

Examining Why the Japanese Nihonto is Curved: A Study Based on Katori Shinto Ryu

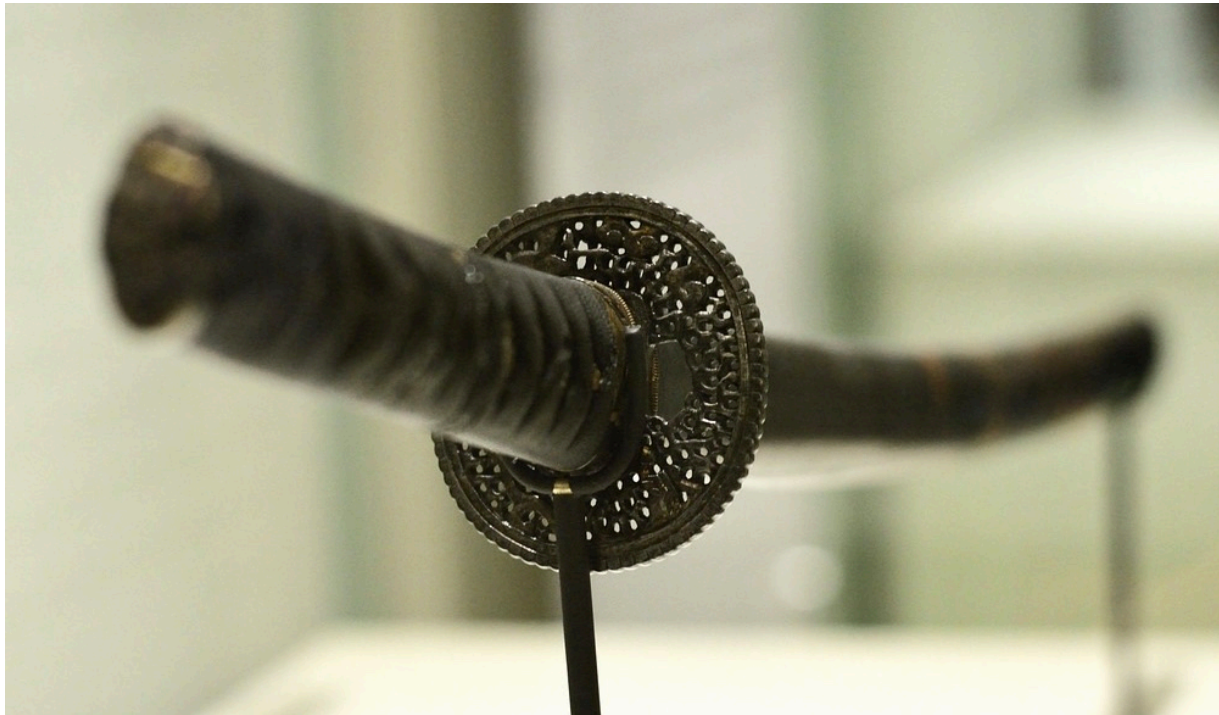


Fig. 1. Japanese sword from: Padrinan, Miguel A. "Museum-Art-Culture-History-East." *Pixabay*. 2018.

Introduction

My name is Tetsutaka Sugawara and I have been a practitioner of Tenshin Shoden Katori Shinto Ryu (Katori) for more than 50 years. This Japanese sword martial art has been trained, taught and handed down for 600 years. It represents part of Japan's history, culture, even religion, at times. Today, it connects people around the world. Through my extended travels as a Katori teacher, I have witnessed firsthand the impact Katori has had on people from different countries, across multiple borders, some conflict-ridden, some not. And always, fascinations with Japanese warrior history seem to hold fast. And deeply associated with the image of Japan's fabled samurai is an equally powerful image of one particular weapon: the Nihonto. Centuries after its formal retirement from the battlefield, it remains readily recognizable and acclaimed. But why is it curved? This paper holds my own ideas, findings, questions and perplexities on the subject, which I hope will spur new discussions among students and scholars alike, as well as

stoke the curiosities of scientific researchers to answer the questions that I cannot. What I can do is build on information provided by Masakuni Ishii in his book, *Warabite Sword*, and do so along the nexus of religious, cultural, commercial, and martial influences to better understand the origin, evolution and utility of the curved Nihonto.

The reason why I chose Katori for analysis is because Katori is the source of many styles of swordsmanship in Japan. Throughout its unbroken history, it can be said that various sword styles adopted parts of Katori's full curriculum and then incorporated or elaborated upon those selections into their own techniques. Thus, Katori may constitute a primordial version of Japanese swordsmanship relative to other extant sword styles in Japan.

I use photographs to discuss some of the basic ways the curvature of the Nihonto is used in Katori's sword techniques. However, I do not present the actual forms of Katori because they are too long. As an aside, in the current situation, the transmission of proper knowledge from one generation to the next is getting difficult even for Katori.

Importantly, I do not limit the examination of this paper's question merely to circumstances within Japan. Instead, I consider the question's broader context of the development of swords around the world.

And finally, I do not mean to arrogate Katori as better than other arts. Rather, the only purpose of this paper is to examine the academic question at hand. Hence, I do not mean to offer an opinion herein on what style of martial art or lineage is best.

1. A Brief Timeline of the Shape of the Nihonto

Masakuni Ishii was an expert on ancient Japanese swords, having examined many specimens found at archeological sites across Japan. According to him, the earliest Japanese swords were straight swords—designed primarily for thrusting—and developed early in the Kofun Period (AD 300-538). From the end of the Kofun Period into the Nara Period (AD 710-794), these swords evolved to have a double-edge and/or a “shinogi”—a type of lateral geometry. What appeared next was something in the family of the Warabite Sword (so named for its handle with a spiral end). Thereafter, curved swords, such as the *Kenukigata Sword* (one in which the blade and handle are built as one piece) and the Tachi (long sword) became prevalent. Widely used during the Heian Period (AD 794-1185), by the middle of this era, the essential

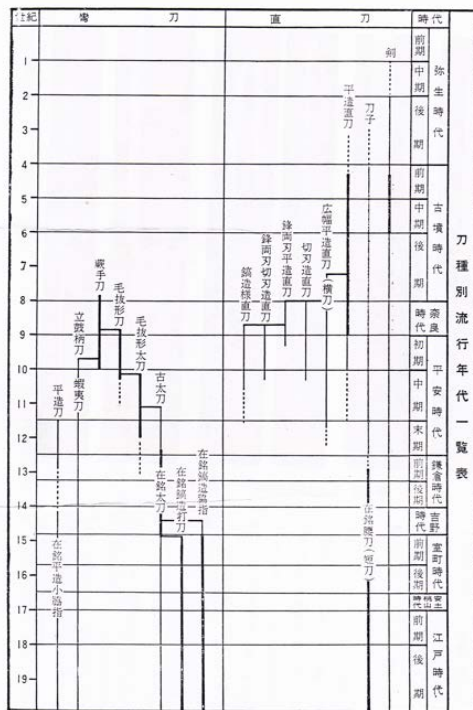


Fig. 2. Time chart. Ishii, Masakuni. *Warabite Sword*. 1966.

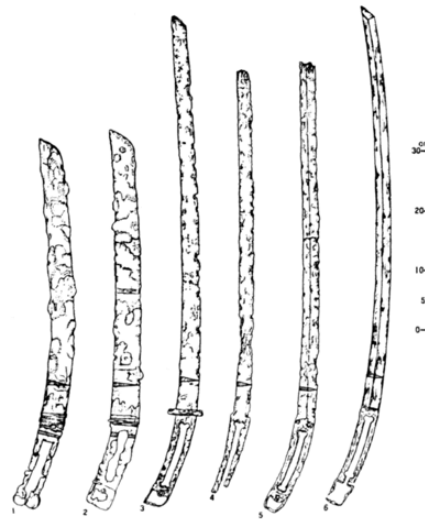


Fig. 3. Kenukigata sword, Tachi. Ishii, Masakuni. *Warabite Sword*. 1966.

properties of the Nihonto became fully established (see Fig. 2). Therefore, in Japan, the straight sword ceased to be forged after the Heian Period.

Masakuni Ishii’s research is comprehensively provided in his book, *Warabite Sword*, and the reader should refer to that work for further details.

2. Nihonto as a Weapon of Combat

In examining the Nihonto, it should be noted that the weapon is often viewed as a work of art. This concept began as a result of the end of World War II, when the American occupiers confiscated then prohibited the possession or production of any types of weapons, including swords. Under these circumstances, sword smiths were only permitted to make Nihonto if they were made as works of art, rather than as weapons.

But if Nihonto are merely pieces of Japanese art, then they become unhinged from their true history and purpose, thus robbing their place among the swords of the world. Rather, the Nihonto should be viewed as practical weapons for combat, and, in that regard, it is important to study their historical evolution through findings at archeological sites.

It means we must examine the martial purpose of the weapon, whether it be a small knife or a long sword, because the physical shape of the weapon is borne from martial purpose. Thus, we need to understand the martial arts behind the Nihonto in order to fully comprehend the purpose for which it was created. Such examination should be extended to all swords around the world. There are reasons why swords became curved, and understanding why is important, particularly to someone who actually practices with these swords as intended: for mortal combat.

Studying the Nihonto as a weapon rather than as a work of art would, in my opinion, allow for more serious and meaningful study of the weapon by scholars outside of Japan. Currently, the study of Nihonto as simply a work of art should have relatively less meaning and interest to scholars both inside and outside Japan.

As an aside, I am scheduled to teach martial arts in Budapest, Hungary, in September 2019 and, while there I will serve on a panel on the subject of the Nihonto. Not many people in Hungary are familiar with this weapon, and I hope that this panel presentation will stimulate further interest in the study of the weapon. To widen the perspective and improve the quality of the presentation, I asked that the panel include local scholars.

For the presentation, I will discuss the history of swords, such as the Warabite Sword, and the development of curved blades, as well as present some martial techniques that were borne from the geometry of the curved sword. Such discussion on the development of the Nihonto will be made with an eye toward the evolution of swords generally in world history. This paper is a supplement to this panel presentation. And as an example of how the curved blade is used in Japanese martial arts, the sword techniques of Katori—a comprehensive style of martial arts—will be shown to examine the reasons for the weapon's curved shape.

I have studied the martial techniques of Katori, which, in Japan, is recognized as an intangible cultural asset, for nearly 50 years. Katori was developed by one of the founders of Japanese martial arts, Choisai Ienao, and includes techniques used on the battlefield with armor, as well as techniques used without armor in mind. The style also incorporates training in various weapons, such as the sword, long staff, naginata (glave), kodachi (short sword), and the spear. Katori is primarily practiced with a partner, and the Nihonto is central to the style. In particular, Katori also includes other areas of study, such as fortification methods, spying methods, spike-throwing techniques, and swimming in armor, to mention just a few.

Religious Influences

3. Tibetan Buddhism

The first time I went to the Great Wall of China was 30 years ago. While there, I traveled by rail from Chang'an along the Silk Road. The ride was slow and steady for 50 hours across a vast geography of sweltering heat, frigid temperatures, even snow. After more than two days, the train passed by Jiayu Pass, the western most part of the Great Wall, which ended there. I was surprised that the Great Wall was built that far out. It showed how much China feared the Greater Mongolian Tatar. I thought about Emperor Qin Shi Huang ordering the Great Wall to be built, at incredible expense and labor, to protect his northern borders from attack.

I disembarked the train, transferred to a bus, and went to Dunhuang and visited, among other sites, its famous Mogao Caves, which hold numerous paintings of Buddhist images. I also walked the trail said to have been taken by the Sanzo Hoshi, the man credited for spreading Buddhism in China.

There is a route that runs directly through Dunhuang from Greater Mongolia to Tibet and into China, as if cutting through the Silk Road. The Tatar may have attacked and occupied Tibet, but they came to adopt the religion of this conquered land, Tibetan Buddhism. Perhaps they sought some peace after knowing only war. Regardless, the Tatar eventually returned north, retreating from the greater Beijing area and back to the grasslands, where they were defeated by other tribes and lost their dominance in the region, giving rise to the Ming Dynasty (1368).

Tibetan Buddhism spread across Asia, Asia Minor and parts of Europe, influencing and connecting these far-flung places, their peoples and ideas. At times melded with indigenous beliefs or superseding them, Buddhism carried knowledge, rituals, beliefs across vast distances and endures as one of the major religions in the world today.

4. Shugen Religion

Tibetan Buddhism traveled to Japan, became known as Shingon Mikkyo, and was absorbed for centuries into an archetypal religion called Shugen. Shingon Mikkyo, as in China, greatly influenced Japanese swords and martial arts.

One day, Risuke Otake Sensei, who was my teacher in Katori, showed me an illustration of a mountain. For those who remain unaware, Risuke Otake Sensei was the Shihan (Headmaster) of

Katori for more than seven decades. When he believed that the era of secrecy was over and agreed to make his martial techniques public, I helped publish a three-volume text about Katori titled *Diety and the Sword*. It was during this time, as we worked closely together, that Risuke Otake Sensei showed me that picture of a famous mountain for Shugen practitioners.



Fig. 4. Depiction of a Shugen monk known as Yamabushi.

Shugen is an amalgamation of multiple religions into one, from folk beliefs of Heaven, Earth, Man, Sky, Wind and Fire to Shinto, Buddhism and Taoism (Lotha). Shugen practitioners, called Yamabushi, believed they could gain supernatural power by leading an ascetic life in nature. To the Yamabushi, mountains were sacred places, i.e., gateways to heaven (Kesao).

Shugen's amalgamated state reflected the variety in which it influenced Katori. Castle fortification principles became based on Feng Shui; the secret teachings of Katori's "Kuji no In" became based on Shingon Mykkyo (Buddhism); certain Shinto rituals became imbued in kiais; and then there was the Yamabushi's specialized footwork called "crow hopping", which exists in naginata and staff techniques, all of which continue to be passed down. For instance, Katori's kiai, (Ei, Ya, Toh—single syllabic guttural exclamations performed throughout kata training) originates from the Shinto ritual to ward off evil spirits.

Unfortunately, the Shugen religion did not survive into the modern era. After a thousand years, it was abolished by government decree during the Meiji Period (1868-1912) as indicated below.

It is said that Buddhism spread to Japan around AD 538 during the reign of the Kinmei Emperor. In the Heian Period (AD 794-1192), however, pietistic men, such as Saicho and Kukai, trained in China then returned to Japan and respectively founded Tendai Buddhism, (Enryaku Temple in Hiei Mountain, AD 788) and Shingon Buddhism (Kongobu Temple in Koya Mountain, AD 816). At some point, the connection between religion and the state became too close, causing protests from the public, and the practice of the various Buddhist sects became secret and distant from political activity (Wikipedia).

As a final note, there is a rule in Katori that forbids the headmaster from entering government service. Consistent with this rule, Shugen practitioners also feared their martial techniques would be used for war and politics.

5. Secrets of Yamabushi - Warriors and Sword Makers

The Yamabushi trained Shingon Mikkyo in the mountains throughout Japan, but they were not just monks. They were warrior monks, who trained in the defense of self and others. Through their religious beliefs and practices, of which martial arts was an extension, they believed they could acquire supernatural powers in order to defeat evil and save people from hell. On a more practical note, Yamabushi sometimes served as protectors or guides for the faithful (common worshipers) who made pilgrimages to sacred mountains.

But the Yamabushi's martial techniques, such as their knowledge of wielding the curved blade, were transmitted in utmost secrecy. They would not have shared their martial techniques even with their immediate blood relatives. Aside from being warrior monks, they also forged swords, and the methods for making their weapons were kept secret as well.

Interestingly, as Shingon Mikkyo spread throughout Japan, it did not seem to disrupt or fracture the discipline of sword-making into warring factions or rivalries along geographical boundaries. Sword styles remained unique to a region, but smiths distinguished themselves in quality rather than with propaganda against their competitors. In fact, Shingon Mikkyo brought Shugen practitioners closer together, which may have established a mutual respect among sword smiths.

While their sword-making processes are mostly understood today, some of their techniques remain hidden and unknown. For instance, no one knows how they created spiral patterns in their swords or if and how they used cobalt in their forging processes.

Japanese swords are known to have been made from two pieces of metal then folded. Folding metal creates "grains" at the molecular level, which take on a uniform shine when polished. But this process does not create spirals or curves whirling throughout the blade. The Nihonto's famous hamon, a unique design set along the cutting edge, results from a clay process, which is known and continues to be utilized today.

On the other hand, the only method known to date that can create spiral patterns in metals comes from the Middle East. Damascus swords, renowned for their beautiful swirling patterns, were made with three pieces of metal, which were folded, twisted then completed using the casting method. I learned this method from a smith who makes these blades today. Tangentially, the ancestor blade to the Nihonto, known as “Gassan,” may have originated from the region where Damascus blades were made, such as the Caucasus. A further mystery is if the spiral patterns in the metal were preferred or a result of necessity.

And then there is the use of cobalt. Ancient Nihonto from the Heian and Kamakura Periods, the epochs in which the Shugen religion flourished, contain cobalt. A conclusion cannot be stated that the Yamabushi incorporated cobalt in their swords deliberately. This hypothesis requires further research and testing for confirmation, but suffice to say that the Yamabushi were highly skilled fighters and sword makers. If the use of cobalt was a secret technique in ancient times, the idea that the Yamabushi’s weapons would be inferior to what has been found to be accepted as stock during the height of their fame and prosperity would seem irregular.

The reason for using cobalt in metal weapons may have been driven by aesthetics apart from any permeation of strength. Cobalt alloys create metals that are exceptionally beautiful, a rare type only seen in ancient Nihonto. Unfortunately, modern smiths’ abilities to precisely and fully replicate the characteristics of these ancient swords remain elusive at this time.

Trade and Commerce Influences

6. Tracing Cobalt’s Journey to Japan Through Ceramics



Fig. 5. Illustration of Silk Road with land and sea routes: Saga, Razon Chandra. “Port Development in Bangladesh.” *Researchgate*. 2015.

As of this publication, I am not aware of the one definitive way in which cobalt arrived in Japan. I surmise that, like so many other commodities before and since in ancient times, it traveled along the Silk Road. The Road itself has various routes covering land and sea ways from Greece to China and back, later reaching into the Roman Empire and beyond. Although the term Silk Road was coined by German historians in 1877, the ancient Greek term for China was “Seres,” which means silk (*history.com*). Hence, commerce and communications existed between these two worlds for thousands of years. Where cobalt is concerned, two facts bracket its presence in Japan.

In order for a commodity to arrive in ancient Japan, it likely passed through China first. And the earliest evidence of cobalt in China references ceramics found in tombs dating to the early Tang Dynasty (AD 618-907) (*Encyclopedia of Iran*). But where did those objects come from? Evidence may be gleaned in a trade crisis five hundred years later.

“During the Hongwu reign (1368-1398), the shortage in cobalt blue from the Islamic region due to the ban of overseas trading led to the development of underglaze copper-red painted ware” (“Chinese Ceramics”).

Although the importation of cobalt dyes resumed in the early 1400s, it seems that China did not develop a domestic source for cobalt in five hundred years of trading along the Silk Road. Instead, when the supply dried up, China’s ceramics took a startlingly different hue, a clear indication that China was at the mercy of its supplier. Major suppliers of cobalt in ancient times was the Middle East.

“The cobalt mine of Qamsar, south-west of the city of Kashan in central Iran, has long been considered a prime source of cobalt ore from ancient times until the early twentieth century AD” (Matin and Pollard, “Cobalt Ore”).

I strongly suspect that more than pretty blue pigments via ceramics traversed the Silk Road. So must have technology, in particular warfare technology, as evidenced in cobalt found in ancient Nihonto.

7. Cobalt's Timeline in Chinese Ceramics

PRE-HAN (5800 BC - 2000 BC)



HAN TO JIN DYNASTIES (AD 200 - AD 589)



TANG DYNASTY (AD 618 - AD 907)



SONG DYNASTY (AD 960 - AD 1279)



YUAN DYNASTY (AD 1271 - 1368)



MING DYNASTY (AD 1368 - 1644)



Fig. 6-23. Ceramics from Pre-Han to Ming Dynasties. Yibo, Yu. *China Museum Online*. 2016.



Fig. 24. Blue flower grass-patterned jug from Keitokushimn kiln. *Asahi Shinbun*. Feb. 11, 2019

Very similar to Fig. 22 is Fig. 24, which was featured in an article in *Asahi Shinbun* daily newspaper about a cobalt jug that was imported to Japan from China. It was made in Jingdezhen, China, during the reign of the first emperor of the Ming Dynasty (AD 1368-1644). A similar piece exists in Beijing's Palace Museum, which houses treasures of China's last emperor.

Known as "Blue Flower," this style of pottery is a legacy of the Mongols, who began fashioning it during the Yuan Dynasty (AD 1279-1368). Strikingly similar to Japan's "somezuke," it uses the same blue color over white ceramic process.

SPECIAL FEATURES OF THE BLUE FLOWER GRASS-PATTERN JUG:

- Late 14th century, Ming Dynasty; 33 centimeters tall;
- Made of porcelain;
- The patterns were drawn in cobalt-based pigments then covered in a glass-like material and kiln fired;
 - The hole on top of the handle was likely used to attach a cover;
 - Made in Jingdezhen, China (Jingdezhen is known for its production of porcelain, touted the largest kiln and exported many Blue Flower ceramics during the Ming and Qing Dynasties);
 - Earlier period pieces exhibit more white space between the patterns;
 - In order to create the blue effect, cobalt pigments are used to draw the pattern before being covered in glass-like material and heated;
 - Around the time the Imperial Greater Mongolian Tatar changed its name to the Yuan Dynasty, the Yuan Emperor began importing cobalt from Syria. This changed the color of the porcelain from the light blue on white to the darker cobalt blue on white;

Compared to indigenous pottery and ceramics in Japan up to this time, the jug appears strikingly foreign. Based on its shape, color and pattern, it indicates the Middle East as its origin, perhaps Syria or Iran.

In ancient times, cobalt was such a rare commodity, it was restricted for use by royalty or nobility. In China, the Blue Flower style ceramics were reserved for the imperial court or offered as gifts to dignitaries, such as the leader of the Islamic confederacy. Because the use of cobalt was so highly prized and controlled, royal kilns, such as those in Keitokuchin (Jingdezhen), became famous across China. It was only at the end of the Ming Dynasty that non-royal kilns also gained the ability to use cobalt in their ceramics.

8. Secrets of the Old Nihonto



Fig. 25. Sugawara, Tetsutaka. "Cobalt Glass."
Taiwan Palace Museum.

I believe that ancient Nihonto, known as "Koto" blades, include cobalt in the composition of their metals, which may explain their unique tint, an effect that modern smiths have not been able to reproduce. Further more, the use of cobalt in sword-making may have been as highly prized and regulated as was with its use in ceramics. Therefore, smiths who made cobalt-added swords likely worked for persons of high status or were

themselves associated with forges that served the imperial court. That said, there are regions in Japan, such as Seto City (ceramic making began here in the 10th century), Tajimi City, and Mizunami City, where cobalt naturally occurs, thus, the element could have found its way into products made by smiths of normal stature.

The Koto blades probably have a weight ratio of 0.01% of cobalt. To test this hypothesis, I am currently in the process of preparing an experiment. If the weight ratio of cobalt reaches between 1% and 2%, then the color of the sword turns blue, like the ceramic in Fig. 25.

Cobalt is highly malleable and could be used during the folding process of the metal. Experimentation is necessary to determine if the Koto blades can be recreated adding only cobalt or other materials (such as Warabai ash) during the folding process. It is also possible that cobalt oxide is mixed during the process of adjusting the carbon in the metal. Alternatively, cobalt may have been used to cover the metal and then heated like in ceramics.

The idea of using cobalt in Nihonto does not appear to be shared by anyone else in Japan. In an article I wrote for the August 2018 issue of *Hiden*, I wrote about smelting high quality iron rock using the crucible method, which was used in Turkey early in the 5th century. I also

proposed a method of creating a cobalt alloy. I would recommend the article to anyone who might be interested in this topic.

Cultural Influences

9. The Hun and the Tatar

Recently, I heard of two interesting and surprising stories. First, a Nihonto was found in an archeological dig in Stavropol City. Second, a large tomb was found in Stavropol City with some people speculating that it may contain the remains of Attila the Hun. A Japanese sword in a Russian city that may hold the burial site of the most celebrated of the Huns shows how much people and information traveled between eastern Europe, the Caucasus, Asia Minor, and Asia.

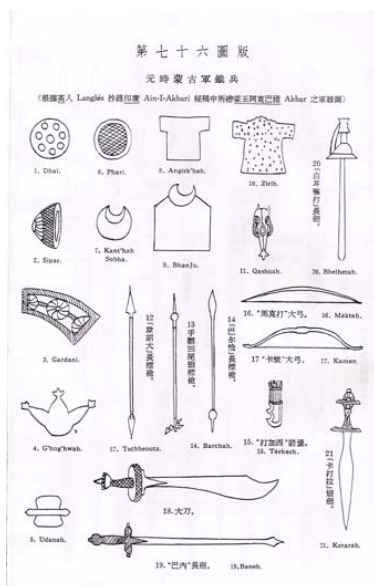


Fig. 28. Weapons of the armies of Greater Mongolia. Wei, Zhou. *Chinese Weapons Manuscripts*. 1957.

When I was in Budapest, Hungary, I shared with some of my students my theory that the techniques of Katori may have been passed down from Buddhist monks, who may have descended from the Tatar people. To my surprise, they replied that the Tatar and the Hun were like brothers.

Next, I traveled to Sophia, Bulgaria, for another martial arts seminar, and while there, I asked one of my students, who is a Professor of Egyptology at Sophia University, about the Hun and the Tatar being like brothers. He explained that, indeed, they shared certain ties, even an alliance to help each other in the event one should go to war. But this alliance was not out of mutual respect; rather, it was borne out of necessity. If the Hun had refused, the Tatar would have waged war on them. Tatar were fearsome fighters as well as mobilizers. In spite of being spread out across vast stretches of lands, the Tatar could come

together very quickly to amass a formidable army, persuasion enough for the Hun to help during the Tatar's campaigns.

But when I examined swords used by the Hun, they were not curved. According to my Katori student in Bulgaria, the professor who teaches at Sophia University, the Hun specialized in bow and arrow technology, particularly off horseback. They trained to shoot as many as 60 arrows per minute. Therefore, swords, although a part of their fighting retinue, did not serve as the center of the Hun's warring culture.

10. The International Influence of the Ancient Tatars



Fig. 26. (Left) Director of Russian historical museum in Stavropol, (center) Tetsutaka Sugawara. Stavropol, Russia. 2018.

In June 2018, I went to the city of Stavropol in southwestern Russia. There, I received an invitation from the director of a Russian historical museum to take a personal tour. The director, Sergei, welcomed me and guided me through exhibits with detailed explanations on the different periods of Russian history. What I found most fascinating was Sergei's discussion on how the curved blade became commonly used specifically through the influence of the Imperial Mongolian Tatar Military.



Fig. 27. Illustration of a soldier about to engage in one-on-one combat. Sugawara, Tetsutaka. Russian historical museum in Stavropol, Russia. 2018.

One of the most famous battles between the Mongolian Tatars and the Russians is the Battle of Kurikovo in or about 1382. Before the two armies clashed, a Tatar warrior appeared in the open without armor to challenge any comers in one-on-one combat. The Russians sent out one of their own to meet the challenge, and the two fought ferociously. When the Russian warrior overpowered and defeated his adversary, the entire Tatar army attacked, vanquishing the Russian warrior then the Russian army.

Over the next two centuries, the Tatar dominated the area, and, as a result, the Russians and the Tatars ended up sharing much of their cultures and ideas with each other, including the use of curved blades. This is the story told to me by Sergei, who said that the Battle of Kurikovo is still remembered and talked about today.

It so happens that Stavropol City is located in the area of the Silk Road, where East meets West. The Tatar fought along the grasslands route from the Eastern Roman Empire (Bulgaria), Sasanian Persia, Turku (Turkey), Russia, Tibet, Kingdom of Dali to China. Each of these regions, to varying degrees, may have developed a curved blade through the Tatar influence. But even the well-known broad swords of China (Fig. 28) were likely influenced by the Tatar, who created the Yuan Dynasty. The fifth emperor of the Mongol Empire moved his capitol to Beijing and proclaimed the start of the Yuan Dynasty in 1271. They then invaded Japan in 1274 and 1281. To defend against these incursions, Tokimune Hojo of Kamakura rose to command Japan's

defenses. Subsequently, one can see how and why the samurai warriors rose in prominence as leaders during the Kamakura Period.

11. Turkic and Russian Swords



Fig. 29. Shown to me by Jeremy. The Turkic blade begins to curve from the 10th to 12th centuries.

At the time of the Battle of Kurikovo, it is likely that the Tatar used curved swords against the Russian double-edged straight swords. Of course, it is also likely that curved swords were not the only weapons used by the Tatar, as both types served their purposes and remained in use up to and during World War II.

However, as a result of the Tatar's influence, Persia and Turkey also began making curved blades. This trend spread around Europe and Asia, and due to their ubiquity, the Nihonto found in Russia may find its origin either with the Tatar or possibly the Japanese.

It does appear that the Tatar influence eventually reached Japan, as Japanese blades show a gradual progression of curvature.

This evolution must have occurred concomitantly with the expansion of knowledge and expertise on the use of curved blades for having some advantage during battle.

12. Lesser Tatar Swords



Fig. 30. Tetsutaka Sugawara, Jeremy.

About 5 years ago, I interviewed a Turkic descendent of Shamans. He demonstrated very strong feelings against the Tatars, as though what is history to me were memories for him. His name was Jeremy and he shared some oral history with me.

According to Jeremy, the Tatar attacked Turkic towns, massacred the inhabitants, threw babies off cliffs, and kidnapped women. Moreover, the Tatar ordered Turkic towns, under threat of death, to make weapons for them. Notably, the reason for ordering the production of weapons was because Turkic weapons were known to be of superior quality than those of the Tatar's. In the end, the towns complied, but the weapons they forged were purposely made

to be of lower quality and often did not last a year.

The very inferior quality of these weapons might explain how the methods for using the curved blades developed. Because the weapons were of inferior quality, it became necessary to use techniques that lessened the damage to the sword during battle. Therefore, I do not think that the primary purpose of the curvature in the blade was to increase the cutting power, particularly because I have heard from practitioners who regularly engage in test-cutting that straight swords actually cut better than curved swords.

Notably, the Greater Mongolian (Tatar) weapons in Fig. 31 look very similar to the Japanese Warabite swords in Fig. 32 from the late Kofun Period, which predate the Yuan Dynasty by 300 years. Thus, it seems suspect that the weapons shown in Fig. 31 are from the Greater Mongolian Yuan Dynasty.



Fig. 31. Greater Mongolian Yuan Dynasty weapons. Wei, Zhou. *Chinese Weapons Manuscripts*. 1957.



Fig. 32: Warabite sword [left] with the handle curved along the back, and Greater Mongolian swords [right] with the handle curved along the cutting edge. Wei, Zhou. *Chinese Weapons Manuscripts*. 1957.

Fig. 32 compares the Warabite sword to the so-called Tatar swords. Although the grips on the weapons are different, the blades share very similar shapes. Because the Warabite sword may be fitted with a long handle and used as a glave, this may explain why the shape of the handle curves along the back of the blade. The “Warabi” design at the end of the handle was likely for the purpose of fitting the blade together with the handle.



Fig. 33: Illustration of a warrior using a Warabite sword as a glove. *Korean National Museum*. October 2017.



Fig. 34: Horse blade from the Ming Dynasty. “Hokaido Tsuma Numako Collection.”

On the Korean peninsula, for example, their swords were fitted in this way with long handles and used as gloves as in Fig. 33 below. Similar blades and applications also existed in China as indicated in Fig. 34.

Martial Influences

13. Why the Japanese Tachi Became the Uchigatana



Fig. 35. A Cossack sword known as the “Shashka.”



Fig. 36. (Right to left) The evolution from Sabre (Tachi) to Shashka (Uchigatana).

The steep curvature of the Japanese Tachi (the Sabre in Russia) evolved into the more modern Nihonto (1596-1763) known as the Uchigatana (the Shashka in Russia). This evolution may have occurred in Russia first because in the beginning of the 16th century, the light cavalry

became the main military force for their army. These groups of soldiers would often use their weapons by striking immediately upon drawing the blade from the sheath. Such tactics may be directly attributable to the Cossacks of Russia.

The Cossacks amassed in Ukraine, traveling from Poland and its surrounding regions, and were known as Zaporozhaye Cossacks. Some of the Zaporozhaye Cossacks relocated to Rostov Na Donu City in the Caucasus and became known as Don Cossacks. They later moved to the interior of Russia and served in various capacities for the Russian government. Don Cossacks proved to

be fiercely loyal to Russia in a way that was akin to the loyalty required under the Bushido code.

In fact, Don Cossacks' warrior mentality and faithful service to the state began during the Roman Empire and likely traversed the region then through China and into Japan. Similar codes of nobility and warrior values can be seen throughout these regions. Indeed, it is said that China's Hua-yi Distinction—the concept that Chinese culture is superior but that outsiders could become civilized by adopting Chinese values and customs—also finds its origin in the Roman Empire.

Using the Sabre or Tachi required the warrior to draw the sword before attacking, resulting in two distinct movements. The Cossacks lessened the curvature, and this modification to the weapon allowed them to cut immediately from the draw, melding the draw and the cut into one seamless movement. This modification and drawing technique were adopted in Japan as well.

I observed practitioners using the Shashka in Russia, and most of their techniques were strikes that began with the blade in the sheath. Expert and adroit, these practitioners would throw an apple in the air and quickly slice it twice. As for the Sabre, the drawing of the blade was incorporated with the motion of moving aside their traditional outer garment, the cape. However, I did not witness the practitioners of the Shashka demonstrate the type of continuous techniques that are prevalent in Katori.

14. Origins of Curved-Sword Techniques

When considering the question “why the Nihonto is curved,” one needs to examine various issues, such as which country first started using curved swords, when and how such weapons were used, and who used such weapons. While the Nihonto undoubtedly was perfected in Japan, it does not necessarily follow that the origins of the blade and the techniques associated with curved swords respectively began and developed in Japan.



Fig. 37. A straight sword and a curved Tachi. Japanese newspaper *Asahi Shinbun*. Feb, 11, 2019.

The critical question is why the double-edged straight sword fell out of favor for the curved sword. It stands to reason that this transition occurred because the curved blade was seen to be more effective than the straight sword. Thus, understanding the practical martial techniques becomes essential.

The Nihonto is used using both hands, but it is curious when this tradition began, because the way the sword is held is different between classical and modern martial arts. Moreover, classical martial arts use footwork that is similar to the one used with Taichi, in which each step is made with deliberate purpose. In Katori, this method of stepping is called “Isoku Itto,” or “one step, one cut.”

Furthermore, the forms practiced in Katori incorporate concepts found in Chinese martial arts, such as developing proper intention, breathing, and posture, as well as applying various stances/stepping (e.g., horse stance, bow and arrow stance, false step, etc.), and moving in conformity with Ying-Yang theory. In addition, Katori stresses the importance of ending conflict without war and encourages practitioners to look beyond the immediate killing techniques. Considering the complexity of the art, it is hard to imagine that Katori was created by a single person in Japan, as legend would have it.

Notably, since at least the 16th century, one of the requirements for receiving a teaching license in Katori was to study the three volumes of military strategy as compiled by a Taoist teacher during the Shu Dynasty (AD 221-263). This compendium of military strategy includes such principles as “softness overcomes hardness,” which is a foundational principle in modern Japanese judo.

Thus, I suspect that the advanced martial techniques, including that of using the curved blade, migrated from China and spread to Japan through the Shugen practitioners. And consistent with this theory, the martial arts of Japan, like those of China, focus on harmonizing with the opponent rather than dominating or beating him. The latter approach to martial arts is more common in western fighting traditions.



Fig. 38. Spiral pattern represents the secret to spear technique as explained by Professor Zhang Keijan of Wuhan Institute of Physical Education.

15. Spiral Patterns and Martial Techniques

Spiral patterns reflect power in nature. In martial arts, the lower tanden (abdomen) generates power by using this natural motion. In Katori’s set of

katas called Gogyo, the handle of the sword is placed on the tanden and power is generated from there to the tip of the sword. This is a very difficult skill, which takes many years to attain. If one's grip were to be even a little too loose, the power would not efficiently travel from the tanden to the tip of the sword.

When one masters the tanden movement and connection to the sword, the sword begins to move very quickly. With proper concentration and focus, as well as using reverse breathing, the tip of the sword flies toward its intended target swiftly and with precision. Spear and naginata techniques also apply movements that are connected to the movements of the tanden.

Fig. 38 shows the secret principle to spear technique, as provided to me by the late Zhang Kejian of the Wuhan Institute of Physical Education. Master Zhang was an expert of western Chinese martial arts (near the Silk Road) and had mastered 82 different types of martial styles. He commanded a cavalry of 2,000 soldiers, and, at the request of the Wuhan Institute of Physical Education, he was invited to teach the next generations of martial artists there.

As for naginata technique, Professor Wang Pei Kun of the Shanghai University of Sport explained to me that its secret is to place the weapon on the lower tanden and move it accordingly in a spiral motion. Thus, the spiral motion of Katori has common characteristics with Chinese martial arts.

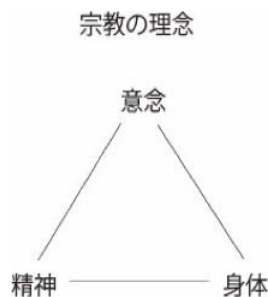


Fig. 39. Principles of religion: intention, spirit, body.



Fig. 40. Principles of martial arts: intention, breath, posture.

In martial arts, there are three essential elements that must combine to become one:

- (1) Proper *intention* (**choshin**)
- (2) Proper *breath* (**chosoku**)
- (3) Proper *posture* (**choshin**)

These three elements have their analogs in religion, as shown in Figs. 39-40. Bodhidharma spread Buddhism from India to China, and his emphasis on building a strong body is the beginning of Chinese martial arts. Thus, martial arts and religion were originally one, and the techniques of the curved sword probably have some religious influence.

16. The Essential Characteristics of Katori



Fig. 41. Illustration of Choisai Ienao, founder of Katori.

The founder of Katori, Choisai Ienao (1387-1489), lived during the Kamakura Period, when the curved sword was already in wide use in Japan. It follows that he must have learned how to use the curved sword from a master of the weapon. Tradition has it that he learned from a Buddhist child. Although it is impossible to determine his identity, this mysterious child may, in fact, have been a Buddhist monk.

Of course, other martial arts were founded after Katori, such as Kurama Ryu by Shogen Ono (1573-1593). It is unclear with whom he trained to develop Kurama Ryu, but the ryu's extant forms are very short. Curiously, this ryu has a technique called "maki otoshi," which shows that the spiral use of curved swords already existed by the time of Kurama Ryu. The origins of Kurama Ryu go back to Yoshitsune Minamoto (1159-1189), also known as "Ushi Waka Maru," who trained in the Kurama Mountains of Kyoto, Japan. According to legend, Minamoto learned from Kiichi Hogen, an expert with supernatural martial arts abilities. Hogen taught Minamoto and eight other warrior monks, and their martial style might currently be known as Kurama Hachi Ryu or Kyo Hachi Ryu.

In contrast to Kurama Ryu, the forms in Katori are very long and are made up of consecutive techniques, which are unique characteristics of Katori. For example, there are four forms in Katori's Omote no Tachi that deal with armored warriors. In each of the four forms, the practitioners attack each other continuously, targeting the weak spots of the armor. Just in one of these forms, the attacker performs at least 15 different techniques that utilize the curvature of the weapon. In this way, one can understand that Katori is unique in its practice and a well-suited entry point for examining the Nihonto.

17. Reasons for the Curve in the Nihonto

It is said that the Nihonto is “difficult to break and bend yet razor sharp.” But the reason for the curve in the Nihonto is not for the purpose of improving the weapon’s ability to cut. Rather, the shape of the Nihonto is designed to prevent damage to the weapon by using the back of the blade or “mune” to receive an opponent’s strike. That is, the mune (spine) is used to receive the opponent’s strike without damaging the blade and, by using the curve, immediately respond with a counterattack. Furthermore, by holding the sword with the right hand and supporting the blade with the left, the practitioner has the option to strike with the butt-end of the sword (see Fig. 43-44). If the weapon is used as in Fig. 42, where the blade is used to block an oncoming attack, the weapon will suffer significant damage and its effectiveness will be materially undermined.



Fig. 42. In actual combat, the blade should not be used to block a strike.



Fig. 43-44. Striking with the butt-end of a Nihonto towards the solar plexus then up to the face in quick succession.

On the point of the Nihonto being purportedly difficult to bend, if one were to apply pressure with his or her hand toward the middle of the blade, one will realize how easy it is to bend the weapon. Once the Nihonto bends and loses its well-balanced shape, the weapon becomes extremely difficult to handle. Thus, blocking an attack with the blade of the sword should not be a desired option in any combative situation. While modern kendo and fictional depictions of sword combat show swords smashing against each other, in actual combat this would result in the Nihonto bending or otherwise being destroyed.

When observing kata (form) practice of classical sword styles, it appears that the practitioners are blocking using the blade of the weapons in Fig. 42; however, there is a deeper meaning behind this practice. For example, if the defender were to step into the attack (application) rather than step back (kata), as in Fig. 45, it becomes clear that the defender who appeared to be blocking is actually striking the attacker’s carotid artery. Alternatively, as in Fig. 46, the defender could step back and strike the inner arm of the attacker and simultaneously



Fig. 45. If there is time to block, then that should be used to counterattack to the carotid artery.



Fig. 46. Cut the inner arm and immediately prepare to strike the liver.

prepare for a liver strike. This is an application of one of the teachings of Katori, which is that one should strike if there is an opportunity to block.

In response to the defender's strike to the inner arm, the attacker might try to avoid getting struck by releasing the right arm from the sword and pulling it away while simultaneously thrusting toward the carotid artery. If this happens, the defender, in further response, may use the mune to deflect the attacker's oncoming thrust. In this way, the kata practiced in Katori—unlike the kata practiced in relatively modern styles—do not end with one technique, but are practiced in a flowing and consecutive manner with no particular names or designation for each technique.

18. The Curved Sword Techniques of Katori: Basics and fundamentals

HOW TO GRIP THE CURVED SWORD: (AS IF WIELDING A RING-HEAD SWORD)



Fig. 47. Gripping method - beginning position.

Fig. 48. Gripping method - ending position.

The palm of the left hand wraps around the tsuka-gashira or the butt-end of the handle as in Fig. 47. Without extending the fingers, the entire left hand wraps around the handle. The right hand is placed near the tsuba (guard) and both hands firmly grip the handle. The thumb and middle fingers lightly touch on both the left and right hands.

According to tradition, this method of gripping is called “like holding an egg.” One



Fig. 49. When thrusting, the hand can maneuver to push the sword.

should be cautious not to place the right hand too close to the tsuba (hand guard), or the thumb nail may get stuck and cause injury. The hand position can be checked by following the prescribed form and touching the right hand to the forehead. When the position of the right hand is incorrect, the blade will not easily reach the opponent.

MAKI-UCHI



Fig. 50. Front view of striking position known as Maki-Uchi.



Fig. 51. The mechanics of the Maki-chi (left hand pushes forward and right hand touches the forehead).

This method of striking is used when wearing armor and to avoid any obstruction from the helmet. Centering the right hand, the left hand pushes up and the right hand touches the forehead. The sword is then brought in ready position for a strike.

From this striking position, the left hand pulls down and the right hand focuses on sending the kisaki (point of the sword) to the intended target. When moving to the striking position as well as when striking, it is important to keep the eyes focused on the opponent's eyes.

TWO METHODS OF PERCEPTION

The first method is to simply look at the opponent. The second method of seeing is to use the eyes to perceive the opponent and read his or her intentions. This latter method of perception is called "shingan," and one way of using shingan is to watch the opponent as if your eye is on your forehead.



Fig. 52. Looking at an opponent versus reading.

In the Shichijo set, the eyes are narrowed and placed on the opponent's hands while simultaneously using one's perception to read the opponent's intentions. The purpose of this method of shingan is to make it difficult for the opponent to read your intentions while facilitating reading the opponent's intentions. Ordinarily, however, you should practice by looking at the opponent's eyes as in Fig. 52.

Chinese martial arts find their origins in India by way of Bodhidharma, who was known for cultivating his concentration by focusing on a single point on a wall. I have developed an exercise inspired by this story about Bodhidharma, using two points of focus. Training the eyes for proper perception is important because the eyes are the windows to the spirit, and the spirit directs the internal energy. By looking into and reading the opponent's eyes, it is possible to determine where he or she is aiming and sense his or her spirit. In martial arts, it is critical to develop this type of perceptive ability.

BREATHING METHOD FOR MAKI-UCHI (EXPLOSIVE POWER)

Beginners breathe in when they bring the sword up to their forehead into striking position. When they do this, they are vulnerable to attack during the preparation phase of the strike. The practitioner must breathe in before he or she takes the ready position, i.e., it is necessary to have the correct starting posture.

When breathing in, the abdomen area is tightened or engaged, and, likewise, when breathing out, the abdomen area is again tightened or engaged. This is known as "reverse breathing."

When the abdomen is engaged using reverse breathing, this is when the body is ready to move and is in the correct starting posture. The sword should then be raised and immediately brought down for a strike using the power of breathing out (the two motions should be done in one beat). Once the strike has been completed, the practitioner should naturally and immediately breathe in using the reverse breathing method. Using this method, the practitioner can move quickly from one technique to the next. The timing of breathing in, without losing tension in the lower tanden (abdomen), is up to the practitioner. All movements in Katori should begin from the correct ready position and should apply this reverse breathing technique.

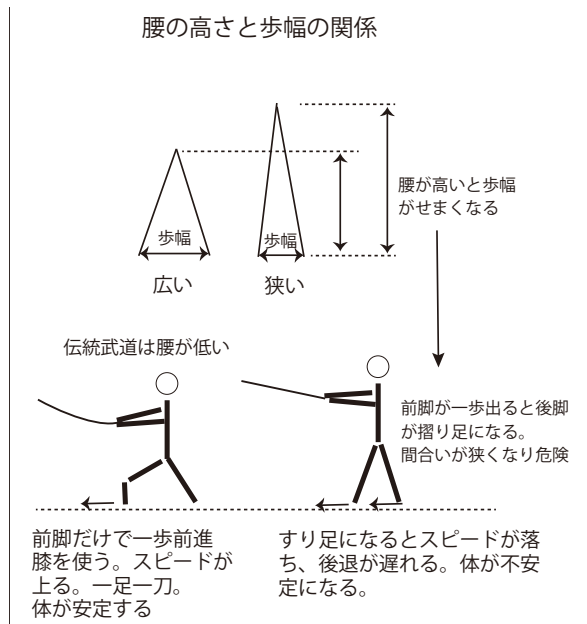
The Tengu (goblins) are actually Shugen practitioners and a word used to describe dogs playing in the air. Using the correct ready position and the reverse breathing method, one can practice jumping in the air and striking two or three Maki-Uchi before returning to the ground. This is the jumping technique of the Tengu.

When practicing Katori, you should assume the correct ready posture and engage the abdomen without loosening it throughout the performance of the kata. Once the kata is over, the practitioner may relax the abdomen to its natural state. This natural state of the body is the ending position for the kata.

SENDING ONE'S PULSE THROUGH THE SWORD (UNIFICATION OF SPIRIT, SWORD AND BODY)

In whatever position you are in, tanden and the tip of the sword should be connected, taut, and always ready to strike. When the proper connection is made, the tip of the sword should synchronize with your pulse and show a slight, rhythmic movement. When this occurs, the sword is said to be alive. If the grip on the handle is loose, however, your pulse will not express itself in the sword. You should grip the handle firmly and relax the wrists, elbows, and shoulders. You should also feel a single line connecting through your body.

ONE STEP, ONE CUT (LOWER THE BODY AND TAKE A WIDER STANCE)



If your stance is high, the length of your step becomes short. Thus, practitioners who have a high stance tend to shuffle-step (sliding the back foot) when stepping in to attack. But shuffle-stepping disrupts the balance of the body and ultimately slows you down. While it might have some merit when you are attacking, this type of stepping is not ideal when you need to retreat after the attack.

If you drop your center of gravity and widen your stance, you can reach the opponent by taking a single step with your right foot. To illustrate, imagine a triangle—the wider the triangle, the lower the center of gravity and the

Fig. 53. Illustration of the height of your waist, the length of your stance, and the relationship between a low stance (one step, one cut), and a high stance (shuffle step). Traditional martial arts use a low stance, which is quicker and more stable. A high stance lowers the overall speed (difficult to retreat) and the body is unstable.

broader the base. You should keep this low stance even after the strike as in Fig. 53.

SHADOW POSTURE (IN NO KAMAE)



Fig. 54. Shadow posture - In no Kamae.

This posture is taken by pointing the sword up with the blade facing forward and the right hand held around the height of the right ear. You must connect the tip of the sword and the lower abdomen and send your pulse to the tip of the sword. The oral tradition for this feeling is called “sword in the body.” You must correct your posture and feel the straight line through your center.

When striking, there must be a unification of spirit, sword, and body. Beginners tend to strike with a lot of looseness in the sword. For example, they tend to let their intention move ahead of their body and legs, and the sword does not project forward until after the delayed body and legs have lunged forward. The movement must be executed together rather than separately. For most people, the sword will move back before it moves forward during the strike. This type of “wind-up” is incorrect. But it is very difficult to strike correctly from In no Kamae.

LOWER POSTURE (GEDAN NO KAMAE): SHADOW, LIGHT, REVERSE



Fig. 55. Lower posture - Gedan no Kamae.

Shadow gedan means to drop the kisaki (tip of the sword) and keep the back of the sword facing the opponent. Point the sword halfway between you and the opponent. Send your pulse to the tip of the sword.

Light gedan has the same posture as shadow gedan but flipping the sword’s cutting edge up and pointing the blade toward the opponent.

Reverse gedan is shadow gedan but with the left foot forward instead of the right.

In Katori, the gedan posture is taken immediately after a strike so as to prepare an immediate thrust in response to the possibility of the opponent’s counterattack. Gedan is not a resting posture.

DISTANCE AND SWORD POSITION (PLACING THE SWORD AT THE CORRECT HEIGHT)

For Omote no Tachi, the sword tip is placed at the height of the opponent's eyes. For Gogyo, the distance between the practitioners gets closer because the sword tip is placed at the height of the opponent's solar plexus.

Katori is known for its use of distance, known as "marvelous distance," where your sword can reach the opponent, but the opponent's sword cannot reach you. This type of distancing can only be mastered by using the principle of "one step, one cut" as in Fig. 57.

CROW HOPPING

This technique permits one to move freely in all directions. One oral tradition for this technique is to keep the body angled, and, when you get tired, dig a hole in the ground, lay in it, and receive the energy of the earth to recover.

CAUTION AGAINST TAKING TOO HIGH OF AN UPPER STANCE (JODAN KAMAE)

In Katori, the hands do not separate from the head when taking the upper stance. Rather, the sword is held with three points of contact to the head, i.e., the left hand, right hand, and the handle. By holding the sword in this way, you can make sure your grip is proper before striking. Also, if the sword is separated from the head and held high, the opponent can strike both your arms and the side of your head in one stroke.

19. Advantages of Using a Curved Sword

☀ Techniques using the mune (spine) of the sword: There are many techniques using the mune, such as trapping the opponent's sword and throwing it down in a spiral motion, trapping the opponent's sword and flinging it up, and suppressing the opponent's movement.

☀ The sword can be supported by placing one hand on the mune: Because the mune is not sharp, the sword can be supported by placing one hand on the mune. When backed into a corner, this hand position can be used to transition into a strike using the handle.

☀ The sword can be used to strike two targets at once. For example:

1. When an opponent strikes the side of your head, you can strike in one stroke the inner arm and the liver as in Katori's Omote no Tachi #1 and #2.

2. When an opponent is in the upper stance, you can strike in one stroke his arm and the side of his head as in Katori's Omote no Tachi #2 and #3.

3. When an opponent strikes for your lower abdomen from the side, you can strike in one stroke the inner arm and the liver as in Katori's Omote no Tachi #4.



Fig. 56. Receiving and attacking at the same time using the curvature of the sword.

☀ Using the sword as having two sides for attack and defense: When backed into a corner and you must receive the opponent's strike, protect yourself near the guard and thrust toward your opponent at the same time. This is an example of simultaneously using half the sword for defense and the other half of the sword for offense.

☀ Using the depth of the sword's curvature for a push cut: When cutting the carotid artery, the depth of the sword's curvature is used to as an advantage to press the weapon into the target as in the left side of Fig. 57.

☀ Using the curvature of the sword to strike the vulnerable areas of armor: The curvature of the sword is applied to strike openings in the armor, such as the inner arm (from above or below), the heart from under the armpit, the inner leg, the front of the face, and the side of the Haidate armor covering the waist and leg.

20. Vocabulary of Sword Techniques

I will explain sword techniques using characters that describe techniques in Chinese martial arts. The Chinese language is convenient because a technique can be described using a single character. Notably, the word "cut" is rarely used to describe sword techniques.

劈: **To split**: The first three inches of the sword is struck into the opponent and the weapon is then pressed down to split the target.

斬: **To slice**: The top half of the blade is used to press against the target, either pushing or pulling. In Katori, most of the strikes are push cuts, which is particularly effective when the distance is far. When pull cutting, the distance shortens and the slicing power may diminish.

截: **To strike**: Either the top three inches or the whole sword is used to strike like hitting the opponent as in Omote no Tachi #1 & #2.

刺: **To skewer**: The sword is thrust into the opponent's body as in Omote no Tachi #3.

穿: **To thrust**: The tip of the sword is thrust into a vulnerable area, such as the heart, carotid artery, inner arm, or the forehead from below.

21. Kata: the Practice of Continuous Techniques

In Katori, the techniques are practiced continuously. To explain this training method, I will briefly explain a section of the fourth kata of the Omote no Tachi (see Fig. 57).



Fig. 57. From top left: receive the opponent's strike with the mune to protect your weapon from damage, and then use the curvature of the blade to slide the weapon into the opponent's neck. Explanation of bottom left quadrant: when using the sword with one arm: when the opponent thrusts, cut the arm on the way to receiving the attack, and then step in and strike the neck. When on horseback, this technique can be applied with little effort because of the significant force created from the speed of the horse. Explanation of the right side: when the opponent strikes, entangle the attack using a spiral motion, throw his weapon down, and cut from below. If the opponent attacks your neck, turn the lower abdomen and cut the opponent's mid-section. When the opponent attacks using a shuffle step, he essentially defeats himself when facing a Katori practitioner who can control the distance to both strike and evade at the same time (application of marvelous distance).

Interestingly enough, the forms for Omote no Tachi (sword) and Omote no Naginata (glave) share the same techniques; hence, the katas are similarly named. Then it

seems likely that the sword was manipulated in the same way as the naginata. The same can probably be said of the Warabite Sword and the old Tachi. Perhaps in the fashion of Chinese long weapons, which could be used to hook and strip the opponent's weapon, Japanese warriors may also have found it effective to attach their swords to longer handles.

Around the time that Ateli (a leader of the indigenous Emishi people in Northern Japan) fought, there were probably many such weapons like the ones described above, used to hook and strip the opponent's weapon. Fig. 58 is an illustration by the artist, Hironori Taniai, which he created after viewing a list of weapons from an ancient scroll. The scroll was meant to depict stories about the origin of a religious temple, but it also provided historical information on the types of weapons the temple monks used.

One definitive piece of information provided by Taniai is that the "nata" of "naginata" does not come from the Chinese language. Rather, it comes from the Ainu (indigenous Japanese) language for "blade."

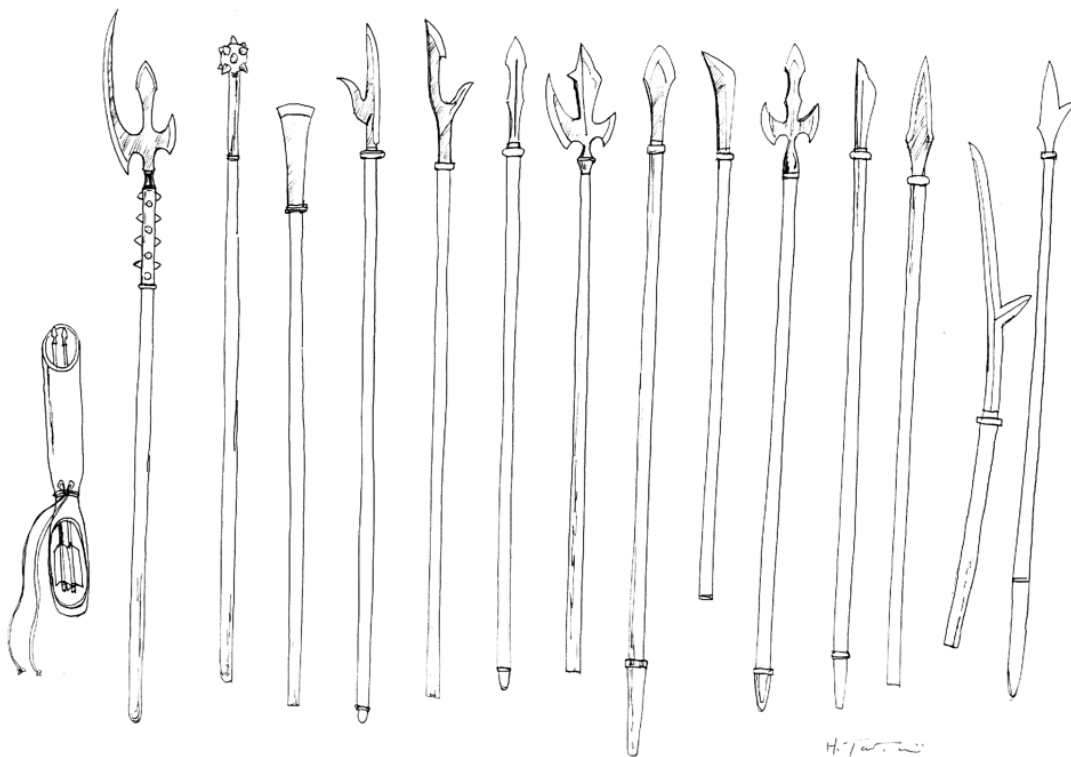


Fig. 58. Illustration by Hironori Taniai, who viewed these weapons from a scroll depicting the origin of a temple.

Conclusion

As shown above, I presented some of the curved sword techniques of Katori and examined the reason why the Nihonto gained its curvature. I also hope that one might have a better idea of why swords from around the world might also have gained their curvatures as the Nihonto did. Finally, I think it important for others to know that there are people around the world who continue to find purpose and enjoyment in studying the techniques of the Nihonto.

For over 35 years, I have taught Katori in the United States and Europe, and now my students teach in 50 dojos in 17 countries: the United States, Canada, Russia, Finland, Sweden, Spain, Portugal, Hungary, Bulgaria, Turkey, Ukraine, Poland, Greece, South Korea, Malaysia, Singapore, and the Philippines. In addition, I have students from Norway, Iran, India, Jamaica, Africa, Australia, Egypt, and countless other countries. Thus, although the curved sword techniques are very difficult, great and serious interest in learning them remain. And outside of Japan their numbers continue to grow.

I suspect that one of the main reasons for Katori's popularity is its absence of competition or ranking system. The practitioner can take his or her time to examine and train the techniques, and the study of Katori becomes a lifelong pursuit. I also think that I might have been successful in making so many friends around the world because I do not mix religion and politics with teaching Katori as a martial art.



Fig. 59. One approach to international exchange of the martial arts is to teach only serious practitioners. In this photo, practitioners from Bulgaria, Sweden, Finland, and Hungary practice together. They truly enjoy the studying the curved sword techniques of Katori.

I would note that in order to properly transmit the techniques and spirit of Katori there is some need for secrecy. If Katori is spread with business in mind, that may lead to violence.

In order to master the curved sword techniques of Katori and receive a teaching license, a student must train at least 10 years. During that time, I observe the student's character and authorize a teaching license upon my satisfaction. As of last year, I have issued slightly over 100 teaching licenses in Katori, and I am now largely confident that these techniques will be properly transmitted to the next generation.

When I began studying Katori in 1975, my teacher advised that knowledge of the Nihonto is foundational to the style. With the help of Mr. Mitsuharu Mamiya and Noriyasu Sato, I had the privilege of becoming a member of the Mogusato Research Group, which has allowed me to continue my serious examination and study of the Nihonto. I am truly grateful to everyone.

Works Cited

- “A Brief History of Chinese Ceramics.” *The Museum of Oriental Ceramics, Osaka*. n.d.
<www.moco.or.jp/en/intro/history_c/japan.php>. Accessed July 15, 2019.
- Ishii, Masakuni. *Warabite Sword*. Yuzankaku. 1966.
- Kesao, Miyamoto. “Shinto and Shugendo.” *Encyclopedia of Shinto: Establishment of a National Learning Institute for the Dissemination of Research on Shinto and Japanese Culture*. Kokugakuin University. Dec. 16, 2006.
<eos.kokugakuin.ac.jp/modules/xwords/entry.php?entryID=830>. Accessed July 14, 2019.
- Lotha, Gloria. “Shugen-do: Japanese Religion.” *Encyclopaedia Britannica*. Nov. 2, 2016.
<www.britannica.com/topic/Shugen-do>. Accessed July 14, 2019.
- Matin, Moujan and Mark Pollard. “Historical Accounts of Cobalt Ore Processing from the Kashan Mine, Iran.” *Taylor & Francis Online*. March 23, 2017.
- “Shugen Religion.” *Wikipedia*. <ja.wikipedia.org/wiki/修験道>. Accessed January 2019.
- “Silk Road.” *history.com*. A&E Television Networks. August 21, 2018. Accessed July 12, 2019.
<www.tandfonline.com/doi/abs/10.1080/05786967.2015.11834755>. Accessed July 12, 2019.
- West Fitzhugh, Elizabeth and William M. Floor. “Cobalt.” *Encyclopaedia Iranica*. Oct. 25, 2011. <www.iranicaonline.org/articles/cobalt-sang-a-lajavard-blue-stone-also-applied-to-lapis-lazuli-and-ultramarine-lajavard-e-kasi-ceramic-blue-la>. Accessed July 13, 2019.