing step-by-step instructions on the execution of basic actions, such as a simple attack by *cavazione*.
- Organising the material into gradually increasing levels of complexity, such as introducing sensitivity training (to apply the correct technique depending on exactly what the opponent is doing).
- Providing instruction on systematic skill development, with tools such as flow drills, stress drills, and freeplay.

As with *The Medieval Dagger*, the book is supported by video footage of the key plays and drills, made freely available on my website.

It is standard practice in fencing coaching to teach simple actions before complex ones. That Capoferro was not providing us with a basic training manual is obvious from his ordering of material. The first set of techniques he shows, on Plate 7, is a “parry and riposte in a single motion” (modern fencers would call it a “counterattack”) against an attack by disengage, countered by a feint of disengage to draw the counterattack onto a prepared parry and riposte in two motions. This presupposes the following skills:

1. The ability to attack by disengage.
2. The ability to parry and riposte in a single motion (counterattack).
3. The ability to feint convincingly enough to draw a counterattack.

²² “Avoidance of the waist” where as the enemy attacks you step your left foot offline behind you to your right.

²³ A defence in one time defends and strikes in a single action; a defence in two times uses one action to parry, and a second to strike.

4. The ability to parry in one motion and riposte in another.

Any trained coach would teach this in the following order:

1. The attack by disengage.
2. The parry and riposte in two motions.
3. The counterattack.
4. The feint of disengage, which draws the counter-attack, and is followed by the parry-riposte.

And all this pre-supposing that the fencer can do simple actions like step, and lunge.

So in the book, I have covered direct attacks, then parries and ripostes, then counterattacks, etc. I have presented every drill as part of the plate on which it comes, eg. "Parrying drill 1, (plate 7)" (143) or "Plate 17 *Scanso dell pie dritto* drill" (148). A good example of this can be found in my treatment of plate 11, which contains five separate plays, and a total of six separate actions.²⁴ If we look at them in order, we can see that their tactical content is very varied: the only thing they have in common is that the final action is a strike "in the waist under his sword" with "the lean, and lowering the body". The actions are:

1. A strike in *contratempo* as the enemy approaches to cover your sword on the inside.

²⁴ "Way of striking with various actions under the enemy's sword.

First in *terza*, you place yourself in a high transverse *quarta*, so that the point of your sword corresponds to the left shoulder of the Adversary, and he coming to cover yours in an oblique line, you in his coming will turn the hand in *seconda*, with the lean, and lowering the body, will strike in *contratempo* in the waist under his sword as the figure shows. Second, in the case that the adversary has you constrained on the outside, you turning a thrust to feint in *quarta* to the face, and he wishing to parry, you turning the hand with the same leaning, you will strike under the sword, as above. Third, when you have been constrained to the inside, you could disengage a feint thrust in *terza* to the face, and him lifting the sword to parry, you would strike under the sword, turning the hand in *seconda*, in the manner as above. Fourth, you having your Adversary constrained on the inside, and he coming to strike you with a thrust to the face, you could strike him in two ways, first you could strike in *contratempo* in his coming, lowering your waist, and the sword in *terza*, and also you could strike parrying in *terza* with the point high, turning the hand in *seconda* in the strike, in the way, that is above. Fifth, and finally, you have the Adversary constrained to the outside, and he disengages to constrain your sword on the inside in the same tempo, turning the hand with the lowering, and leaning the body, you would strike in *terza* under the sword in the same way, that is above." Capoferro, plate 11. Translation mine. So, there are five sections, of which the fourth has two plays, and the rest have one.

2. A disengage with a feint, after the enemy has covered your sword on the outside.
3. A disengage with a feint after the enemy has covered your sword on the inside.
4. Part one: a counterattack without parrying, after you have covered your enemy's sword on the inside and he disengages to strike you. Part two: a parry in terza and then riposte, after you have covered your enemy's sword on the inside, and he disengages to strike you.
5. An attack, after you have covered your enemy's sword on the inside, and he disengages to cover your sword.

In modern fencing terms these are: an attack on preparation (his step forwards); a compound attack;²⁵ another compound attack; a counterattack with a void; a parry-riposte; and another attack on preparation (his change of line). Teasing out these tactical distinctions makes all the difference in making the material accessible to the student. In the book, for example, I have separated out part two of drill four, to place it in the section on parry-riposte (147). The rest I have kept together on pages 137-140 as part of the discussion on Capoferro's use of "contratempo". In retrospect, it may have been even better to select out drills two and three also, and place them with the rest of the feints.

This book is a presentation of my conclusions based on the work done at steps 4 to 8 of "working out the system". Manuscript study is less important here as the printed source is quite clear. The original source is widely available (two of my colleagues own original copies), and presents no paleographical challenge. We also know the primary context in which this system is supposed to work: technically illegal (and therefore private) duelling between social equals, as prescribed by the so-

²⁵ A "compound attack" is an attack that includes one or more feints.

cial mores of the time and place. We have abundant records of how such duels were fought,²⁶ which present an interesting contrast between what you are supposed to do (the book) and what people actually did (the fight). Or as Capoferro put it, the “Art” and the “Use”. In my book I glossed over these details as they were well known to most of my target readership, and confined myself to presenting a coherent method of acquiring the skills that Capoferro presents. The book is intended to offer a workable training method in one specific historical rapier style, to be not only a guide for a beginner wishing to learn rapier fencing, but also an example for other researchers for how such a method can be created from the source material.

Taken as a whole, these three submitted works exemplify the methodology of historical swordsmanship research that I have developed. *Veni Vadi Vici* represents the process of creating usable texts through transcription and translation from manuscript sources, and outlines the interpretive process in the commentary. *The Medieval Dagger* is an example of taking one section of a larger system and working it out in detail before placing it back in context with the rest of the system. It also describes my systematic approach to skill development. And *The Duellist's Companion* is a complete training method for one specific system from one specific source, with every section taken into account.

²⁶ Both *The Sword and the Centuries* (Hutton 1901) and *Dueling With The Sword And Pistol* (Kirchner 2004) contain many well-sourced descriptions of duels.

Other works

My other published works touch on other aspects of the process of interpreting and teaching a system of swordsmanship, such as memorisation skills and strength training. These works either rely on my previous martial arts and fencing training, and relatively little on my academic research, or are not academic in content or tone, or were published between first examination and the second, so I have not submitted them to the examiners.

The Swordsman's Companion, 2004

This book is a training manual for students of the longsword, drawing on the works of Fiore and Vadi. This book addressed parts one and two of Teaching the System: it introduced readers to the existence of the sources, and provided them with the means of developing key skills such as control of body and weapon, judgement of timing and distance, power generation, and tactical awareness.

The Little Book of Push-Ups, 2009

This book is intended as a humorous and accessible helping hand for those stuck on the couch and wanting a more active life. As such it fits at step 4 of "Teaching the system". One of the virtues of swordsmanship training is that it is sufficiently different and interesting that it attracts many new students who have never done any kind of deliberate physical activity before. But this has meant that it has been necessary to develop ways of building sufficient strength and stamina that they can participate actively. This book represents some of that work.

The Armizare Vade Mecum, 2011

Armizare, “The Art of Arms”, is the martial art of Fiore dei Liberi. This book is a collection of mnemonic verses, preceded by an exhortation to practitioners of the Art to consider the moral consequences of this life-choice. I wrote them as part of a much larger work, a four-volume analysis of and training method for *Armizare*, of which *The Medieval Dagger* is volume one. Some of these mnemonics are funny, some serious, all make it easier for the reader to remember things like the “four guards of *abrazare*” (wrestling), or “the five things to do against the dagger”. This speaks to steps one and two of teaching the system. Memory is a key skill, and Fiore’s manuscript is clearly written with medieval memorisation techniques in mind²⁷.

Mastering the Art of Arms volume 2: The Medieval Longsword, 2014

This book lays out a complete method for training in my interpretation of Fiore’s longsword material, in the same way that *The Medieval Dagger* does for the dagger material.

Swordfighting for Writers, Game Designers, and Martial Artists, 2015

Based on my experiences working with the team of writers on *The Mongoliad*, and with the video game makers *Clang!*, and in producing my own card game that teaches my interpretation of Fiore’s longsword material, *Audatia*, this book is a compilation of essays aimed at helping writers to write better sword fights, game designers to design better sword fights, and martial artists to train more effectively.

²⁷ For an excellent source on medieval mnemonics, see Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture*.

Mastering the Art of Arms volume 3: Advanced Longsword: Form and Function, 2016

This book is based on two forms, “The Cutting Drill”, and “The Syllabus Form”, which are sequences of actions practised solo and in pairs, and form a critical part of my overall *Armizare* syllabus. The book explains each step of the forms in terms of their practical application, and their provenance in *Il Fior di Battaglia*.

Articles

The only peer-reviewed journal in this field, *Western Martial Arts Illustrated*, found itself without a sufficient market to survive and lasted for only three issues. My article “The Elements of Test Cutting” appeared in issue 2 (Fall 2007). There have been a couple of book compilations of articles published, and my work is included in the following:

- *Teaching and Interpreting Historical Swordsmanship* (ed. Brian Price, 2005) “What teachers need to know”.
- *In the Service of Mars* (ed Gregory Mele, 2011) “Notes on Training: Forms, Intervals and Skill Progression”.

The norm in this field now is to simply distribute articles online for free, which leads of course to there being no peer review, but nonetheless furthers the study of these arts by making the fruits of research available, very much in the spirit of Open Access. To date I have written dozens of articles and blog posts, including:

- *Technical and Tactical notes on the longsword guards of Il Fior di Battaglia*
- *Half full? Translating Meza and Tutta in Il Fior di Battaglia*
- *Max Your Lunge*
- *Finding Bicorno*
- *Crossing Swords*

- *The mechanical and tactical structure of I.33*

These are not submitted for examination, but can be provided if required.

Conclusion

Taken as a whole, these three publications represent the application of a new form of manuscript study: the recreation from textual sources of our hitherto lost martial heritage. They comprise a consistent application of a clearly defined methodology for recreating historical swordsmanship styles as authentically as possible. In *Veni Vadi Vici* there is minute attention to detail in restoring the text leading to a translation that is as accurate as possible, as the idea is to minimise the shadow of the translator between the reader and the original work. Explication and commentary are separated out, so that the reader can, as far as is possible, immerse themselves in the words of the author.

Having acquired a complete reading of the source text, I then take a discrete section of it (such as the dagger plays from *Il Fior di Battaglia*, which underlies *The Medieval Dagger*) and work through it looking for the patterns of thought and movement that comprise the living system. This will naturally entail a great deal of physical practice, and the creation of tools for developing skills. At this stage I take into account the context of the fight, what the winning conditions are, and the physical and material culture of the period. For example Fiore places no emphasis on self-defence as a justification for fighting: this is a system for the warrior caste, for whom killing is a professional necessity.

The Medieval Dagger focusses on representing the key points of the system, and giving the reader the necessary theory and instruction for developing real skills. By singling out one weapon, I can establish most clearly the fundamentals of the system. The basic tactics, for example, can be summarised as: if attacked: control his weapon, break whatever you can get hold of (his grip on the dagger, or his arm, are the most common examples). If attacking, stab him with your dagger: if he de-

fends himself, then turn to the other side, either with the dagger, or by entering in with your left hand.

With a clear understanding of all the sections of the source, I put them all together to create an understanding of the system as a whole: for example in *The Duellist's Companion* you can see all the major components of the system: theory, mechanics, tactics, applied with sword alone, and with sword and dagger. Fiore's system is way too large and varied for that to be accomplished in a single book (hence the *Mastering the Art of Arms* series), but with Capoferro's much smaller and more homogenous work, it proved possible. Unlike Fiore, Capoferro does repeatedly insist that this art is for defence, and almost every plate shows first a defence against an attack by the opponent. By carefully selecting and organising the techniques I was able to include examples of every single mechanical action, and actions of every single tactical type (such as parries, counterattacks, and feints), so that every concept in the system is represented.

Given the enormous amount of historical data available, and the feedback provided by practical embodiment, it is entirely possible to recreate historical forms of combat. Of course we cannot know for certain how accurately we are doing so, but the yardstick we use is this: "if it follows the text, looks like the picture, and works in practice, it might be right." The most common objection raised is that you 'can't learn martial arts from a book'. This is not true: you can't learn martial arts *only* through reading. You must also practice. I know for certain that it is possible to recreate a martial art from a book because many times I have encountered students whose only resource (in the days before YouTube) has been one of my own books, and I have seen them accurately reproducing the drills that I wrote down. Of course they are coming from a contemporary culture so some of the problems of interpretation

from historical sources do not exist, but the principle is clear. We can reasonably aspire to recreate these arts with a high level of accuracy.

Something about swordsmanship has struck a nerve in our society, creating a wide-spread interest in the lost martial skills of our forebears, and rendering their study worthwhile not just for personal gratification but also to serve the needs of a broad community of practitioners, and to add to the fields of cultural and material history and manuscript studies. The sword attracts people from all walks of life, from all over the world. My school has study groups on all five continents, and the student body could not be more heterogenous. We have all ages from about 13 to about 65, and most professions. About 35% of my students are female. Within the wider community there are groups that focus on creating a modern sport using the older weapons, groups that adhere to one text only, groups run as professional schools, and groups that have no formal structure at all. It is truly diverse, and every approach brings with it both strengths and weaknesses. One of the aims of my books is to help those who don't yet have the academic skills to tackle the treatises directly, by providing a bridge or support structure.

Further work on this subject includes my books on the use of the longsword out of armour, as shown in *Il Fior di Battaglia. Mastering the Art of Arms volume 2: The Medieval Longsword* (2014) and *Mastering the Art of Arms volume 3: Advanced Longsword, Form and Function* (2016). A similar training method for the Bolognese school would complete the practical study of the development of Italian swordsmanship from medieval times into the Renaissance. While my work has focussed on Italian sources, this methodology is applicable to martial texts of any language or culture.

There is clearly a vast range of material here for a scholar to explore; and the list of sources in the previous sections represents less than ten percent of the total

available. For a broader overview of the range of material, Anglo's *The Martial Arts of Renaissance Europe* is perhaps the best source.

One cannot fully grasp the meanings of these systems without a detailed knowledge of the cultures from which they come. One example of the relationship between the representation of a swordsmanship system and its culture can be found in the naming convention of the guard positions shown by Fiore. On the face of it, the names are not very helpful to modern students learning the Art: whole iron door, lady, window, middle iron door, long, short, boar's tooth, long tail, crown, and the two horned guard. Some of these are apparently descriptive, such as long and short, and the tail guard is indeed held behind like a tail. Fiore does also say that the boar's tooth takes its name from its way of striking (it rips upwards) (Getty MS, f24r).

But there is nothing ladylike about *posta di donna*, door-like about *porta di ferro*, nor anything obviously two-horned about *bicorno*. But if we recall that this is a late-14th century system, and take into account statements in the MS like "I [the Sword] am Royal, enforce justice, propagate goodness and destroy evil. Look at me as a cross, and I will give you fame and a name in the art of arms" (Leoni 2012, 47) then it makes sense to look at the names symbolically. And a story emerges.

The pilgrim's path through life; does he take the *long* road that leads upwards to heaven, where the *lady* in the *window* (Mary Magdalene)²⁸ and the *lady* in the *crown* (the Virgin Mary)²⁹ await, or is he tricked by the devil with *two horns*, down the *short* road to the *gates* of hell, behind which lurk the beast with *teeth* and a *tail*?

²⁸ We can see from Diane Wolfthal's "La Donna alla finestra: Desiderio sessuale lecito e illecito nell'Italia rinascimentale," (in *Sesso nel Rinascimento: pratica, perversione e punizione nell'Italia rinascimentale*, ed. Allison Levy. Florence: Le Lettere, 2009,) that it is reasonable to identify a woman depicted in a window as a prostitute or mistress. Given the image of the pilgrim's path suggested by the names of these guards, the natural "mistress" figure in Heaven would be Mary Magdalene.

²⁹ Mary is often depicted in Renaissance and medieval art as a crowned woman, "The Queen of Heaven".

Bicorno lies between *longa* and *breve*; *donna*, *corona* and *fenestra* are high, *porta di ferro*, *dente di zenghiaro* and *coda longa* are all low. The naming scheme takes into account obvious characteristics such as looking like a tail, and some tactical elements like the deceptiveness of *bicorno*, but has been apparently arranged for mnemonic purposes according to the common medieval theme of The Pilgrim's Progress.³⁰

There are many explicit references within the texts to aspects of religion and culture, as one would expect. For example, in his first chapter, Vadi states that swordsmanship not an Art, but a science like Music and Geometry (f3v-4r). He is clearly referring to the subjects of the quadrivium: arithmetic, geometry, music and astronomy. These can be thought of (and were in Vadi's time) as the study of numbers and their relation to each other (arithmetic); numbers in relation to space (geometry), numbers in relation to time (music) and numbers in relation to space and time together (astronomy)³¹. Geometry, for instance, literally means "earth-measuring", and above all is the study of proportion. The relationship of mathematics to music was a common theme in medieval musical thought³²; suffice to note that in this period, long before pitch could be objectively measured, the mathematical aspect of music was primarily its rhythm. It is a truism to say that fencing is one half distance, the other half time: tempo (time and rhythm), and distance, are the key objective measures. As Vadi himself notes on f15r:

lo sono sexto che fo partimenti
O scrimitore ascolta mia ragione

³⁰ I first heard this theory in conversation with Bob Charron in 2003. Mr Charron has yet to publish. As far as I know, there is no formal evidence for it. I offer it here as a plausible explanation.

³¹ For an authoritative study of medieval education, see Curtius, E. R., *European Literature and the Latin Middle Ages*.

³² There is an interesting series of examples and discussion of medieval ideas of maths in music in David P. Goldman's "The Divine Music of Mathematics" online at <http://www.firstthings.com/article/2012/03/the-divine-music-of-mathematics>.

Cusi misura et tempo simelmente

I am callipers, that divide into parts,
 O fencer heed my reason,
 Thus measure the tempo similarly.

In other words, measure distance (with the figurative dividers or compass) and time (tempo) together. In practice, this refers to the way that fencing time works. Any action takes time, and the longer the action, the more time it takes. So, if you need more time, you take distance; if you need more distance, it will take time. “Tempo” is also rhythm, and a more specific connection between Music and Geometry is hard to imagine. Fencing is the perfect correlation between actions in space and actions in time.

To take this one step further, let us see where this idea of the relationship between measure, motion and time comes from. According to Viggiani, the theory of time in fencing derives from the theory of time and motion in Aristotle’s *Physics* books 7 and 8.³³ In *Lo Schermo*, Viggiani determines that the guards are the beginning and ends of blows. The point is that a body begins at rest; then is in motion, and then at rest. The motion of the body determines its time. The tempi of rest, and tempi of movement, are measured relative to each other. Or as he puts it:

All right, it suffices that each motion that is single and continuous lies between the preceding and subsequent rest; look, then, Conte: before you throw a mandritto, a rovescio, or a punta, you are in some guard; having finished the blow, you find yourself in another guard; that motion of throwing the blow is a tempo, because that blow is a continuous motion; thus the

³³ “ROD: I see that the Conte does not understand well; and therefore in order to give it to him perhaps to understand, speaking chivalrically: you see, Conte, the philosophers have proven that prior to a body moving itself it will remain at rest, and ceasing its motion again remains at rest; so that a motion (provided that it be single) will lie in the middle of two rests.
 BOC: In the Seventh and Eighth Physics Aristotle proved it; Rodomonte speaks the truth.”
 Viggiani, *Lo Schermo*, 1575, ed Swanger, 27.

tempo that it accompanies is a single tempo; when you rest in guard, having finished that motion, you find yourself once again at rest; it is therefore a tempo, a motion, which instead of calling a “motion”, we call a “tempo”, because the one does not abandon the other; and the guard is the rest and the repose in some place and form. In conclusion it is as much to say “tempo” and “guard”, as it is to say “motion” and “rest”. Whereby it is necessarily so, that as between two motions there is always a rest, and between two rests there is interposed a motion, apparently between two thrown blows, or two tempos, or two motions, is found a guard. And between two guards, or rests (as you wish to say) are interposed some blow and tempo. (Swanger, 30-31)

This idea is also present in Capoferro’s *Gran Simulacro*:

In fencing, the word tempo means...that proper interval of motion or stillness I require to carry out a specific action; in this case, it does not matter if the time is long or short, the only concern being that I carry out the action. In the art of fencing, I require a specific and appropriate interval of time and motion to arrive into measure; it does not matter whether I arrive sooner or later—what matters is that I arrive where I intended to arrive. ...Next, the word tempo is taken to mean speed in relation to the length or brevity of motion or stillness. As in the art of fencing there are three measures (or distances) from which to strike, so there are three distinct tempi. In this case, it is not enough that I reach a certain end; what also matters is that I reach it with the required speed and promptness...Tempo is nothing but the measurement of stillness and motion. (Leoni 2011, 11)

By examining the theory of fencing as presented in texts such as these, we not only learn fencing, but gain an insight into how these people interpreted the educa-

tional bedrock of their culture. These fencing texts are clearly products of their time and place. To understand them requires a detailed knowledge of their cultural contexts. But this works in both directions: I would argue that, given the importance of swordsmanship skills to the people of these ages, one cannot fully grasp the context without taking into account these products of it. In other words, their swordsmanship treatises are vital windows into the minds of these people. According to Gregory Clark, cited in Stephen Pinker's *The Better Angels of our Nature*, 26% of male aristocrats died by violence in the 14th and 15th centuries (97). This is in contrast to the rate of death by homicide in the general population at the time of less than 100 in 100,000, or a tenth of one percent.³⁴ Live by the sword, die by the sword, indeed.³⁵ Violence was not only an art form, but also a way of life for a large section of society. The importance of how they chose to represent the arts by which they preserved their lives and established their status and prestige cannot be overstated.

There is a breadth of knowledge that can be generated only through being able to contextualise the sources in bodily practice; combat manuals therefore offer a particularly valuable opportunity to historians. We cannot, for instance, enact the text of Augustine's *De civitate Dei*. And despite the efforts of A.J. Jacobs in his *Year of Living Biblically* we cannot really live out the instructions of the Old Testament. But these combat manuals were made to record the specifics of a living art, and so are natural candidates for investigation by embodiment. As such, they present an unparalleled opportunity to gain insight into one very common aspect of medieval

³⁴ And today the rate in Western Europe is about 0.8 per 100,000. (Pinker, 74).

³⁵ Pinker, 74-77. One significant data point that Pinker did not include in his otherwise very thorough argument that violence has been declining over the last 500 years is the demonstrable fact that over the same period, there was a fundamental change in the presentation of personal combat in the treatises. Nobody in the 1400s thought it necessary to justify why one would fight to the death; but by the end of the 1500s, virtually every treatise distinguishes between recreational fencing and duelling, and many of them elaborate on the circumstances in which mortal combat is morally justified. See for example Vincentio Saviolo's 1595 treatise *On Honour and Honourable Quarrels*, published in Kirby, 2013.

and Renaissance life. Perhaps the greatest value my work represents to other scholars is that by presenting the insights of my practice, I spare them from having to take up arms themselves.

These sources represent a barely-tapped resource for the recreation of period ways of moving, and insight into the language of gesture, which are important for the historical performance of music and theatre. They also provide a way for art historians to test their theories of representativeness in period art; by recreating the techniques as described in the text and as shown in the images, we can establish more precisely how “photographic” any given image may be. This has ramifications for the interpretations of other contemporary works of art.

There is a general idea, common in the 19th century³⁶ and sadly perpetuated even recently³⁷ that medieval combat was a thuggish, unsophisticated affair, devoid of skill or art. These treatises and my work on them stand in stark opposition to that view.

³⁶ as we see in for example Castle, 6: “The rough untutored fighting of the Middle Ages”.

³⁷ by, among others, Richard Cohen in *By The Sword*, 25.

Works Cited

Manuscript Sources:

Anonymous. *Royal Armouries Manuscript I.33*. Royal Armouries, Leeds.

Fiore dei Liberi. *Il Fior di Battaglia* (MS Ludwig XV13). J. P. Getty museum, Los Angeles.

Fiore dei Liberi. *Flos Duellatorum*. Pisani-Dossi Library, Corbetta, Italy.

Fiore dei Liberi. *Il Fior di Battaglia*. (Morgan MS M 383). Pierpont Morgan Museum, New York

Fiore dei Liberi. *Florius de Arte Luctandi* (MSS LATIN 11269), Bibliotheque Nationale Francaise, Paris.

Monte, Pietro. *Exercitiorum Atque Artis Militaris Collectanea*. Escorial MS A.IV.23, El Escorial, San Lorenzo de el Escorial, Spain.

Vadi, Philippo. *De Arte Gladiatoria Dimicandi*. Biblioteca Nazionale, Rome.

Silver, George. *Brief Instructions on my Paradoxes of Defence*. Additional MS 34192. British Library.

Vadi, Philippo. 2005. *L'arte cavalleresca del combattimento*. ed Marco Rubboli and Luca Cesari. Rimini. Il Cerchio

Codex Döbinger. Ms. 3227a. Germanisches Nationalmuseum, Nuremberg, Germany

Codex Ringeck. MS Dresden C.487. Sächsische Landesbibliothek, Dresden, Germany

Gladiatoria, MS KK5013, Kunsthistorisches Museum in Vienna, Austria

Talhoffer's Fechtbuch. MS Chart.A.558. Universitäts- und Forschungsbibliothek Erfurt/Gotha. Gotha, Germany

Codex Danzig, Cod.44.A.8, Biblioteca dell'Accademia Nazionale dei Lincei e Corsiniana, Rome.

Paulus Kal's Fechtbuch, Cgm 1507 Bayerische Staatsbibliothek in Munich, Germany.

Le Jeu de la Hache, MS Francais 1996. Bibliotheque Nationale Francaise, Paris

Published Sources

Anonymous. I.G. 1594. *Giacomo di Grassi, His True Arte of Defence*, London: Thomas Churchyard.

Agrippa, Camillo. 1553. *Trattato di Scientia d'Arme, con vn Dialogo di Filosofia*. Rome: Antonio Blado.

Amberger, J. Christoph. 1999. *The Secret History of the Sword*. Burbank CA.: Multi-Media Books.

Anglo, Sydney. 2000. *The Martial Arts of Renaissance Europe*. New Haven and London. Yale University Press.

Augustine. 1931. *The City of God*. trans. John Healey. New York: Dutton.

Brown, Terry. 1997. *English Martial Arts*. London: Anglo Saxon Press

Capoferro, Ridolfo. 1610. *Gran Simulacro del arte e del uso della scherma*. Siena, Italy: Silvestro Marchetti and Camillo Turi.

Capwell, Tobias. 2012. *The Noble Art of the Sword*. London: The Wallace Collection.

Carruthers, Mary. 2008. *The Book of Memory: A Study of Memory in Medieval Culture*. Cambridge: Cambridge University Press.

Castiglione, Baldassare. 1528. *Il Cortegiano*. Venice: The Aldine Press.

- Castle, Egerton. 1892. *Schools and Masters of Fence*. London. George Bell and Sons.
- Charette, Robert N. 2011. *Fiore dei Liberi's Armizare: The Chivalric Martial Arts System of Il Fior di Battaglia*. Wheaton, IL. Freelance Academy Press.
- Chaucer, Geoffrey. 1987. "The Nun's Priest's Tale", in *The Riverside Chaucer*, ed. Larry D. Benson. Oxford: Oxford University Press.
- Clark, G. 2007. *A farewell to alms: A brief economic history of the world*. Princeton, N.J.: Princeton University Press.
- Clements, John. 1998. *Medieval Swordsmanship*. Boulder, CO. Paladin Press 1998
- Cohen, Richard. 2002. *By The Sword*. London. Random House.
- Curtius, E. R. 1990. *European Literature and the Latin Middle Ages*. Princeton, N.J.: Princeton University Press.
- Fabris, Salvator. 1606. *Lo Schermo, overo Scienza d'Arme*. Copenhagen, Denmark: Henrico Waltkirch.
- Forgeng, Jeffrey. 2003. *The Medieval Art of Swordsmanship: A Facsimile & Translation of Europe's Oldest Personal Combat Treatise, Royal Armouries MS I.33*. Benecia, CA. Chivalry Bookshelf.
- Forgeng, Jeffrey. 2013. *The Illuminated Fightbook - Royal Armouries Manuscript I. 33*. London: Extraordinary Editions.
- Forgeng, Jeffrey. 2006. *The Art of Combat: A German Martial Arts Treatise of 1570*. New York: Palgrave Macmillan
- Gaugler, William. 1998. *The History of Fencing, foundations of modern swordplay*. Bangor, Maine: Laureate Press.
- di Grassi, Giacomo. 1570. *Ragione di adoprare sicuramente l'Arme*. Venice: Giordano Ziletti.

- Giganti, Nicoletto. 1606. *La Schola overo Teatro*. Venice: Giovanni Antonio and Giacomo de' Franceschi.
- Hand, Stephen. 2006. *English Swordsmanship*. Highland Village, TX.: Chivalry Bookshelf.
- Hutton, Alfred. 1901. *The Sword and the Centuries*. London: Grant Richards.
- Jacobs, A.J. 2009. *The Year of Living Biblically*. London: Arrow Books.
- Kellett, Rachel E. 2008. *Single Combat and Warfare in German Literature of the High Middle Ages: Stricker's Karl der Grosse and Daniel von dem Blühenden Tal* (PhD diss. Published by MHRA)
- Kenyon, Nicholas (ed.), *Authenticity and Early Music*, Oxford University Press, 1989.
- Kirby, Jared. 2013. *A Gentleman's Guide to Duelling: Of Honour and Honourable Quarrels*. Barnsley, UK: Frontline Books.
- Kirchner, Paul. 2004. *Dueling With The Sword And Pistol: 400 Years of One-on-One Combat*. Boulder CO.: Paladin Press.
- Leoni, Tom. 2005. *The Art of Dueling: Salvator Fabris' rapier fencing treatise of 1606*. Highland Village, TX.: Chivalry Bookshelf.
- Leoni, Tom. 2009. *Fiore dei Liberi's Fior di Battaglia translation into English*. Wheaton, IL. Freelance Academy Press.
- Leoni, Tom. 2010a. *The Complete Renaissance Swordsman*. Wheaton, IL. Freelance Academy Press.
- Leoni, Tom. 2010b. *Venetian Rapier: Nicoletto Giganti's 1606 Rapier Fencing Curriculum*. Wheaton, IL. Freelance Academy Press.
- Leoni, Tom. 2011. *The Art and Practice of Fencing*. Wheaton IL. Freelance Academy Press.

- Leoni, Tom. 2012. *Fiore de' Liberi Fior di Battaglia, Second English Edition*. Wheaton IL. Freelance Academy Press.
- Malipiero, Massimo. 2006. *Il Fior di battaglia di Fiore dei Liberi da Cividale (Il Codice Ludwig XV 13 del J. Paul Getty Museum)*. Udine, Italy: Ribis.
- Manciolino, Antonio. 1531. *Opera Nova*. Venice.
- Marozzo, Achille. 1536. *Opera Nova*. Modena.
- Mele, Gregory. 2013. *Captain of Fortune: Galeazzo da Montova*. Wheaton, IL.: Freelance Academy Press.
- Meyer, Joachim. 1570. *Gründtliche Beschreibung der Kunst des Fechtens*. Strasburg.
- Mondschein, Kenneth. 2009. *Fencing: A Renaissance Treatise*. New York: Italica Press
- Mondschein, Kenneth. 2011. *The Knightly Art of Battle*. Los Angeles, CA. J. Paul Getty Trust.
- Monte, Pedro. 1509. *Exercitiorum Atque Artis Militaris Collectanea*. Milan.
- Novati, Francesco. 1902. *Flos Duellatorum, Il Fior di Battaglia di Maestro Fiore dei Liberi da Premariacco*. Bergamo: Istituto Italiano d'Arte Grafiche.
- Pinker, Stephen. 2011. *The Better Angels of Our Nature*. London: Penguin.
- Porzio, Luca, and Gregory Mele, 2002. *De Arte Gladiatoria Dimicandi*. San Francisco, CA. Chivalry Bookshelf.
- Rector, Mark. 2000. *Medieval Combat: A Fifteenth-Century Manual of Swordfighting and Close-Quarter Combat*. London: Greenhill Books.
- Richards, Colin. 2008. *Fiore dei Liberi 1409 Wrestling and Dagger*. Hamburg, Germany. Arts of Mars Books.
- Sherman, Bernard D. (ed.), *Inside Early Music: Conversations with Performers*, Oxford University Press, 1997.

- Silver, George. 1599. *Paradoxes of Defence*. London. Edward Blount.
- Silver, George. 1898. *The Works of George Silver*. Ed. Cyril G.R. Matthey. London. George Bell and Sons.
- Sotheby & Co. 1967. *Catalogue of Forty-Two Manuscripts of the 7th to the 17th Century*. Sotheby & Co. London.
- Terminiello, Piermarco. 2013. *The Lost Second Book of Nicoletto Giganti (1608)*. United Kingdom: Fox Spirit Books.
- Thomas, Nick S. 2007. *Rapier: The Art and Use of Fencing by Ridolfo Capo Ferro*. London: SwordWorks.
- Tobler, Christian. 2002. *Secrets of German Medieval Swordsmanship*. Benecia, CA. Chivalry Bookshelf.
- Tobler, Christian. 2004. *Fighting with the German Longsword*. Highland Village, TX. Chivalry Bookshelf.
- Tobler, Christian. 2006. *In Service of the Duke (The 15th Century Fighting Treatise of Paulus Kal)*. Highland Village, TX. Chivalry Bookshelf.
- Turner, Craig and Tony Soper. 1990. *Methods and Practice of Elizabethan Sword-play*. Carbonsdale and Edwardsville, IL.: Southern Illinois University Press.
- Vail, Jason. 2006. *Medieval And Renaissance Dagger Combat*. Boulder, CO. Paladin Press.
- Viggiani, Angelo. 1575. *Lo schermo*. Venice: Giorgio Angelieri.
- Viggiani, Angelo. 1575. *Lo Schermo*. Trans Jherek Swanger. Published online at <http://mac9.ucc.nau.edu/manuscripts/LoSchermo.pdf>
- Wagner, Paul. 2003. *Master of Defence*. Boulder CO. Paladin Press.
- Wilson, William. 2002. *The Arte of Defence*. Benecia, CA. Chivalry Bookshelf.
- Windsor, Guy. 2004. *The Swordsman's Companion*. Highland Village, TX. Chivalry Bookshelf.

Windsor, Guy, 2006. *The Duellist's Companion*. Highland Village, TX. Chivalry Bookshelf.

Windsor, Guy. 2012. *Mastering the Art of Arms vol 1: The Medieval Dagger*. Wheaton, IL. Freelance Academy Press.

Windsor, Guy. 2012. *Veni Vadi Vici*. Helsinki, Finland: The School of European Swordsmanship.

Windsor, Guy. 2014. *Mastering the Art of Arms vol 2: The Medieval Longsword*. Helsinki, Finland: The School of European Swordsmanship.

Windsor, Guy. 2015. *Swordfighting for Writers, Game Designers, and Martial Artists*. Helsinki, Finland: The School of European Swordsmanship.

Windsor, Guy. 2016. *Mastering the Art of Arms vol 3: Advanced Longsword: Form and Function*. Helsinki, Finland: The School of European Swordsmanship.

Windsor, Guy. 2007. "The Elements of Test Cutting". *Western Martial Arts Illustrated* ed. Scott Baltic. Issue 2, Fall 2007.

Wolfthal, Diane. 2009. "La Donna alla finestra: Desiderio sessuale lecito e illecito nell'Italia rinascimentale," in *Sesso nel Rinascimento: pratica, perversione e punizione nell' Italia rinascimentale*, ed. Allison Levy. Florence: Le Lettere.

Online sources

Aristotle, *Physics*. Translated by Hardie, R. P. and Gaye, R. K. online at: <http://classics.mit.edu/Aristotle/physics.html>

Capoferro, Ridolfo. 2002. The Great Representation of the Art and Use of Fencing, translation by Wilson, William, and Jherek Swanger. Published online at <http://mac9.ucc.nau.edu/manuscripts/pcapo/EngCF.pdf>

Cappelli, A. 1912. *Dizionario di Abbreviature Latine ed Italiane*. Milan. online at: <http://www.hist.msu.ru/Departments/Medieval/ Cappelli/>

Goldman, David P. 2012. "The Divine Music of Mathematics" online at <http://www.-firstthings.com/article/2012/03/the-divine-music-of-mathematics>.

Viggiani, Angelo. 1575. *Lo Schermo*. Translation by Jherek Swanger. Published online at <http://mac9.ucc.nau.edu/manuscripts/LoSchermo.pdf>

Windsor, Guy. 2012. "Italian Longsword Guards". Online at: <http://www.scribd.com/doc/104396013/Vadi-Guards>

Personal Communication:

Lawrence-King, Andrew. 2012. "Links to Early Music", 5. Submitted to the Australian Research Council Centre of Excellence for the History of Emotions, and shared with me via email, April 16th, 2012.