Dialogue with Roberto Gotti: An Initial Foray into Comparing Chinese and Italian Two-Handed Sword Methods

Hing Chao

Abstract Sword culture is a complex phenomenon that encompasses the dimensions of sword-making and polishing, sword appreciation, technical skills associated with the use of the sword, i.e., swordsmanship, as well as the written and oral traditions related to the transmission of fencing. In recent years, this diverse heritage in China and Italy has drawn increasing attention from both professional scholars and the historical martial art community. However, efforts to directly compare Asian and European historical fencing and sword culture are extremely rare. Written in the form of a dialogue with the pioneering researcher Maestro Roberto Gotti, who has been at the forefront of reconstructing Renaissance Italian martial arts for the past two decades, this study is an initial foray to compare Chinese and Italian two-handed sword traditions of the early modern period (*circa* 1400–1630). At the same time, the author recognizes the inherent challenges to such an undertaking, such as the fact Italian and Chinese martial arts have come down to us in very different states. While Chinese martial arts continue to be practiced as a living art, Italian martial arts have mainly survived in written form. On the other hand, notwithstanding the difficulties in interpretation, Italy has preserved far more documents from which contemporary scholars may seek to uncover the past. At the same time, there are numerous differences in the way fencing knowledge was recorded, which creates an additional layer of complexity for cross-cultural comparison. In summary, considering all the difficulties inherent in this research, the findings presented here are tentative and meant to stimulate discussion and further research—no more than "throwing a stone to attract jade" as the Chinese saying goes—rather than serve as a definitive comparative statement of Chinese and Italian swordsmanship. The reader is encouraged to read Gotti's *The Dynamic Sphere: Thesis on the Third State of the Vitruvian Man* and the reply to this study, jointly written by Gotti and Penso (appended to the end of this chapter), in order to form a more complete view of the dialogue.

Keywords Way of the Sword · Sword culture · Swordsmanship · Martial arts · China · Italy · *Shuangshou dao* · *Shuangshou jian* · Two-handed sword · Historical fencing · Dynamic sphere · Humanism of the sword

H. Chao (✉)
Institute of Chinese Martial Studies, Hong Kong, People's Republic of China
e-mail: hing.chao@icms.org.hk

H. Chao et al. (eds.), *Martial Culture and Historical Martial Arts in Europe and Asia*,
Martial Studies 2, https://doi.org/10.1007/978-981-19-2037-0_12

1 Introduction

Martial arts are the result of long-term cultural exchanges between individuals, communities, and states, which involve material and technological, cognitive, technical, textual, as well as ideational dimensions. Born out of the need for survival and created as combat techniques to settle quarrels, demonstrate valor, as well as to enhance prestige and honor, in time martial arts became an embodied system of knowledge, carrying multi-dimensional information about technology, material science, as well as social and cultural values. Martial arts also reveal essential information about the individuals and communities who practice them, while the social performance of martial arts frequently plays a role in enacting cultural identity. Clearly, martial arts are a fertile field for examination, while martial studies provide unique opportunities for cross-cultural research, the significance of which the academia has only started to recognize. At the same time, the complexity of such research must not be underestimated.

The background of this paper is the multi-layered research partnership between International Guoshu Association, Ma's Tongbei Martial Studies, and Opera Nova that began in 2019. It led to the third International Martial Studies Conference *Sword Culture Across the Eurasian Continent* (2020), where researchers from Europe (in particular, Italy) and China exchanged views on the history, technology, and material culture, as well as transmission and teachings related to historic fencing, and the exhibition *Way of the Sword: Warrior Traditions in China and Italy* at Tai Kwun—Center for Heritage and Arts (2021). It is also the result of an ongoing personal dialogue with Roberto Gotti, visionary founder of the Opera Nova School and pioneer at the forefront of revitalizing Italian martial arts as a living art, who has been encouraging me to consider the similarities and potential connections between the martial art traditions of China and Italy. To a significant degree, therefore, this paper is a response to his invitation to comment on his study, *The Dynamic Sphere: Thesis on the Third State of the Vitruvian Man* presented as the fourth chapter of this volume.

The research process leading up to the exhibition *Way of the Sword*, which involved regular and frequent exchanges with Gotti, including a rare opportunity both to participate in the training and to teach martial arts at Gairethinx in Botticino, the headquarters of the Opera Nova School. These experiences gave me invaluable first-hand glimpses into both the astonishing similarities between Italian and Chinese martial arts, as well as some of the differences. This paper is, therefore, to a large extent, also an account of my own reflections.

It is beyond the scope of an initial foray such as this to compare the two systems as a whole. Instead, this study will focus on the theory and practice of the two-handed sword, which is an important feature in the historic martial arts of both countries. Before launching into the main disquisition, however, it is necessary to emphasize some of the inherent difficulties and potential pitfalls when attempting to compare Italian and Chinese martial arts.

First and perhaps most important, Chinese and Italian martial arts have come down to us in very different states. Italian martial arts—more precisely, Italian martial

arts of the fifteenth to early seventeenth centuries—largely disappeared long before the twentieth century. At the same time, a significant corpus of historic martial art literature has survived and been the subject of reconstructive study by Gotti and his scholars, forming the basis of the curriculum at the contemporary Opera Nova School and Gairethinx, which is now recognized by the Italian Fencing Federation as the national center for historical Italian fencing. By comparison, Chinese martial arts are a living culture with popular following both in China and overseas. With a small number of historical schools and lineages, it is even possible to trace the transmission back to the Qing dynasty. However, the inherited teachings have evolved with the times and been subject to significant—and in many instances, radical—transformations. In addition, much of what we now call "traditional" Chinese martial arts was created between the late nineteenth and mid-twentieth centuries. Therefore, it would be hazardous to take contemporary practice—even what we consider having survived from historical martial arts—to be fully reflective of the past. Even the most respected historic lineages are not free from modern influences.

Second, there are significant disparities between the primary sources in China and Italy, which differ both in terms of quantity and in the nature of the information they convey. In the first instance, extant historical martial art texts in Italy considerably outweigh Chinese manuals of the same period. Gotti considers at least fifteen treatises, dated between the late fifteenth century (Vadi, *De Arte Gladiatoria Dimicandi*) and the beginning of the seventeenth century (Anonymous, *Postura*), to be central to his study (Gotti). The total surviving corpus would be considerably greater if we also take into account the dueling manuals, instructional texts for military drills and training, etcetera. By comparison, only a small corpus of sword manuals has survived from the Ming and early Qing dynasty (and nearly nothing before that). Even if we include Qi Jiguang's (1528–88) military-style two-handed sword methods (which he styled *Xinyou daofa*)—derived from a Japanese *kenjutsu* scroll of the *Kage-ryū* tradition[1]—and the "imported" *Chaoxian shifa* recorded in the Ming military encyclopedia *Wubeizhi*, the total number of texts is less than ten.

Third, from a content and presentational viewpoint, Chinese manuals take a more compact form. In Italy, the birth of humanism and the intellectual transformation it brought about had an enormous impact on the human mind and on the ways in which knowledge was articulated, recorded, and transmitted. While Renaissance Italian martial art treatises still retain a certain Medieval flavor, as Gotti has noted, particularly in the expressive metaphors various masters-of-arms use in describing the human body and the nature of its parts,[2] what is even more noticeable is the growing attention to detail, logical reasoning, and use of mathematic principles for understanding human structure and movements—all tell-tale signs of a nascent scientific mode of thinking. In contrast, with one or two exceptions, Chinese sword manuals

[1] The *Kage-ryū* is considered one of the three main traditions of historical fencing in Japan, alongside with *Shintō-ryū* and *Ittō-ryū*. While *Kage-ryū* itself is no longer practiced, the various *Shinkage-ryū* (i.e., "new" *Kage-ryū*) schools remain popular to this day. *Yagyū Shinkage-ryū*, which is discussed in some detail in this chapter, is derived from *Kage-ryū*.

[2] The best example is Vadi, who compares the human body to a moving fortress mounted on an elephant, with a lion and a dragon sitting above his shoulders.

provide instructions in a fairly general manner. Martial arts in China were—and are—primarily an oral tradition. This highlights an essential difference between Chinese and Italian traditions—in the former case, written text primarily served as an aide to memory, a point of reference for the essential principles and techniques. Italian sword treatises, on the other hand, despite the masters' occasional reluctance to fully disclose their knowledge, are meant to stand on their own to a much greater degree. This in turn illuminates the need to consider the inherited oral traditions when we look at Chinese swordsmanship, while at the same time recognizing the protean nature of oral transmission.

Pursuant of these observations, this study makes equal use of two types of text—written and embodied. Historic documents are chiefly from the period between the fifteenth and seventeenth centuries, while the contemporary masters themselves (and their performances) constitute the embodied text. Historic sword treatises are essential in so far as they are the *only* primary sources—directly written down by the masters—from this period. In the same breath, we must acknowledge that the knowledge transmitted through the pages is necessarily mediated through subjective interpretation. Ultimately, when we compare Italian and Chinese martial arts *qua* dynamic systems, our only reference is those performed by the living masters. In this sense, the body—and the movements enacted with the body—serve as an essential text for this study. Therefore, the methodology adopted here combines textual research and the study of the embodied knowledge.

My point of reference for Italian martial arts is the Opera Nova School founded by Gotti and his teachings, whereas for historic Chinese swordsmanship I refer to two different systems: the two-handed sword methods transmitted by the Ma family, and the techniques passed down within the Jieyuantang school of southern Fujian (or Minnan region).

I do not profess to an in-depth knowledge of Opera Nova, nor do I claim that the teachings of the school offer the only possible interpretation of Italian martial arts of the Renaissance period. However, for the purpose of this study, Gotti and Opera Nova serve as my sole guide and the ultimate authority on Italian martial arts. When I write about Italian martial arts or Italian swordsmanship, it is therefore filtered through Gotti's interpretive lens, which serves as my guide to the labyrinthine martial art system of Renaissance Italy. I also rely on Gotti's reading of the Italian treatises in my discussion of the various masters and their theories.

As to contemporary practice of the two-handed sword in China, I rely on Ma's Tongbei system of martial studies and the Jieyuantang school. The Ma family's two-handed sword methods, a northern tradition with association with the military system of the late Qing period, are the most respected historic swordsmanship system in China, while the Jieyuantang school, founded in the nineteenth century, is the only school I know in southern China to transmit two-handed sword techniques. As a longstanding member of both schools, I have recourse to oral transmissions and my personal experiences, including my own practice with the two-handed sword and related weaponry training.

Last but not least, as the development of the Chinese two-handed sword is intricately linked and, in some ways, derived from the Japanese sword, I also draw from

Japanese sources where that shed light on our discussion. This paper is constructed as an answer to Gotti's essay on the dynamic sphere, so I will begin with a summary of his exposition.

2 Gotti's Exposition of the Dynamic Sphere

Gotti believes the teachings passed down by the Renaissance Italian masters are unified under a set of common principles—or rather, *the* principle. In his view, their transmissions are intrinsically complementary, in the sense that each contributes unique elements and perspectives toward understanding the system as a whole. The quest then is to uncover "the common element in the teachings of those Masters or martial artists who left behind written records (Gotti)." He further says, "There are differences among the treatises of armed combat that we have inherited. Some are richer in content, others less so; some offer detailed descriptions of the techniques, others are more taciturn … All too often they are analyzed individually, which is a serious flaw when studying an art form which, by its very nature, draws its strength from the diversity of confrontational situations, leading to the settlement and layering of different experiences (Gotti)." Therefore, to make sense of one treatise, it is preferable—or, in order to arrive at a complete understanding, it is essential—to study all the treatises together, for concepts revealed in one source illuminate another, like pieces of a complex jigsaw puzzle which are only fully known when they are assembled and put into the right places.

Gotti's study of the primary sources over a period of more than two decades ultimately led to the discovery of what he considers the holy grail of Italian martial arts—the dynamic sphere—which he defines as follows:

> (T)he concept of the dynamic sphere—a sphere that does not rest on its poles and can change its diameter—comes from those who received and passed on the teachings of a perfect martial art in the fifteenth to sixteenth centuries. … (This is) the common element in the teachings of those Masters or martial artists who left behind written records … the insistence upon improving dynamic movement, uniting all the limbs behind a blow or a parry (Gotti).[3]

In his view, the dynamic sphere is the ideal motional state the Renaissance masters sought in the martial arts. It leads to the actualization of what the early sixteenth-century fencing master Camillo Agrippa (1520–1595) described as *potenza infinita* (infinite power), which manifests in a continuous motional flow within a sphere, which may expand and contract as the actor responds to new confrontational situations.

To intuit the workings of the dynamic sphere, the actor has to establish his "maximum possible proportions," which in turn leads to the (self-)discovery of what Gotti calls the third state of the Vitruvian Man. In this state, the center of man is located at the solar plexus, between the diaphragm and the groin, while his limbs (in particular, the upper limbs) extend outward to their maximum reach. The solar plexus is seated

[3] Note that for all of these references to Gotti's work, please see the fourth chapter of this volume.

at the core of the dynamic sphere, whose surface is described by the edge of the blade as it strikes at the enemy. Once the maximum reach is discovered, the martial artist may then freely change or adjust the circumference of the dynamic sphere as he pleases. Gotti says,

> The true and grounded principle should be sought in man's natural state, which can be perceived when the maximum possible proportions are reached. Such proportions may then be reduced in half-sword play, in narrow play and with bare hands, but maximum proportions should first be sought … The true and founding principle that troubled Pagano's thinking was the dynamic sphere laid down by Agrippa, of which the other Masters let us glimpse into the fundamental principles: the ability to mobilize the limbs; the ability to move one's weight from the ground toward the first center—the solar plexus—and lay it down again elsewhere; the ability to move the center of the dynamic sphere around the inside of the body; the ability to expand and draw upon the energy of dynamic moves (whether they are cuts, parries, displacements); the ability to place the sphere temporarily on one possible pole out of an infinite series existing on its surface, to draw upon the support within the nucleus and to send it to the periphery of the sphere (Gotti).

According to this view, the dynamic sphere is a complex concept that is at once a movement principle, while it also encompasses the strategies and mechanisms of attack and defense. In a word, it is a totalitarian principle that holds the key to all aspects of martial arts.

Later we will look more closely at some of the concepts described by the various masters, which we may view as conceptual components of the dynamic sphere *qua* a theoretic system. For now, let us examine the Chinese tradition to see whether there is a comparable theory.

3 The Chinese Two-Handed Sword Tradition

The idea of a three-dimensional circular power that moves within a spherical space is endemic in Chinese martial arts. Popular "styles" such as Taijiquan, Baguaquan, Yiquan, and Fujian White Crane, frequently invoke such ideas as *baoyuan* (embracing the circle) in static and dynamic practice, which further draw support from traditional Chinese cultural and cosmological concepts like "*tian yuan di fang*". In Fujian White Crane boxing, for example, one of the most fundamental training exercises is *sanyuan jiushi* (Three Circles and Nine Movements), which reduces dynamic motion analytically into three movement planes.[4] Taken together they constitute a dynamic sphere not dissimilar to the one described by Gotti and the Renaissance masters. Indeed, practitioners are taught to visualize and perform their movements within an invisible sphere. The example of Fujian White Crane is particularly interesting, as it forms a core component of the teachings at Jieyuantang, which also transmits the methods

[4] Master Lee Kong offers an in-depth discussion on the "circle" in a sub-section entitled "*Sanyuan jiushi*" in his book (Lee 2020, 127–140), to which I refer the interested reader.

of the two-handed sword. According to the oral transmission of Lee Kong, a fourth-generation master of the school, the principles in empty-hand martial arts also apply to the two-handed sword.[5]

However, before getting carried away it is important to note that there are crucial distinctions between the concept of *yuan* (the circle or sphere) in Fujian White Crane and the dynamic sphere. While the dynamic sphere initially seeks the greatest possible extension, White Crane begins on the opposite end of the spectrum, with a small circle whose radius is defined by the length of one's forearm and teaches the practitioner to keep the circle tight and close to the body. It also involves specific cultural notions about the human body, in particular, the need to extend and contract the spine as a governing movement principle which—common across Chinese martial art styles—is not found in the Italian tradition as far as I am aware. Therefore, even though Chinese and Italian martial arts both ostensibly make use of the sphere as a dynamic principle, there are subtle but important differences in how it is understood and expressed.

Another important point is that when we consider Chinese sword manuals of the fifteenth to seventeenth centuries, they make no reference to such concepts as the sphere, which are typically associated with a specific cultural attitude to understanding martial arts—a so-called "internal" approach—which did not appear until the very end of the Ming dynasty.[6] In fact, in the surviving martial art literature of the period, there is no discussion at all of such abstract theories, while the focus is firmly placed on the practical matter of combat and the strategies therein. Circular movements exist in so far as they apply to the actual methods of attack and defense, cutting and parrying, but do not form the basis of a higher or more abstract movement principle such as the dynamic sphere.

The Ming dynasty was an unusual time in terms of martial art development. On the one hand, it has long been acknowledged that general military preparedness (and martial skills) suffered a sharp decline during this period. On the other hand, ongoing military crisis and mounting threats of invasion both on the northern border and along

---

[5] In his article, "*Fujian shuangshou dao fa*" ("Fujian's Two-handed Sword Methods") in *Xianggang wulin* (*Hong Kong's Martial Arts Community* 2014, 52–59), Lee Kong discusses the common principles between the two-handed sword and White Crane, which he further explains in the video demonstration (https://youtu.be/s3osKAjh0ao).

[6] Under the growing influence of Neo-Confucianism—which was heavily influenced by Taoism—from the Song dynasty onward, body practices increasingly drew upon Taoist cosmological concepts. In particular, the cosmological concept of Taiji, which the Northern Song (960–1127) scholar Zhou Dunyi (1017–73) developed into diagrammatic form, gave impetus to esoteric health cultivation techniques. In origin, the "internalization" of such Taoist concepts into body practices aimed primarily at cultivating longevity and had nothing to do with the martial arts. However, from the Southern Song (1127–1279) onward, as Neo-Confucianism of the Li School began to dominate the mainstream intellectual landscape, concepts such as "*yi dong buru yi jing*" ("movement to give way to stillness") began to penetrate other cultural domains. At the beginning of the Qing dynasty, the concept of "internal boxing" (*neijiaquan*) appeared for the first time in *Wang Zhengnan muzhi ming* (*Tomb stele in commemoration of Wang Zhengnan*), composed by the late Ming and early Qing literati Huang Zongxi in commemoration of his friend and martial artist, Wang Zhengnan. However, it is likely that this concept already existed in the late Ming.

the coast encouraged innovations in military tactics, weaponry, and martial skills, which often took place outside the official domain, as civilian and military martial arts interacted in unprecedented ways in an effort to reform the corrupt and degenerate military system. Ming's sword culture mirrored such contradictory tendencies in mainstream martial culture, as it was at once marked by decline and loss, as well as innovation and revival.

In his paper, "*Shuangshoudao fa yuanliu*" ("Genesis of two-handed sword methods"), Ma Lianzhen states that the two-handed sword, which emerged in the late Warring States and reached its peak during the Tang dynasty, fell sharply into decline during the Ming, such that "swordsmanship skills had become degenerate, (while) the swords manufactured were coarse … and became an impractical martial art fit only for performance (MLZ 2018, 40)." However, from extant sources, we know that the "ancient" techniques of two-handed sword (*shuangshou jian*)[7] were still practiced by civilian masters in the sixteenth and seventeenth centuries, notably Li Liangqin, who transmitted the methods of "Jing-Chu *changjian*" to the celebrated general Yu Dayou (1503–79).[8] At the same time, incursions by *Wokou* pirates, who terrorized communities in the coastal provinces with the two-handed Japanese sword (*nihontō*), which reached its height between the Jiajing (1522–66) and Wanli (1573–1620) eras, encouraged civilian as well as military martial artists to study its techniques. This led to one of the most febrile and interesting periods of exchange between Chinese and Japanese martial arts, which gradually progressed from imitation of Japanese methods to a more profound fusion of Japanese and Chinese swordsmanship (MMD 2000a, 222–225, 240–246). Ultimately, this gave rise to a number of classic fencing treatises, notably Cheng Chongdou's (b. 1561) *Dandao faxuan* and Wu Shu's (1610–94) *Dandao tushuo* (see Fig. 1).

Reflecting this hybridity, two parallel systems of the two-handed sword existed side by side during the Ming. The first is an ancient native tradition, already over a thousand and five hundred years old by the early Ming, which makes use of a straight blade that could be either double- or single-edged. The second is an imported tradition from Japan, which itself evolved from earlier Chinese and Korean forms.[9] Around the eleventh century, a distinctive Japanese sword with its own characteristics—including a curved blade (as opposed to the earlier straight blade from China, called *chokutō* in Japanese), ridge, and finely polished surface—emerged. Ultimately, this type of blade was responsible for the second, imported tradition. For the sake of simplicity, we will refer to the indigenous Chinese form as *shuangshou jian*, irrespective of whether a double or single-edged blade is used, and to the form derived from Japan *shuangshou dao*.

---

[7] *Shuangshou jian* refers to a type of two-handed sword with double edges.

[8] In the "Introduction" to *Jianjing*, in the opening sentence Yu Dayou writes that he "learnt Jing-Chu *changjian* and was conversant with its methods," which indicates he was a master in this art. His teacher was Li Liangqin, as clearly recorded in *Yu-gong Dayou gongxing ji*, written by Li Du (Ming dynasty). For further discussion see MMD (2000a, 236).

[9] The straight single-edged sword, known as *chokutō* in Japan, was imported from China in large quantities, especially during the Tang. For a more detailed discussion see MMD (2000a, 215–216).

Fig. 1 "*Shanggong dao shi*" in Cheng Chongdou's *Dandao faxuan* illustration

While these two traditions had a profound historic connection, there are fundamental differences both in their form and techniques. We will begin with the *shuangshou dao*, which was the more popular during the Ming. It is to this tradition that most of the living "historical" two-handed sword techniques are traced, including the Ma's Tongbei two-handed sword methods.[10]

[10] Ma's Tongbei's two-handed sword methods originated from Huang Linbiao, who in turn learnt from the Ji family of Tianjin, who were hereditary martial art instructors for the Green Standard army during the Qing. The source of Ji's two-handed sword is unclear but likely to have derived from the military system of the long-hafted *shuangshou dao*. At the same time, Huang passed down a manual which was substantially based on Cheng's *Dandao faxuan*, thus, according to Ma Lianzhen, his methods were likely a fusion of Japanese two-handed sword and the Qing military *shuangshou dao*. See MMD (2000a, 247–248) and MLZ (2020, 45–46).

3.1 *Shuangshou dao*

A notable feature of the interactions between Chinese and Japanese swordsmanship during the Ming was the concerted Chinese effort to copy Japanese form. Imitations of the Japanese sword, known under the name of "*wogun dao*" or "*wodao*", became standard military weapons and were manufactured *en masse* by the state (MMD 2000a, 220). Mirroring this development, commanders assiduously incorporated Japanese sword methods into military training. Qi Jiguang, for example, created the Xinyou two-handed sword methods based on his observations of Japanese swordsmanship. The same trend is also evident among civilian martial artists. Cheng Chongdou learned his methods from the Zhejiang sword master Liu Yunfeng, while Wu Shu acquired his art from Shi Dian. Intriguingly, Liu and Shi apparently both learned from the same Japanese master, so in effect Cheng and Wu's methods derived from the same source.[11] According to Ma Mingda, "Cheng's *dandao* fully copies the original style of Japanese swordsmanship, while such details in his manual as drawing and sheathing the sword also closely follow the 'Japanese form', which [therefore] gives a meticulous and faithful representation [of the Japanese sword] (Ibid., 245) (see Fig. 2)." By comparison, Wu showed considerable ingenuity in the way he fused Chinese sword techniques with Japanese swordsmanship, particularly the various grips he introduced in holding the sword, changing flexibly between single-hand and two-hand grips (Ibid., 245). However, it remains the case that this two-handed sword tradition essentially had the *nihontō* and Japanese swordsmanship as its basis.

Japan is one of the only countries to preserve its historic martial arts, particularly *kenjutsu* (swordsmanship), as a living tradition. However, it is worth bearing in mind that the Japanese sword itself went through a significant transformation during the Edo period (1603–1868), as the shogunate proscribed the wearing of the long sword used for field combat—sometimes known as *nodachi* (field sword), which was particularly popular during the Nanbokuchō (1336–1392) era—in favor of a shorter blade no longer than 69–70 cm in length.[12] By a historic irony, at the same time as the longer field sword went out of fashion in Japan, it was adopted and ultimately became the model for the Chinese *shuangshou dao*.

In *Dandao faxuan*, Cheng states that a normal *wodao* (i.e., Japanese sword) measures three *chi* and eight *cun* while long ones go up to five *chi*, which translates to around 122 cm and 160 cm in today's measurement.[13] Extant two-handed

[11] MMD (2000a, 245). Also see "*Ming mou wushujia Shi Jingyan kaoshu*" for a more in-depth discussion on the martial arts (included two-handed sword methods) of Shi Dian (Jingyan) (MMD 2000b, 88–111).

[12] The Tokugawa regime instituted a series of regulations to consolidate the new shogunate's power, including outlawing the wearing of the extra long *odachi* (literally, "large longsword"). See "Sumptuary Regulation and Status in Early Tokugawa Japan" by Shively. For a more general summary on the development of the Japanese sword, see Harada, "History of the Japanese Sword," in *Art of the Samurai*.

[13] In the section where Cheng describes the two-handed sword ("*dandao shi shuo*" or "Description of *dandao*"), he states, "There is an ancient saying, '*kuai ma qing dao*' ('a fast horse and a light

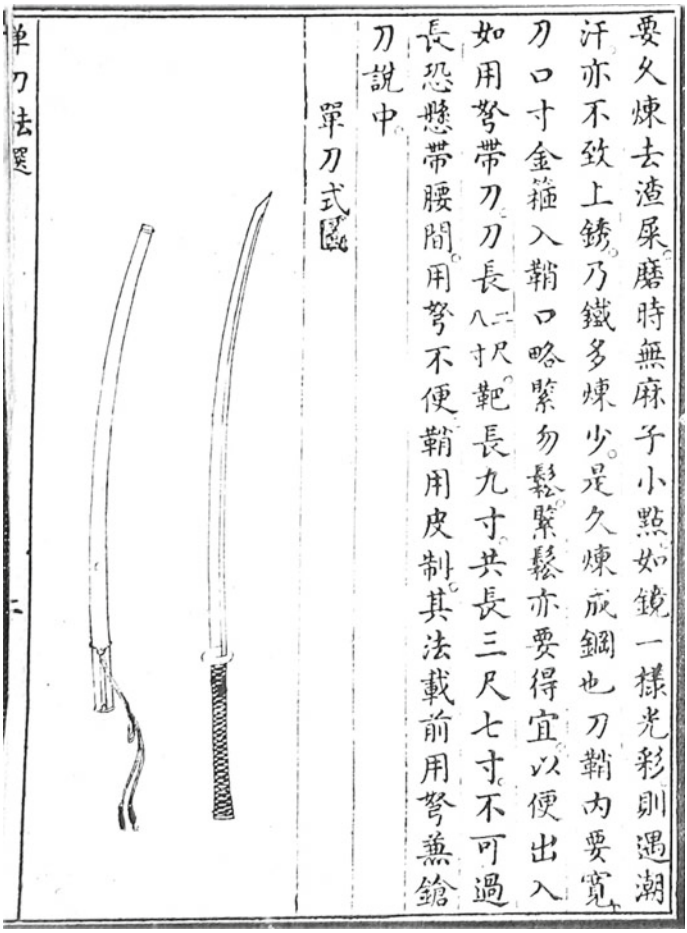

Fig. 2 Two-handed sword (*dandao*) illustration in Cheng Chongdou's *Dandao faxuan*

swords of the Ming dynasty, including specimens in Mr. Ma Yuwei's private collection, leave us in no doubt that the information provided by Cheng is accurate (see Fig. 3). By comparison, Edo period swords were normally between 90 and 110 cm, so we can see that many of the swords used by the *Wokou* pirates, which struck such fear in coastal communities in China, were war swords of pre-Edo standards.

We may further gain a flavor of the impressive size of the *nihontō*, as well as the techniques and movements of Japanese warriors from Qi Jiguang's famous statement,

> Longsword, it has been around since the *Wokou* pirates' incursions into China. Flashing [the sword], they leap and dance before us, which take the wind out of my troops. The *Wokou*

sword'). Today I take the Japanese sword (*wodao*) as model. It is three *chi* and eight *cun* in length, while long ones are five *chi* long." He then specifies the metallic properties required to make a good *wodao*.

Fig. 3 Ming dynasty two-handed sword from Ma Yuwei's private collection. The sword measures 146 cm overall (not including the pommel). The blade is 101 cm from the guard to the tip

> pirates like to jump, leaping over a *zhang* with each step, while their sword is over five *chi* long, thus adding five *chi* to their reach. It is hard for my soldiers to ward it off with short-range weapons while long-range weapons are too slow, thus those who meet them end up being cut in two. The reason is that their weapon is sharp and wielded with two hands, thus with great force.
>
> (Qi, Jixiao xinshu: duanbing changyong jie)

In a similar vein, Ma says, "after Chinese sword methods entered Japan, through a long period of development and exploration … [they] created the Japanese fencing techniques that were simple, practical, exacting, and full, and further characterized by powerful and flowing movements. In particular, it should be mentioned that … Japanese warriors … created a system of footwork that is extremely quick and agile, to combine with swift, forceful big cuts …" (MMD 2000a, 240).

The foregoing gives us a flavor of what the sword techniques of the *Wokou* pirates were like. Given the Chinese *shuangshou dao*'s intimate connection to the *nihontō*, including many martial artists' conscious effort to learn and closely imitate the Japanese style, we may expect them to be quite similar. However, to appreciate more fully the quality of their movements, it is necessary to go beyond the text and study the principles *in* movement.

During the production of *Way of the Sword*, I had an opportunity to closely examine an *assalto* (first *assalto*, fifth part)[14] performed by Jacopo Penso, Gotti's disciple and one of the leading practitioners of historic Italian fencing, and compare it with a performance of the two-handed sword by Prof. Ma Lianzhen. An important objective was to annotate the key movement principle(s) of the respective schools/traditions. To this end, I spent a considerable amount of time discussing with Gotti and Ma Lianzhen, respectively the head of Opera Nova and the third-generation inheritor of

[14] According to Penso, the fifth part is one of the most complete parts of the first *assalto* (made of ten parts). It is the only that offers a grappling action as a possible alternative, and concludes with an "embellishment" that mirrors the conclusion of the entire *assalto* at the end of the tenth part.

Ma's Tongbei, in order to gain a deeper understanding of the movements and to find the most effective and accurate way for annotation. During this process, I became aware of some of the key differences in their movement, which I summarize below.

Ma's performance included a sequence of two-handed swords that consists of twenty-three movements and several shorter sequences from a poem used for transmitting the principles of swordsmanship. The movements are crisp, strong, and fluid, accentuated with clear changes of pace, dynamic rising and sinking of the body, sudden turns, and quick changes of direction, and delivered in long, measured strides. The general style is evocative of the military-style of the pre-modern period, intended to cut through an opponent with powerful strokes. Indeed, if we compare this with the illustrations in Ming sword manuals, particularly Cheng and Wu, the resemblance is striking (see Figs. 4 and 5).

Naturally, given the close connection, it also invites comparison with historical Japanese swordsmanship. Qi said of Japanese swordsmanship, "Those who meet them [in battle] end up being cut in two." In fact, "splitting the enemy in two" (literally, "one cut, two halves") is the name of a technique in *Yagyū Shinkage-ryū*

Fig. 4 Illustrated figure in *juanqi shi* posture from Ma's Tongbei two-handed sword methods

Fig. 5 Illustrated figure in *yingtuici shi* posture from of Ma's Tongbei two-handed sword methods

kenjutsu,[15] and in *Heihō kadenshō*, one of the most important Japanese sword treatises ever composed, Yagyū Munenori (1571–1646) stresses both the importance to "keep the stance low" and the ability to gain victory through a combination of reading the opponent's intent, proper timing, and delivery of a single powerful stroke—which he calls the "ultimate single stroke."[16] Miyamoto Musashi (1584–1645) writes in a similar vein about "the single stroke" in his equally classic *Book of Five Rings*, which is "to gain victory with certainty by the accuracy of a single stroke" (Miyamoto 1993, 31).

Similar concepts are found in European swordsmanship, in particular the Italian master Angelo Viggiani dal Montone (d. 1552), who speaks of the "*magno calpo*" ("great cut"). However, if we look more closely at the text, both in Viggiani and other Italian masters, we discover that there are considerable differences in the technique and execution compared to Chinese (and Japanese) methods. With Viggiani the focus

[15] "One Cut, Two Halves" is the first of the five elementary techniques in *Yagyū Shinkage-ryū kenjutsu*, as shown in both Munenori's *Heihō kadenshō* and the illustrated catalog produced by his father Sekishūsai, which fully illustrates its importance.

[16] Munenori discusses the "ultimate single stroke" in a section of the same title in the third scroll of his work, "The Life-giving Sword." However, to understand his meaning it is important to consider more broadly the lessons within the second and third scrolls, under the "Three Rhythms," "The Moon on Water and Its Reflection," "The One Principle," etcetera.

is on how to "carry the weight in the body's core to free up the feet" when delivering the cut. According to Gotti's analysis, the muscular chain behind the stroke aims to maximize the force of the stroke while simultaneously freeing up the lower body to allow for freedom of movement (Gotti). Indeed, this is a general rule one may observe in Opera Nova. While the martial artist draws strength from the ground, one leg is always free, which of course is consistent with Gotti's philosophy of combat. This contrasts with Chinese and Japanese two-handed swords, where the swordsman "should tread strongly on your heels (Miyamoto, *The Book of Five Rings: The Water Scroll: On Footwork*)," with the "forward knee … carry[ing] the weight of your body and the rear knee should be extended" (Yagyū, *Heihō kadenshō: The Shoe-presenting Bridge: The Three Learnings*). In a similar vein, Yu Dayou states in *Jianjing* that when using a hafted weapon, including a long two-handed sword, one should keep "the front leg bent and the left leg extended (Yu)." Evidently, there is a difference in emphasis on stance and footwork where East Asian swordsmen, in general, prefer to take a wider and lower stance, keeping their center of gravity closer to the *dantian*, several inches below the navel, while distributing their weight evenly on the two feet, whereas Italian swordsmen adopt a slightly narrower and higher stance, with the feet closer together, while maintaining a higher center (around the solar plexus) and lean slightly toward the front.

If we now look at these principles *in practice*, in Ma's Tongbei the power of the descending cut is maximized by bringing the sword down, while simultaneously "closing" the spine and pressing down the forward shoulder, with *both* feet firmly planted on the ground, if only for a moment. This dynamic principle is the subject of a detailed discussion in the article, "*Cong tongbi dao tongbei*," to which I refer the interested reader (MMD 2017, 267–273). Obviously, there are of course instances (and techniques) where the weight is mainly on one leg, but more often we seek balance between the two feet (see Figs. 6 and 7).

From the foregoing, we may perceive that the methods of *shuangshou dao* place great emphasis on delivering precise, powerful strokes from mainly strong, long stances. This makes a sharp stylistic contrast with the Italian two-handed sword of the late Renaissance, which is characterized with smooth, flowing strokes that are performed as a continuous motion within a moving sphere. It is true that both Chinese and Japanese manuals also make reference to circular cuts that combine parry and counter in a swift single movement, particularly in specific situations where, for example, one has to fend off multiple opponents from different directions.[17] Such similarities and differences illuminate, on the one hand, the role of culture in determining specific styles or preferences in the approach to combat, but also the ultimate unity of the human experience that leads to common strategies and solutions.

Let us now consider the *shuangshou jian.*

[17] An example is the *yinmang shi* (Silver Serpent Movement) in *Chaoxian shifa*, which I discuss in the section on "*Shuangshou jian*".

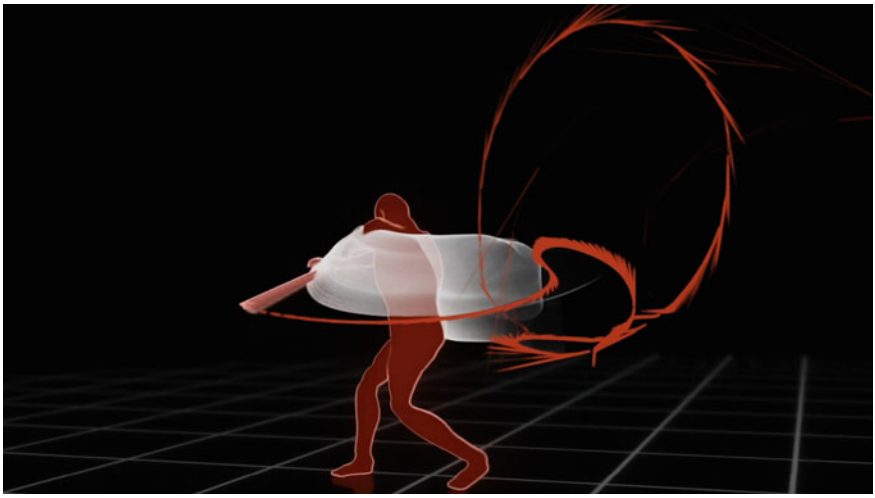

Fig. 6 Animated figure showing a movement in Ma's Tongbei *shuangshou dao*. From *Way of the Sword* exhibition (2021)

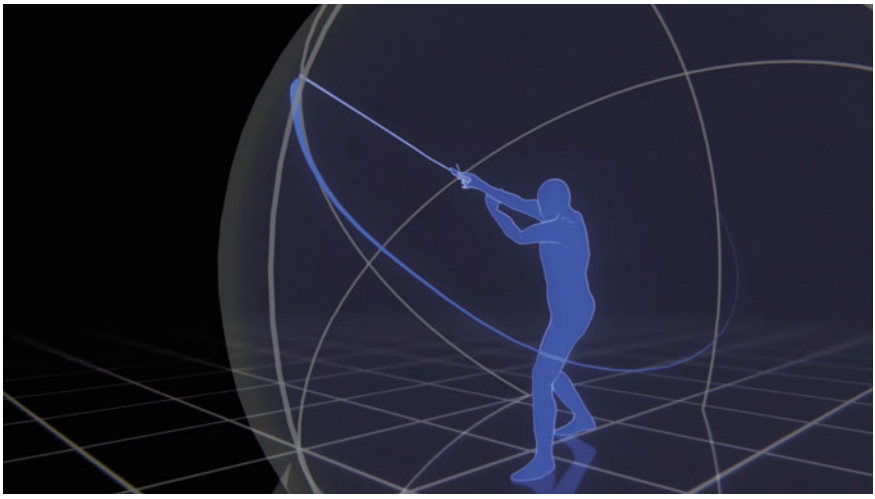

Fig. 7 Animated figure showing the dynamic sphere. From *Way of the Sword* exhibition (2021)

3.2 Shuangshou jian

Shuangshou jian is a native swordsmanship tradition with a very long history in China. It emerged in the late Warring States, in particular, in the kingdoms of Chu, Yan, and Qin, and was in essence an extended form of *changjian* (longsword). From archaeological records, we aver that by the Qin and Han dynasties, *shuangshou jian*,

also known as *changjia* for its long hilt,[18] had attained a mature form. According to Ma Mingda, this type of longsword first emerged in the state of Chu, and later gained currency in Qin after the latter defeated and absorbed Chu (MMD 2000a, 228). Archaeological work at the imperial mausoleum of Qin *shihuang* (the first emperor of Qin) produced several bronze longswords, measuring on average over 80 cm. The dimensions of these swords and, in particular, the length of the hilt (which commonly exceeds 20 cm), suggest they were intended for two-handed use.

These are not isolated finds as great swords of similar lengths were found in other archaeological sites throughout the country, notably the King of Nanyue's royal tomb of the Western Han dynasty in Guangzhou. Fifteen long iron swords of varying lengths were found in the inner burial chamber, suggesting they were the personal belongings of the king. The longest of these is D143, which measures 146 cm in length, of which the blade measures 103.8 cm.[19]

The appearance of *changjian* marked a significant breakthrough in metallurgy, which made it possible to make a long, narrow blade that could withstand the stress of combat. If we compare bronze and iron swords of the late Warring States, we note a remarkable shift in blade design. The prevalent bronze sword design had a relatively wide, waisted, blade that tapered toward the tip. Such swords were seldom more than 60 cm long. By comparison, iron longswords between the late Warring States period and Han were commonly around 100 cm in length, and displayed a completely different blade profile—slender with no waist, and ran parallel for the full length until it gradually tapered toward a (often slightly rounded) triangular tip. It is interesting to note that, despite developments in blade design, two-handed swords of the fourteenth to seventeenth centuries in China and Japan remained similar in length. This suggests *shuangshou jian* had attained a mature form already at this early stage. By comparison, swords of comparable design and length are not known in Europe until the twelfth century, while proper two-hander only developed toward the end of the fourteenth century, to flourish in the sixteenth century.

Jian or the double-edged sword reached the peak of its cultural development between the Warring States and the Han dynasty. During this period, sword-making and sword appreciation, swordsmanship, as well as philosophic discourses surrounding the sword reached an unprecedented height—never to be scaled again in Chinese history. Such developments also led to the birth of *Jiandao*, or *Way of the Sword*, which is the subject of an earlier chapter (*Sima Qian and the Way of the Sword in Ancient China*). Sadly, due to the shift in cultural values and ideology, *Jiandao* was lost in an early period of history, and that by the Tang dynasty it was already considered a lost art. At the same time, from the Eastern Han onward the rise of the single-edged sword gradually replaced *jian* as the dominant short-range weapon.

---

[18] According to Ma Mingda, the name "*changjia*" originated in the state of Chu to refer to a "long-hilt" sword. For a more detailed discussion see MMD (2000a, 229).

[19] The iron swords from the royal tomb of the King Nanyue are the subject of many papers. For a more recent discussion see, for example, "*Shilun Nanyue wang mu chutu de tiezhi wubei*" in *Wenwu tiandi*, 2019, vol. 1.

Nonetheless, despite these setbacks *shuangshou jian* retained its prestige as a weapon of war for several centuries. Between the end of Tang and the Five dynasties, a military unit specializing in *shuangshou jian* was created, which became a mainstay in the army (MLZ 2020, 39). Ma Lianzhen reckons that *shuangshou jian* swordsmanship reached its peak during this period. The Ming military write Mao Yuanyi writes, "in ancient times *jian* could be used for combat" and that "[the emperor] Tang Taizong had over a thousand *jianshi* (swordsmen) (Mao, "Introduction", in Anon, *Chaoxian shifa*)."

Following the fall of the Tang *shuangshou jian* fell out of use, although it continued to survive in some form down to the Ming. In fact, it had fallen so far that Mao considered *shuangshou jian* all but a lost art—until it resurfaced in a single manual, which Mao published as *Chaoxian shifa* (*Korean [Swordsmanship] Movements and Methods*) in his military encyclopedia, *Wubeizhi* (*Records of Military Preparedness*). Besides this sword treatise, the only other martial art author to mention *shuangshou jian* was Yu Dayou, who studied the methods of "Jing-Chu *changjian*" from Li Liangqin, but he left behind no record except for what one can glimpse from his *Jianjing*, which is a staff manual. Wu Shu also mentioned a certain Yuyang *laoren*, whose *jian* techniques he incorporated into his *shuangshou dao* methods, but it is unclear whether the methods were specifically for two-handed use.

Chaoxian shifa is remarkable in many ways. The manual consists of three parts: brief introduction by Mao Yuanyi, a sword poem, and the actual manual. The three parts were written at different times but with the exception of the introduction, the manual predates the Ming. In the introduction, Mao laments the loss of *shuangshou jian* and mentions that the current manual came into his hands from a "*hao shi zhe*" ("helpful man") who in turn obtained it in Korea, and further refers to a "*gejue* (literally, poetic formula) from broken bamboo slips and fragmented passages." This probably refers to the sword poem that follows the introduction. If this interpretation is correct, then this section comes from a different source with no aetiological link to the manual. The poem contains fourteen stanzas. Mao states that "its meaning is obscure," but nonetheless goes on to provide annotations with instructions for performance. We shall return to the poem a little later. Finally, the third and main part of the text is the manual itself, which consists of "The Four Methods" and twenty-four illustrated techniques (movements).

Ma Mingda reckons that the manual in its current form was created in the Ming dynasty, while the text might have been written during the Yuan or earlier. His assessment is based on a linguistic study of some of the technical terms, that he has been able to identify in Yuan dynasty literature (in particular, *Water Margins*) and theater. I encourage interested readers to refer to the relevant part in his important paper, *Historic Examination of Swordsmanship Exchange between China, Japan and Korea* (*Lishi shang zhong ri chao jiandao wuyi kao*) (MMD 2000a, 234–235).

Without going into too much detail, what is remarkable is that this manual has preserved several techniques not found in any other Chinese sword manual. Of the twenty-four movements, at least three of them—the Silver Serpent Movement (*yinmang shi*) (see Fig. 8), the Spreading Wing Movement (*zhanchi shi*) and Against-the-Scale Movement (*nilin shi*)—appear to be unique. What is even more interesting,

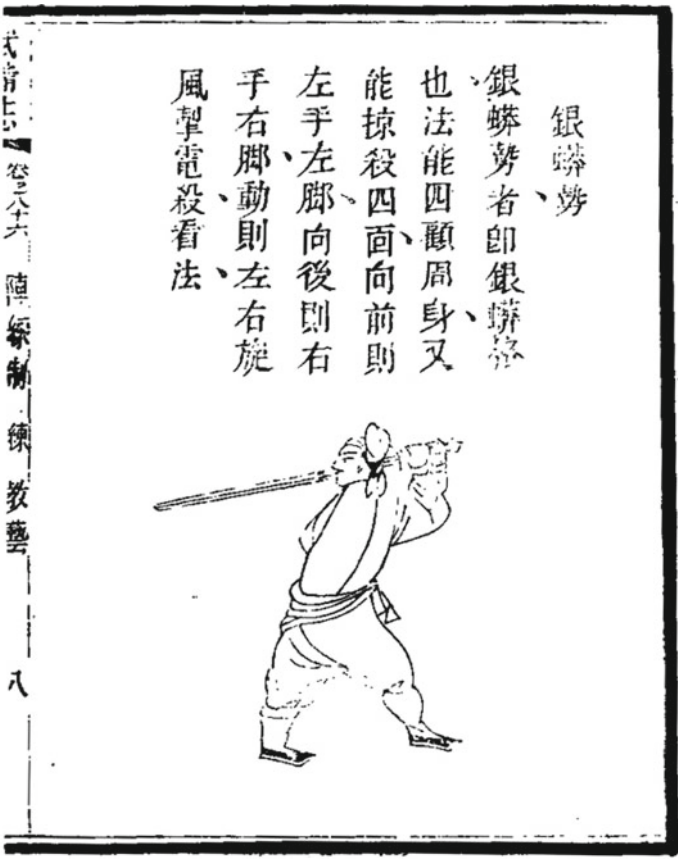

Fig. 8 *Yinmang shi* in *Chaoxian shifa*

similar methods are testified in contemporaneous European (including Italian) sword manuals. The Spreading Wing Movement is a signature technique in Opera Nova, known as *fendente/tramazzone di filo falso* (false edge vertical cut), while the Silver Serpent Movement corresponds closely to a technique known as *Spazza campagna*, recorded in a seventeenth-century two-handed sword manual (Ferdinando Alfieri: *L'arte di ben maneggiare la spada*, 1653), and further invites comparison with *posta di finestra instabile* in Fiore dei Liberi's *Trattato della scherma* (early fifteenth century) (see Figs. 9 and 10). The name *nilin* (against-the-scale) is also highly intriguing, as it vividly evokes the idea of piercing through scale armor with a thrust from below—thus exposing the weakest point of the scale armor. It is interesting to note that from the Achaemenid period (550–330 BCE) onward scale armor was the most popular type of armor in the Near East until it was superseded by lamellar armor in the Middle Ages (Tsurtsumia 2011, 68). The name of this movement also conjures up memories of the Tang dynasty's conflict with the Abbasid empire. In

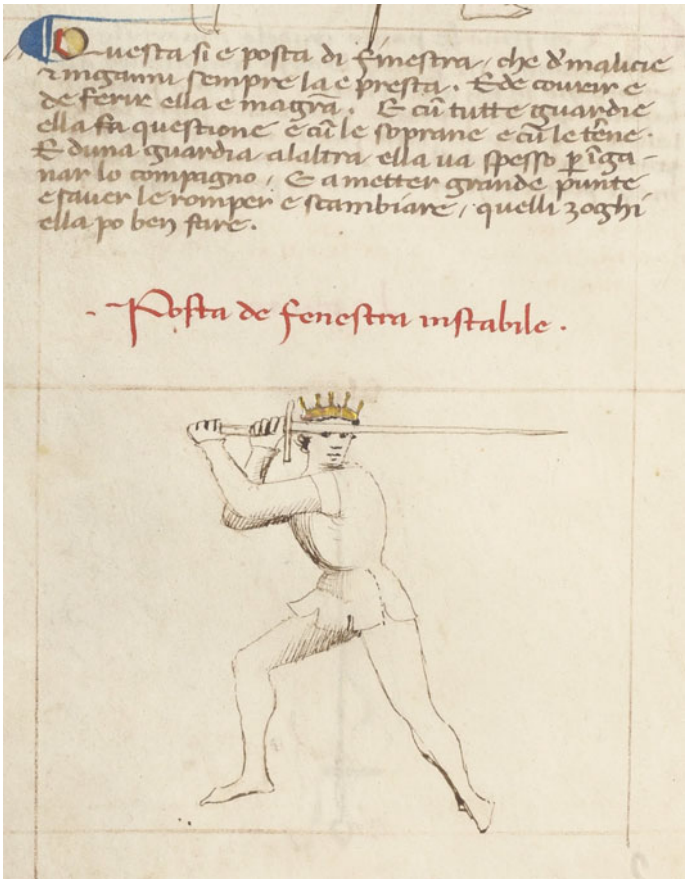

Fig. 9 *Posta di finestra instabile* in Manuscript Ludwig XV 13, Fiore dei Liberi (early fifteenth century)

the absence of concrete evidence, such a notion may only be a fancy, but could this technique have been used by the Tang's *shuangshou jian* unit at the Battle of Talas (751 CE)?

The highly evocative and cryptic sword poem is even more intriguing. Consider, for example, the following stanzas:

> Sweep past the knee(s) and, connecting the shoulder(s), strike at the two sides; step forward as the air is filled with white snow.
>
> (*Luexi lianjian pi liangpang jinbu mankong fei baixue*)

The two stanzas describe the movement and technique of the ascending stroke(s). Couched in poetic language, they nonetheless provide the key to execution. The expression *lianjian* (connecting the shoulder), in particular, points to the vital role of the shoulder, which connects on the one hand with the lower body that initiates the

Fig. 10 *Spazza campagna* in *L'arte di ben maneggiare la spada*, by Ferdinando Alfieri (1653)

movement, and with the arms and the sword on the other, extending them upward as "the air" becomes filled with the "white snow" of the blade's reflection.

Another stanza, "spreading the flower petals over your head to cover the front and back" ("*sanhua gaiding zhe qianhou*"), resembles the description for *yinmang shi*, which reads,

> *Yinmang shi* (Silver Serpent Movement) is the same as *yinmang ji* (Silver Serpent Stroke). This method allows you to look around and [at the same time] to lay about (*lue*) and strike in the four directions. [When you are] Facing the front, [you should have your] left hand [arm] and left leg [forward]; [and when] facing the back, [you should have your] right hand [arm] and right leg [forward]. [And when you are] In motion [you should] swirl around from left to right [and from right to left] like a whirlwind, with the speed of lightning, [delivering] killing-blow[s] [as you do so].
>
> (*Chaoxian shifa: Yinmang shi*)

"Spreading the flower petals over your head to cover the front and back" also reminds me of "The Wheel" in the *Yagyū Shinkage-ryū*, which Munenori describes in the following terms,

> The Wheel … is so named because you move your weapon in a circular pattern. Assume a side stance. Allowing your opponent to cut at your left shoulder, defeat him by rotating your sword in accordance with his cutting action.
>
> (Munenori, *Heihō kadenshō: The Shoe-presenting Bridge*)

For the most part, teachings such as these are extremely brief. However, they indicate a deep pool of knowledge that is hinted at but not fully explained.

Elsewhere, the annotations themselves offer interesting insights about *shuangshou jian* practice of the Ming dynasty. In this connection, the annotation for the final stanza is particularly useful. The stanza reads, "*huishen yema qu sixiang*" ("the wild stallion turns around as it remembers its native land"). The annotation gives the following interpretation: "right hand wipes the shoulder, one cut; right hand wipes the foot, one cut; wipes the eyebrow, one cut; left hand wipes the waist, one cut, (then) one thrust on the right; withdraw the sword." The passage suggests a smooth flow as one delivers four cuts and a thrust in a continuous chain of movements. The pattern here, as well as the emphasis on circular motions throughout the poem, hints at an underlying movement principle that may be compared to the dynamic sphere in the Renaissance Italian sword tradition. Unfortunately, the tantalizing clues of this single *shuangshou jian* treatise do not allow us to draw any firm conclusion, only revealing some of the subtleties in the technical features of China's native *shuangshou jian* tradition.

I end this section with a passage from the Han dynasty (Liu Xiang, *Garden of Stories: On Martial Arts* [*Shuoyuan: zhiwu*]) which provides one of the most exquisite expositions on the ancient *Way of the Sword*. Because it is attributed to the mythical swordsman Lu Shigong, we may perhaps aptly call it "Lu Shigong's sword discourse":

> Lu Shigong's sword responds when it is pressured and moves when it senses. It perceives the infinite, changes without form; it is soft and yielding, like a shadow or an echo. It protects the gate like a guardian spirit, and whirls around like a prancing horse. [It is] echo to sound, and shadow to form. The city gate is inferior to a lamellar armor of rhinoceros hide; exhaling is inferior to inhaling; lifting one's foot is inferior to concentrating [one's energy]. Departing like the wings of a cicada, to be so minute as a point between the eyebrows. Never assume [as a rule] the great extinguishing the small, as [equally] the small could become great. Thus is the way of military tactics! (Liu 1987, 374–375)[20]

This passage is an instance of ancient sword discourse of the highest level. It is interesting to note that the description of the sword "whirl[ing] around like a prancing horse" sounds very similar to "the wild stallion turns around as it remembers its native land." It is likely that they convey a similar principle and are, as the saying goes in Chinese, "different tunes to the theme." This provides further proof that the ideas and principles in *Chaoxian shifa* could indeed be ancient. Moreover, the opening sentence of this passage—describing a sword that "responds when it is pressured"—suggests a form of swordsmanship of the highest sensibility and skill. To reach the state of the third Vitruvian Man that Gotti speaks of, no doubt the same level of sensibility is required, so that "through these weapons … [we] *feel* the opposing force and transform the weapons into a sentient part of our body (Gotti)." In a sense, Lu Shigong's sword discourse gives expression to the ultimate state of supreme subtlety that every martial artist aspires to—being able to perceive the infinite and change without form, to become echo to sound and shadow to form.

[20] This passage is also treated in Ma Mingda's earlier chapter.

4 The Italian and Chinese Martial Art Bodies: Comparison Across Three Essential Aspects

In the sections above, I have compared the Italian two-handed sword with the twin traditions of *shuangshou dao* and *shuangshou jian.* In particular, through analyses of historic sword manuals from the Ming dynasty, as well as the principles and performances in contemporary practice, I have tried to identify the principles in Chinese swordsmanship that share similarities with what Gotti regards as the ultimate, governing principle in Italian martial arts—the dynamic sphere. The initial result is inconclusive: while similarities certainly exist, the foci in Chinese and Italian martial arts are often at variance, not least due to the contrasting written traditions for documenting martial arts in these countries. Equally, because of the size of the country, the extended length of transmission—the fact the two-handed sword has existed in China for a very long time—as well as the very nature of a living tradition, Chinese martial arts are unified to a far less degree when compared to the Italian two-handed tradition.[21]

To further our investigation, in this section I will look into greater technical details across three main aspects: footwork, movements, and coordination of the body and arms, and perception.

4.1 Ding-*Character Step or Moving Poles*

Footwork is arguably the first principle in martial arts. Without proper knowledge of how to move with your feet, methods of advance and retreat, attack and defense, are altogether impossible; you could neither strike your opponent nor evade his attack. This is why Yagyū Munenori placed stance and movement as the first of the "Three Learnings" (Yagyū, 2–3). As we have seen, Qi Jiguang also saw fast, dexterous footwork as a core strength of Japanese martial arts, which provided the foundation to "defeat the long with the short" (Qi, *Jixiao xinshu: Duanqi changyong jie*) by rapidly bridging the gap with the enemy. In *Sword Treatise*, Yu Dayou likewise stressed the importance of footwork, which is encapsulated in his famous phrase, "*bubu jinbi, tianxia wudi*" ("pushing with every step, thus you become invincible under heaven"), which is as much a description of the character of South Chinese staff-fighting as it is a reflection of his general strategic thinking. At the same time, while other Ming dynasty martial art writers might not have devoted specific sections in their works to stance and footwork, their instructions leave us in no doubt about the vital role of footwork in the art of combat, which is none other than the art of "hitting without being hit."

[21] In an earlier chapter of this volume, Penso mentions that the two-handed sword had a relatively short and condensed period of development in Italy, between *circa* 1450–1600. See "Masters Through the Ages: Interpretation of a Renaissance Martial Art System and the Foundation of a Modern School" by Penso.

Unsurprisingly, footwork is no less important in Italian martial arts. One of the earliest Italian martial art theorists, Fiore dei Liberi, compares one's legs to an elephant. In Gotti's words, a martial artist is visualized as a "tower on elephant." The tower is the body, which is "carried by a being with trainable intelligence—the elephant/legs." Further, "the … elephant highlights the gifts of power and stability, but also the option to be fast. … The sentence that accompanies the image reads: 'Fortitude. I am an elephant and I carry a castle upon me. I neither kneel nor lose my stride' (Gotti)." In Gotti's universalist thinking, he further takes the view that Fiore's elephant is the same as Camillo Agrippa's pole (*forchina*), except the two authors choose to focus on slightly different, but mutually complementary, aspects. Whereas the metaphor of the elephant highlights its movement, strength and stability, speed, and intelligence, the *forchina* draws attention to an important feature of footwork in swordplay—the ability to draw circles with your feet.

Agrippa invites his readers to imagine the human body as a mathematical instrument—the compass or *forchina* (see Fig. 11). As we engage in swordplay, the most effective and fastest way to dodge our opponent's attack and change our own line is by pivoting on our foot, which serves as a temporary pole on which we turn our entire body. At the same time, Agrippa teaches us to embody and indeed *become* a spherical ball when we engage in combat, which Gotti summarizes as follows,

> The *Palla* teaches us to triumph over larger forces with lesser ones, to give way when we are pulled, and to pull when we are pushed … To successfully lift one's weight and further

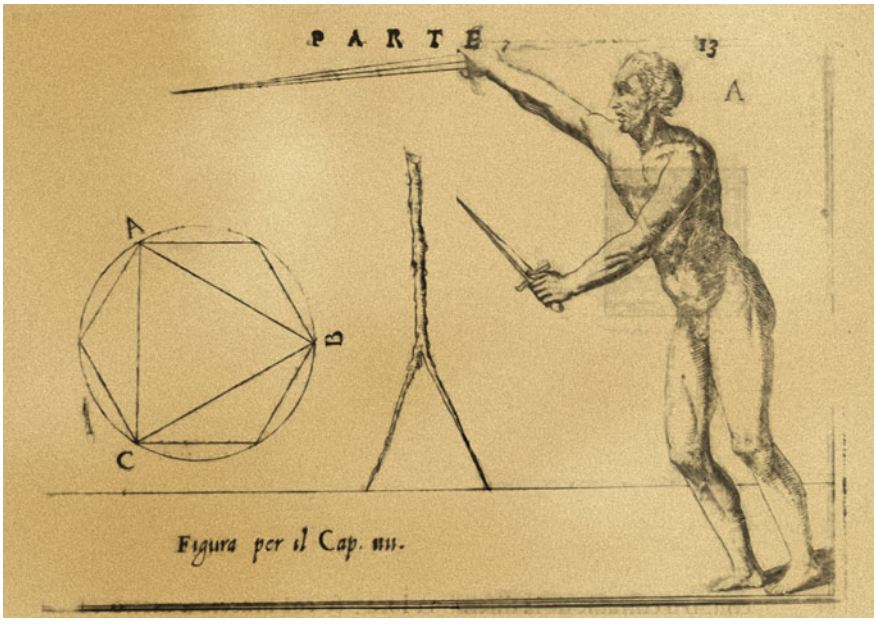

Fig. 11 Illustrated human figure holding two swords from Camillo Agrippa's *Tratto di Scienza d'Arme*, with the *forchina* in the center of the picture

> achieve the ability to use it as an engine for the sphere, he suggests keeping the feet close together which allows for easy transfer of weight, thereby avoiding the idea of a static pole (by pole, he means the point on which the sphere can be anchored to build an armillary sphere mechanism) (Gotti).

We do not find a similar concept as the compass or *forchina* in Chinese sword manuals. But this is not surprising as we would hardly expect a sixteenth-century Chinese martial art writer to use the language of mathematics to explain his principles. However, the idea of pivoting on one's foot to make a sudden change in position is well testified in Chinese treatises, which is described by the Chinese character *ding* 丁. Yu provides several interesting examples in *Sword Treatise*, which we may consider here.

Toward the front of his work, Yu records a number of short sequences under "Footwork Practice" ("*Xi bufa*"), immediately following an "overall poetic formula" (*Zong juege*, i.e., a mnemonic song). The first movement includes the following instructions, "*pianshen sha*, *dingzi hui sha*" ("strike from an oblique position, [then] turn in a *ding*-character movement and strike"). According to Yu, the meaning of this movement is clear: strike as you move your back (left) leg to the right behind the front leg, then swing the back leg to the left and strike again, turning your body sharply as you do so.

Another good example is "after stepping in to strike, you must quickly retreat in a *ding*-character movement to be safe (Ibid.)." The movement sequence described in this teaching is clear—step in to strike, then pull back to the side with your back leg, and in doing so move out of your opponent's direct line of attack. We may also consider the following instruction several lines later: "I enter through the main gate (*da men*) with [my staff in the] high guard, make a *ding*-character turn as I pull my staff down. Then, as he [the opponent] rushes in, I pull [my staff] and flip [*jie*] it back, entering and striking a blow at the same time (Ibid.)." Again, this instruction is easy to follow. As you approach the enemy, step obliquely to the [right] and strike your opponent's weapon. Whether you successfully hit his weapon or not, he will step forward to strike. As he does so you pull back your staff to parry or push his weapon to the side, then decisively step in and deliver a blow.

In each of the examples, Yu teaches us to use our feet in a dexterous manner, moving from the center to the left or right as we advance and retreat, then suddenly pivoting to change our angle of attack as we draw in the opponent, in the process surprising and catching him off the line. As we visualize these movements, it is clear that one leg is being used as a pole, upon which the entire body turns to shift our weight, while the other leg is free. Here, on one of the most critical and important points, while different words are chosen to describe the movement pattern across Italian and Chinese traditions, the meaning is very close.

However, before moving on to the next part, let us observe that there are different approaches to footwork in East Asian swordsmanship traditions. According to Miyamoto Musashi, who was undefeated in sixty-one duels and therefore had first-hand experience of footwork across a multitude of schools, "[t]here are various ways of quick-stepping, such as those known as the floating step, the leaping step, the springing step, the stomping step, the crow step, and so on (Miyamoto, op. cit., *The*

Wind Scroll: "Footwork in Other Schools")." In Miyamoto's view, however, there is just one type of footwork—"following the rhythm of the opponent, finding the right physical position in conditions of both hurry and calm, the stride should be orderly, without slack or excess (Ibid.)." While it is impossible to generalize, such a direct approach also holds true for other influential fencing schools in Japan at the time and may be observed, for example, in the general combat philosophy of the *Kage-ryū* tradition.[22] Under this light, the "side-step and pivot" tactic discussed above is an important—but not the only, nor perhaps even the most important—stepping method in East Asia.

4.2 Body and Arms: The Moving Tower with Rotational Points

In Chinese martial arts, we believe that the weapon is an extension of one's arms. Therefore, to become proficient with arms, it is vital to understand your body and to gain the ability to wield a weapon with freedom and ease—like moving your own limbs. In many ways, the ability to coordinate the entire body to maximize the effectiveness in attack and defense—to deliver a forceful strike without over-extension or to parry the opponent's stroke while keeping your body and limbs free—is an ideal state for the martial body across cultures. The power one generates in such a state is known in Chinese martial arts as *zhengjin* (whole-body force). In Qi Jiguang's terms, this means to "advance with one's body and feet together, [and to move one's] arms and legs as one" (Qi, op. cit., *Changqi duanyong jie*). Yu Dayou expresses the same idea when he writes that "movement of the arms and advancement of the feet must be coordinated." When this is done, "the entire body is filled with strength (Yu, op. cit.)." In the Italian martial tradition, the idea to move the body as a single object is found in the writings of different authors, notably Vadi (1482–1487) and Pagano (1553), but also Agrippa (1553), Manciolino (1531) and, of course, Marozzo (1536). After all, in Gotti's words, "movement dynamics … [are] the essence of martial arts."

While the contents and format vary considerably across Chinese authors, the manuals commonly begin by laying down the principles and fundamental techniques, and then provide instructions for solo practice or "fixed sparring." Much variation exists within this framework thus it is hard to generalize. Nonetheless, we may take *Chaoxian shifa*, which has the best and most complete structure among the Ming sword treatises in my view, as representative. The manual begins with "*Chuxi*" ("Training for Beginners"), which lists the "methods of looking," the "methods of

[22] Besides the opening part where Yagyū stresses the importance of stance and footwork, he does not give it further treatment in the rest of his work. However, just as Miyamoto speaks of there just being a single type of footwork in his school, so in the *Yagyū Shinkage-ryū* the key lies in timing the opponent *off* rhythm, rather than in the use of any specific footwork. *Yagyū Shinkage-ryū* is part of a broader system of swordsmanship known as the *Kage-ryū* founded *circa* the mid sixteenth century.

striking," the "methods of deflecting," and the "methods of thrusting." The subsequent section, which names the individual methods, also adds the "methods of parrying." Altogether, there are twenty-four movements (*shi*). Each explains the principle of a given technique and how it is applied in combat. Some of the descriptions afford multiple interpretations and may further be practiced as fixed short segments of movement. This kind of practice is still found in schools that have preserved the methods and the spirit of classical martial arts, such as in Ma's Tongbei.

A similar principle may also be discerned in Japanese martial arts, even if it may not be explicitly stated. For *Yagyū Shinkage-ryū*, Munenori does not speak specifically about coordination. However, a careful reading of his work reveals the centrality of this principle. In particular, the order of the "Three Learnings"—mainly transmitted through studying a series of movement sequences presented as *kata* ("forms")—discloses the learning process, which begins with the stance, then hands and feet, and finally, the sword (indeed, finally to the state of "no sword"), ultimately leading to full mastery of the art of swordsmanship (Yagyū, op. cit., *The Shoe-Presenting Bridge*).

When comparing martial art traditions of Italy and China (and Japan), an interesting discovery (from an East Asian perspective) is the emphasis in Italian martial arts on form training, which is often perceived as unique to East Asia (*taolu* in Chinese and *kata* in Japanese). Marozzo's *Opera Nova* (1536) is perhaps the notable example where his teachings are largely contained within the set forms. Writing in the same tradition, Manciolino explains that through learning these forms, "The person, their legs and their hands will become swift and active" (Gotti). As Gotti notes, "He not only insists that practice of the *assalti* is necessary for one to become a good fencer, but that the moving into play (*andare a gioco*) is also necessary (which is unrelated to striking and parrying well and concentrates only on good body movements and moving weapons)." Therefore, in much the same way as one is expected to gain mastery of swordsmanship through studying the forms, so in the Italian tradition, much the same learning process leads to the "unity in footwork and unity in that footwork with the upper body (Gotti)."

Writing more broadly, the Italian master Fiore dei Liberi compares the body to a fortress. According to Gotti, it is also "the torso/tower/handle of the compass … from which defensive and attacking moves stem" (Gotti). It is moreover a *moving* fortress carried by an elephant as we have seen. This reminds me of an expression from *Lu Shigong's Sword Discourse*, "[t]he city gate is inferior to a lamellar armor of rhinoceros hide," which emphasizes the importance of movement and mobility over static strength. Other Italian masters provide more details on the correct use of the body to generate force. Viggiani, who emphasizes the need to move the body in unison, is an outstanding example. Gotti's masterful description sums up Viggiani's (1575) principle,

> The description that Rodomonte-Viggiani gives of striking tells us of the chain of muscles and the entire body that must move together behind the blow. He gives a splendid lesson on how to free oneself from being static to becoming stable in movement and describes the need to carry the weight in the body's core to free up the feet. Movement comes from combining the body's power into a single unit: the upper and lower parts move together and

> extend as far as they can. He often repeats the sentence, "And here, combining all the forces of the body together, you perform that *rovescio tondo* with the same hand and footwork about which I have told you." In the last pages he clearly maintains that he teaches "only one fencing [technique]," because that is enough to give the lesson, but confirms that there are many more blows and moves and defines what he calls "the great," as in the most powerful strike, "The *magno colpo*" is so-called because one must act with all the forces of the body, the intelligence, emotions and art in synchronization and union (Gotti).

This passage can almost be read as an annotation to what is called the "ultimate stroke" or the "single stroke" in Japanese swordsmanship, the notion of which even provided the conceptual foundation for a major fencing school in Japan, *Ittō-ryū*.

As to how one should move his body and arms to maximize one's potential, historic Chinese and Japanese sources are reticent on the subject, preferring to focus instead on strategy as well as the mental and spiritual aspects, although such principles are amply provided in contemporary schools such as Ma's Tongbei and Jieyuantang. As transmission was mainly oral, the idea that some of these principles might have been known or combined with sword practice cannot be rejected out of hand, particularly as a few of the most important body and martial art concepts, such as the notion of the two arms being joined through the back and shoulders, were established by the Ming-Qing period (MMD 2017). However, as there is more written evidence in Italian treatises, I will turn to these first.

Di Grassi (1570) speaks of the different sections of the arm and applies geometric principles, in particular the triangle and the sphere, when analyzing the structure of the human body and its movements. He divides the arm into three parts, the wrist, elbow, and shoulder, where each is a rotational point that is capable of describing circular movements. In this way, one can imagine making a circle either with your hand, forearm, or your entire arm (from the shoulder down to the hand). This is a crucial point for Gotti, as the idea of the shoulder as a dynamic node holds the key to what he calls the Third Vitruvian Man and the dynamic sphere. The ability to turn the sword on any one of these rotational points also allows the swordsman to change the circumference of the dynamic sphere at will while keeping the motion continuous and alive as it were.

Interestingly, Di Grassi's thesis invites comparison with both Jieyuantang and Ma's Tongbei. In Ma's Tongbei, its movement philosophy centers around the idea that one's arms are joined through the shoulders and back. The name "Tongbei" is a conjunction of two characters *tong*, meaning "through" or "without obstruction", and *bei*, which in the originally context is written 背 (meaning the back), and later abstracted to 備 (meaning "to be prepared" or the state of "preparedness") (MMD, *Cong tongbi dao tongbei*). According to Tongbei philosophy, the most effective way to use one's body and arms is to move them together as a single unit. Once we have understood their interconnected nature, we learn to perform movements that optimize their potential, no longer restricted by the fallacious and limiting perception of the two arms as being separate. In this regard, the most important conjunctive node is the shoulder, which joins the arm to the body. This again reminds us of the sword poem in *Chaoxian shifa*, "Sweep past the knee(s) and, connecting the shoulder(s), strike at the two sides," which likewise emphasizes the role of the shoulder. However, while

Ma's Tongbei (or the Tongbei philosophy) recognizes the essential role of one's shoulders, the movement principles they developed are different from those in Italy, as already touch upon in an earlier part of this discussion.

As for Jieyuantang, the similarities are even more striking. Like Di Grassi, Lee divides one's arms into three parts, which the martial artist is trained to move, either in isolation or in unison, on three movement planes. Such training is fundamental to the concept and practice of *sanyuan jiushi*, where the practitioner has to further coordinate his arm movements with the rest of his body, thereby gaining bodily harmony and awareness of the subtlest changes in his body movement. In addition, the idea of moving the two arms in unison is also embedded within the principles of White Crane and Jieyuantang. Whether delivering a punch or a sword stroke, at the same time as you are pushing out with one arm/hand, the other is retracted and pulled in the opposite direction; and it is precisely in tightening and creating a sudden tension between the two arms that we maximize the force of our blow.

Having reached this point, after one has mastered the ability to manifest whole-body force, when hands and feet are able to move as one, masters in East and West teach us to move from techniques to stratagem. Among Italian masters, this is most clearly demonstrated in Marozzo's movement sequences, but also in Vadi, who teaches us that the knees are the keys that "open and close the game," and moreover that movement should be "serene and slow," to emphasize the movement quality of an accomplished swordsman. The same principles are found in East Asia. Among extant Chinese manuals, *Jianjing* provides the most extensive list of movement sequences that unlock the secrets of strategic thinking in Chinese martial arts. Further examples are found in all the Chinese and Japanese manuals of this period which need not be discussed here. The important thing is that once a person has learned stance and footwork, and the method to generate force with your whole body and to coordinate your hands and feet, everything should come together if you have the right mindset and a proper strategy. Musashi speaks of the critical importance of footwork in the martial arts and military science; in the same breath, he tells us that to be effective one also has to know the intent and the rhythm of your opponent, and then calmly make the decisive step—while dealing a single, victorious blow. This goes back to the ultimate unity of the principles in the art of combat which tend to achieve a common but elusive goal—perfection.

4.3 Perception: Eyes That See Emptiness

For those beginning in the art of swordsmanship, *Chaoxian shifa* lists the "methods of seeing" as the first of four fundamental methods. No further detail is given but we may expect such training to initially focus on the "external" aspects—using the eyes to perform the techniques accurately, then to respond to adversarial situations—and then, upon mastering the techniques, to move on to "internal" observations, where you learn to read the opponent's intent while liberating your own mind. In this sense, seeing may be bifurcated into a physical act of looking with your eyes, and a deeper

perception that can "cut through" phenomenal appearance into the hidden reality. Concerning the physical act of seeing, we may refer to an account by Miyamoto, who gives a characteristically direct and succinct summary of the "Focus of the Eyes in Martial Arts" in *The Water Scroll* in *Book of Five Rings*. As the passage is insightful and concise, I cite it in full below,

> The eyes are to be focused in such a way as to maximize the range and breadth of vision. Observation and perception are two separate things; the observing eye is stronger, the perceiving eye is weaker. A specialty of martial arts is to see that which is far away closely and to see that which is nearby from a distance.
>
> In martial arts it is important to be aware of opponents' swords and yet not look at the opponents' swords at all. This takes work.
>
> This matter of focusing the eyes is the same in both small- and large-scale military science.
>
> It is essential to see to both sides without moving the eyeballs.
>
> Things like this are hard to master all at once when you're in a hurry. Remember what is written here, constantly accustom yourself to this eye focus, and find out the state where your eye focus does not change no matter what happens.
>
> (Miyamoto, op. cit., *The Wind Scroll*: Focus of the Eyes in Martial Arts, 1993, 19)

Having laid down these instructions, Musashi then makes it clear that sensorial perception with the physical eye is merely the first step. In fact, in *The Wind Scroll*, he explains that the "observing eye" includes perception of a broad spectrum of things such as "the heart and mind of the adversary" and "the state of the situation," and may be extended to the broader context of military conflict to include "the conditions for battle," "the strength and weakness of the occasion," etcetera (Miyamoto, *The Wind Scroll*, 49–58). In Miyamoto's view, the ultimate criterion that determines the outcome of combat is having the correct state of mind, which must "remain the same as normal." It must be calm and relaxed, open and clear, in such a way that "[e]ven when still, your mind is not still," and "even when hurried, your mind is not hurried." At the same time, it must remain impenetrable (Miyamoto, *The Water Scroll: State of Mind in Martial Arts*, 17–18).

Miyamoto is not the only one to write about mental perception in such a way. His contemporary Yagyū Munenori also devotes the greater part of his work to discussing the importance of mental mastery, which in his view would ultimately lead to the "ordinary mind that knows no rules." For Yagyū, all the basic technical training—including stance and footwork, methods of attack and defense, and even mastering the forms and the stratagems embedded therein—is merely a bridge. To attain the true "Way of the Martial Arts" he exhorts the practitioner to forget the techniques he has learned, in order to attain an empty mind. Only in such a state, unburdened with thought, can one attain the celerity and spontaneity of "the interval into which not even a hair can be entered."[23] This allows the swordsman to maintain

[23] Takuan Sōhō describes the interval when two things come together simultaneously as the "interval into which not even a hair can be entered." The example he uses is when a person shouts and claps his hands at the same time, with no break in-between. To do so one must not think about one or the other, as that moment of reflection will create an interval between the two actions. This is a key point in Buddhist thinking, which abhors fixation of the mind which is considered an affliction or sickness. Takuan explains this principle in his letter to his friend Munenori.

complete mental clarity and freedom, not abiding in any fixed attitude of either attack or defense, but rather, in Munenori's words, to "attack and abide" at the same time.

In Chinese sword manuals of the same period, discussions of the same kind are largely absent. This partly has to do with the nature of the surviving treatises, as well as the intent of the authors, who were primarily writing within the established genre of *bingshu* (military treatises). Three of the Ming authors—Qi Jiguang, Yu Dayou, and Mao Yuanyi (who was responsible for compiling a large number of military and martial art treatises, including *Chaoxian shifa*, into his classic military compendium)—belonged to this tradition. This shared identity accounts for the matter-of-fact style of their works, which leaves little or no space for more contemplative reflections. As to Wu Shu and Cheng Chongdou, even though they were civilian martial artists and wrote for a lay audience, as educated members of the *shi* class, they were also highly conscious of the *bingfa* genre, within which they set out to establish their own writings.[24]

As to whether or not Ming dynasty to early Qing Chinese martial artists subscribed to or taught *xinfa* (oral transmissions) of the kind that deals with such notions and practices as intent (*xin* or *yi*) and introspection of one's intent (*guanxin*), this seems quite likely given the strong cultural links between China and Japan, the fact most of these concepts originated in Chinese philosophy, and the general philosophic trends then under way, in particular developments in Buddhist philosophy and its close association with the martial arts during this period. In this regard, it is especially worth considering Cheng Chongdou.

Cheng was a lay follower and inheritor of the Shaolin martial art tradition. It would be surprising if he did not learn or even practice some Buddhist concepts in so far as they related to the martial arts. This seems highly unlikely as his *Shaolin gunfa chanzong* (*Zen Tradition of Shaolin Staff Techniques*) includes an illustration of Jinnaluo-*wang*, Shaolin's guardian deity, as well as a number of dedications by lay and monastic followers of Shaolin martial arts, which were very much written in Buddhist terms. Evidently, Cheng maintained a close relationship with the Shaolin temple as well as both monastic and lay followers of Shaolin martial arts. Of the dedications included in *Shaolin gunfa chanzong*, the one written by the monk Puxing includes a particularly important clue. Describing the character of Shaolin's staff methods, he says that they should "follow the abiding [principle] to overcome the active [principle], [and] such is the way in both intent and [in the use of your] hands" ("*suishun jingding yi zhi dong, xinshou ru ru*") (Cheng, *Shaolin gunfa chanzong: zang* by Puxing). On the surface, the words "*suishun jingding yi zhi dong*" appear to echo the idea of "*yijing zhi dong*" ("overcome action with passivity"). However, there are subtle but important differences. The words *suishun* ("to follow") suggest that one should "follow the path of," while *jingding* 靜定 is also not to be confused or equated with *jing* 靜. Whereas *jing* denotes passivity, the conjunctive *jingding*

[24] In his four-volume *Gengyu shengji*, the first volume is devoted to Shaolin staff methods, which lay at the foundation of his martial arts. In the section "*Zonglun*" ("*Discursus*"), he begins with a discussion on the principles of military tactics. These principles are then used to analyze the Shaolin staff methods. See Cheng Chongdou, *Shaolin gunfa chanzong: zonglun.*

refers to the mental state of "immovable calm." Taken together, "*suishun jingding yi zhi dong*" means to be able to overcome your opponent by being in a mental state of imperturbability. In this state, one's mind is "immovable"; therefore, the phrase refers not so much to overcome your opponent's action through passivity, but rather to defeating the "wavering mind," whether it is present in your opponent or in yourself. If this reading is correct, then the philosophic concepts that underpin the Shaolin martial art tradition (which Cheng inherited and passed down) are the same or at least very similar to those expressed in the Zen martial art tradition in Japan, as represented by Takuan Sōhō and Yagyū Munenori.

Perfection in the martial arts is achieved when the practitioner attains not only complete technical mastery and the mastery of his body, but more importantly when he gains complete freedom of his mind. Only then is he able to perceive the intent of his opponent, and to move with the unhurried freedom of an unfettered mind.

Italian treatises do not deal with this subject to the same degree, which is not surprising, as East Asian authors who speak on the mental-spiritual aspects of swordsmanship were mainly influenced by Buddhism, which of course did not exist in Italy in the sixteenth and seventeenth centuries. However, it is not to say that the Italian masters were unaware of the significance of the mental state in fencing—indeed, the necessity of possessing such a state in order to attain freedom of movement in combat. One of the authors to pay attention to this subject was the unnamed Classene author. Gotti says,

> He tells us that fencing is the dynamic union of intellect, intent, and the entire body. … The unknown author provides an important definition: the "limbering up" of a person, that is the absence of breaks or fragmentation of the movements, resulting in a smooth and truly "admirable" art (Gotti).

5 Conclusion: Humanism of the Sword

In this paper, I have reviewed and offered a preliminary comparison of the swordsmanship principles between China and Italy across three vital aspects: stance and footwork; use of the body and arms; and finally, perception and the mental state in combat. In addition, based on Gotti's study and theory on Italian martial arts, I have considered the dynamic sphere *qua* a governing principle of Italian swordsmanship and, on this basis, sought analogies in China.

On the whole, while there is considerable overlap in the movement principles of these traditions, the difference in focus is equally obvious. Fighting arts in Italy and the Far East both stress the importance of footwork and share certain common principles. However, they differ in the relative significance assigned to such principles. In Italian martial arts, the idea of the *forchina*, or the leg of the compass, as expressed by Agrippa, is fundamental to the dynamic sphere as a whole. As such it lies at the heart of the system. In East Asia, however, while a comparable notion is found—as manifests through the *ding*-character step—it does not occupy a comparable role within the system. Moreover, this principle finds greater currency in staff-fighting

rather than two-handed sword. Indeed, early Edo writings on Japanese swordsmanship—which is closely related to the Chinese *shuangshou dao*—reveal a system of combat that in general advocates a more direct line of approach, where a side-step is usually followed by an advancing step forward, rather than swinging the back leg sideways. In this way, we see that cultural preference could play an important, and sometimes decisive role, in formulating a martial art system and the strategies therein.

Cultural difference is also at root of the differential emphasis being placed on perception, which in Italy tended to be a relatively minor consideration, mainly with reference to the practical aspects of observing your opponent, whereas in the East Asian tradition(s) perception and the mental state were a dominant theme under the influence of Buddhism, particularly in Japan where the towering figure of the Zen monk Takuan loomed large. To a lesser degree, Buddhist ideas and ideology also penetrated Chinese martial arts during this period as a result of the Shaolin monastery's ascendency as a major martial art center. However, compared to contemporaries in Japan, Chinese martial art writers kept out personal beliefs from their writings to a much greater degree as they self-consciously wrote within the genre of *bingshu* (military treatise).

This further throws open the question of whether it is even reasonable to assume, as I have in the beginning of this paper, that a principle similar to the dynamic sphere might be expected in Chinese martial arts of the Ming and Qing period at all. Such an assumption would have as its premise that Chinese martial arts and martial artists somehow shared similar cultural concerns or outlooks with Italian martial art theorists of the same period. Having reviewed the evidence at some length, we may say with some confidence that they did not.

The Italian Renaissance was a time when the late Medieval views of the world were gradually being replaced by the new paradigms of science. However, in reality, many late Medieval ideas and concepts co-existed and developed side by side with the new spheres of knowledge, and it is precisely this ideational dialectic between the old and the new that gave birth to humanism. If we look more closely into the language and expressions within the Italian treatises of the fifteenth to early seventeenth centuries, we see a linguistic shift from one dominated by Medieval metaphors and hermetic lore, to arguments put forward in the terms of mathematics, science, or Platonic dialectics, which increasingly appealed to the reader's logic and power of reason rather than relied on the persuasion of experience and arcane knowledge. However, for the Renaissance masters, such tendencies did not manifest as a form of contradiction but rather, as Gotti argues, they existed as parallel and complementary paths to the truth. He sums it up as follows,

> Martial art masters of the Renaissance period were bound to the quest for ancient knowledge and wisdom. They … used them as a tool for understanding their art. Taking Agrippa as an example (it was he who clearly inscribes the dynamic man in a sphere), Bizzi expressly labels him an esotericist. He highlights the involvement of Cosimo I de Medici (to whom the fencing treatise is dedicated) in a consolidated Eleusinian tradition associated with the Orphic rites … Nonetheless, I would like to underline that these studies may be traced back to a concept much closer to humanist-scientific studies than to some obscure magical context.

> They should be placed in studies where geometry, classical texts, mathematics, astronomy, and philosophy meet with the study of weapons, with Hebrew texts, as described by Viggiani and as illustrated in the study represented in the engravings of Agrippa's treatise (Gotti).

Illumined in this light, we may start to appreciate the perspective of those who wrote the treatises, i.e., the masters. For Ghisliero, his study (1585) tends to "show in numbers and geometry the perfection of Man, who must be placed at the center of Creation" (Gotti). In the same way, Marozzo's *Opera Nova* should not be read as a simple technical manual that offers instructions in the martial arts. Rather, it is a manifesto of his humanist thinking where he professes his faith in the perfectibility of man; equally, it provides the means where fellow men could attain a higher state—through martial art training.[25]

Here, I am reminded of the teleology of Munenori, Musashi, and Takuan's teachings, which tend not only toward perfection in skill, but rather, through perfecting the martial body to purify one's body and soul, to assist the practitioner to discover his true self, by severing the bonds of desire and delusion. This is the humanism of Japanese martial arts of the early Edo period, and perhaps the humanism of such Chinese masters as Cheng Chongdou, who followed in the Zen tradition of Shaolin martial arts. I am also reminded of the Way of the Sword in ancient China, which sought to "humanize" the "killing sword" by imbuing it with Confucian philosophy, in the process sublimating and conferring upon it a new cultural dimension.

Appendix—Reply from Roberto Gotti and Jacopo Penso

Master Chao's study analyzes the differences and similarities between the martial cultures of China and Italy. This is an impressive effort, the result of a fruitful meeting

[25] It is worth quoting Gotti's relevant passage in full, "To my mind, this is a possible reading: the Master kneels inside an altar of everyday life, rectangular in shape, to recall the first earthly state. Before that altar, he performs his daily work in the city through which the river Reno flows, perhaps near his textile workshop. He bears the arms of his trade (Master General of Arms) while carrying out kabbalistic-alchemical activities—a hermetic study that permeates the structure of teachings on assaults that he leaves in his text. Inside a protective circle he sketches symbols that remain to be deciphered today, copying them from a book. From this altar rise two Caryatid figures. They represent the Master himself and support a new, higher level, upon which the Master sits on his throne, with a sword and a sphere (the "*Palla*" or ball) in each hand, and wearing a tiara (triregnum) on his head. Beside the throne there are two sphinxes, the symbols of ancient knowledge. All of this is framed by an open curtain. At the center of this raised structure a cartouche is rolled out, allowing us to see a new dimension, inside which the title of the book, *Opera Nova* appears, alongside his name and his title, "Master." This is not the place for more than a mention: all the Master's teachings are made up of cyclical references—three in threes, five in fives—and of actions that are "diluted and dried" (*diluito e asciugato*). These components of knowledge are only linked together after an initial theoretical understanding becomes actualized through practice and experience. Only by playing the game of comprehension (theory first, then practice and, finally, improvement by experience) can we then better understand the theory and return to a new practice, which brings greater experience."

and of the desire to share and to look for a middle ground, to grow in deeper understanding through exchange and cross-germination, so that we may together discover a "new humanism of the sword" as Chao says at the end of his paper. His analysis pushes us to try to share further our vision, which we present below, and by way of replying to some of the topics he raised.

The Triangle

The first is the concept of the "triangle." Our focus on showing and describing the dynamical sphere has perhaps hidden this second—but inseparable and not less important—concept. In combat, the lines drawn from the base of one's shoulders to the vertex toward the opponent form a protective triangle. This triangulation is always sought whether delivering a stroke or a parry, since it is the only geometric form that allows the body to be protected behind the sword, serving at once as an offensive weapon and a defensive shield (as master Vadi instructs). This principle prevents us from launching suicidal attacks and ultimately achieves the goal to "touch without being touched."

In historical martial arts, circular motions always end in (or alternatively start from) linear motions. The symbol master that Gotti uses as the basis for many of the logos he has designed (for the various entities related to his school) consists of a triangle and a circle, which flow from linear to circular lines ad infinitum. In this dynamic model, the movements of the warrior truly are without end, as the energy produced by the body is kept alive from one action to another. In modern fencing, geometry is simplified as the fencer is constrained by the platform to move lineally, whereby circular motion is restricted mainly to the wrist. Historical masters, on the other hand, apply these concepts with the entire body, using the shoulders, elbows, wrists, and weapons as a composite system. Master Di Grassi shows a clear example of triangulation when he teaches us to keep the defensive weapon far from the body, thus allowing a larger area of oneself to be covered by the "shadow" of the weapon—a linear projection of the lines where the opponent might attack. Master Monte stresses the same principle when he warns against the bending of one's arms during parries or attacks. Similarly, Di Grassi highlights how to create an elliptical pattern with a combination of linear and circular geometries. Our practical interpretation of the symbolism in Master Vadi, who shows a bear and a ram on the shoulders of the warrior, is also exactly the ability to combine rotational and linear dynamics in order to deliver the right impulse in the strike. Finally, Master Agrippa explicitly discusses different situations where the choice of a linear line (like a direct thrust moving in the centerline, which is the most direct line between two fencers) or a circular motion (for example using a side-step to move the body out of the central line, keeping only the weapon in the previous position while moving the body away) may be preferred.

Descending Blows

Regarding the power of the descending blow, it is well known to the Italian two-handed swordmasters. The *fendente* is the heroic blow of the *chansons de geste*, but also the most used blow. Marozzo always uses it when changing the side of attack, to better protect oneself while leaving no space of protection to the opponent. However, Pietro Monte also explains how to oppose it with the ascending blow, without directly opposing it with an inferior force, but remaining sideways and targeting the hands, from which the enemy's attack originates. The purpose of a martial art system is to create a complete range of possibilities, giving to the swordsman the ability to attack and defend in any situation, from any position, and against any choice or move by the opponent.

The Use of Two-Handed Sword

Longswords were used before the thirteenth century. We may note that there are evidence and exemplars of such weapons even in the eleventh and twelfth centuries. Longer weapons or weapons held with two hands are depicted in several iconographic sources; also, a number of Sardinian bronze swords are more than a meter long and leave open some questions (for example, the methods of gripping the sword and the technical nature of their use), still to be discussed and explored. The written sources (treatises) start from the end of the fourteenth and the beginning of the fifteenth centuries with Fiore's manuscripts, but surely this weapon was used even before that. There is also a connection to the use of wooden staff with two hands, which has been transmitted up until the modern era, but mainly in the form of folkloristic knowledge, with scant written sources before the nineteenth century.

Footwork

Footwork in the Italian two-handed sword (and in other European traditions) consists of a great variety of steps: there are crossed steps in front and behind, steps called "foot chases foot" in which one approaches the other to push it forward or backward, jumping steps (leg raised, forward or backward to follow the motion of the upper parts), legs that twist around the other leg (like in Marozzo), and "counter steps" (*contrappasso*) in which one leg opens to the outside.

Regarding the presence of wider stances, they are used especially in lunges and in actions of extension toward the opponent, usually followed by rapid recovery in legs position that allows for rapid motion. Agrippa provides an example where he starts a position with close feet, which develops into a wider stance as he pushes the thrust forward. The German author Joachim Meyer (1537–71), who published his

work around 1570 and is closely connected to the Italian school, uses very deep and wide stances in longsword, but always in dynamic actions and keeping the weight of the torso stable.

In our school, the approach to swordfight has always been focused on freeing the body from the ground, helped in this feeling by the application of physical exercises as the training tool built following Marozzo's diagram. The ground does not "give strength" but, on the contrary, the force originates in and is expressed by the body (starting from his center in the plexus and exploding through the legs) pushing against the ground to give motion and elevation. This is clearly expressed in Master Ghisliero's thought when he describes the legs as dynamic columns which push against the "natural motion" toward the ground (i.e., gravity), which are able to receive and give back the weight to the center of the body, as Master Vadi already depicted with his symbols about a century earlier (the tower, the sun and the wheel).

Mental Attitude and Training

When talking about freedom of mind in the Eastern culture, we find strong connection with some of the Italian masters' teachings. A very beautiful phrase by Agrippa speaks of *mente sottile* (subtle/sharp/light mind), a mental state that apprehends and reacts in a better way than the rational mind. The forms, the *taolu* of Marozzo and the other masters, have precisely the function of transforming techniques into the "quiet instinctiveness" of trained automatism. In Vadi's beautiful drawing, an open eye is placed on the heart, bringing together perception and emotions in a body-mind unity. It is also useful to understand the words that many masters use—very similar from the medal of Monte to the words of some of the great masters—the *vis temperata* (tempered force) or *collera temperata* (tempered rage) which describes the state of the quiet mind, absent of thought but full of disruptive energy, which may be equated with the mental-spiritual state sought in Eastern martial arts. It is that state of controlled anger, which combines cold and reflexive mental clarity with emotional activation and the will to act, with the body and mind in readiness and synchronicity.

Moreover, the historical sources often mention the motivational attitude one should adopt when approaching a fight. Fiore's lion (one of the four virtues) is a metaphor for courage, as he encourages one to display fearlessness as a way to demotivate the opponent. The motion of the body to show conviction and aggression is suggested in several authors, for example, the anonymous author of Classense manuscript, who discusses how one could inspire terror through adopting a certain body attitude, and how fencing footwork is similar to dance but with a different attitude and purpose. This is the important role of *andare a gioco.* The experience in fencing—the result of several cycles of theory and practical understanding essential to the learning of fencing (the *teorica-prattica-esperienza* mentioned by several authors of sixteenth and seventeenth centuries)—is the result of going beyond rational understanding (theory) or mindless physical exercise (practice) to achieve a state of

mastery in the art, in which trained automatic bodily response is combined with the possibility to "read" the opponent and to use the intellect and creative mind to defeat him.

References

Historical Sources

Agrippa C (1553) Trattato di Scientia d'Arme, con un Dialogo di Filosofia. Antonio Blado, Roma
Anon (1621) Chaoxian shifa 朝鮮勢法. In: Wubeizhi 武備誌 by Mao Yuanyi 茅元儀
Cheng C 程沖斗 (1586a) Dandao faxuan 單刀法選. In: Gengyu shengji 耕餘剩技, vol 4
Cheng C 程沖斗 (1586b) Shaolin gunfa chanzong 少林棍法禪宗. In: Gengyu shengji 耕餘剩技
dal Montone AV (1575) Lo Schermo, written before 1550. Giorgio Angelieri, Venezia
dei Liberi F. Il Fior di Battaglia. MS Ludwig XV 13, fine XIV, beginning of the fifteenth century. J. Paul Getty Museum, Los Angeles
di Grassi G (1570) Ragione di Adoprar Sicuramente l'Arme. Giordano Ziletti, Venezia
Ghisliero F (1585) Regole. MS M.A.M. Martial Art Museum, Botticino
Liu X 刘向 (1987) Shuoyuan jiaozheng: zhiwu 说苑校证・指武. In: Xiang Z 向宗鲁 (ed). Zhonghua shuju 中华书局, Beijing
Manciolino A (1531) Opera Nova. Zoppino, Venezia
Mao Y 茅元儀 (1621) Introduction. In: Chaoxian shifa 朝鮮勢法. Wubeizhi 武備誌
Marozzo A (1536) Opera Nova. D. Antonio Bergolae, Modena
Miyamoto M 宮本武蔵 (1993) The book of five rings. In: Cleary T (trans). Shambala Publications, Inc., Boston, London
Pagano M (1553) Le Tre Giornate. Luigi Acilio Alife, Napoli
Qi J 戚繼光. Jixiao xinshu 紀效新書
Takuan S 沢庵宗彭 (2012) The unfettered mind. In: Wilson WS (trans). Shambala Publications, Inc., Boston, London
Vadi F (1482–1487) De Arte Gladiatoria Dimicandi. Biblioteca Nazionale di Roma, MS Roma
Wu S 吳殳. Shoubi lu 手臂錄
Yagyū M 柳生宗矩 (2012) Heihō kadenshō 兵法家伝書 [The life-giving sword]. In: Wilson WS (trans). Shambala Publications, Inc., Boston, London
Yu D 俞大猷. Jianjing 劍經

Contemporary Sources

Gotti R (2021) The dynamic sphere: thesis on the third state of the Vitruvian Man (chap 4 of this volume)
Harada K 原田一敏 (2009) History of the Japanese sword. In: Ogawa M 小川盛弘 (ed) Art of the samurai: Japanese arms and armor, 1156–1868. Metropolitan Museum of Art, New York, pp 117–123
Lee K 李翊 (2014) Fujian shuangshou dao fa 福建雙手刀法. In: Xianggang wulin 香港武林. Mingbao zhoukan 明報週刊 [Ming Pao Weekly], Hong Kong, pp 52–59
Lee K 李翊 (2020) Hefa shuzhen 鶴法述真. Yiwen wushu wenhua Ltd 逸文武術文化有限公司, Taipei

Ma M 马明达 (2000a) Lishi shang zhong ri chao jiandao wuyi jiaoliu kao 历史上中日朝剑刀武艺交流考. In: Ma M (ed) Shuojian conggao 说剑丛稿. Lanzhou daxue chubanshe 兰州大学出版社, Lanzhou, pp 212–255
Ma M 马明达 (2000b) Shuojian conggao 说剑丛稿. Lanzhou daxue chubanshe 兰州大学出版社, Lanzhou
Ma M 马明达 (2017) Cong tongbi dao tongbei 從通臂到通備. In: Wuxue tanzhen 武學探真. Yiwen wushu wenhua Ltd 逸文武術文化有限公司, Taipei
Ma L 馬廉禎 (2018) Shuangshou dao fa yuanliu 雙手刀法源流. In: Ma L (ed) Ma Lianzhen's selected papers on Chinese martial studies. Yiwen wushu wenhua Ltd 逸文武術文化有限公司, Taipei, pp 39–51
Ma M 马明达 (2021) Sima Qian and the Way of the Sword in ancient China. In: Chao H (trans) (chap 2 of this volume)
Ogawa M 小川盛弘 (ed) (2009) Art of the samurai: Japanese arms and armor, 1156–1868. Metropolitan Museum of Art, New York
Penso J (2021) Masters through the ages: interpretation of a Renaissance martial art system and the foundation of a modern school (chap 11 of this volume)
Shively D (1965) Sumptuary regulation and status in early Tokugawa Japan. Harv J Asiat Stud 25:123–64. Harvard-Yenching Institute, Harvard
Tsurtsumia M (2011) The evolution of splint armour in Georgia and Byzantium: lamellar and scale armour in the 10th–12th centuries. Byzantina ∑ymmeikta 21:65–99