

Architecture + Ninjutsu: **Negotiation of Tactical Space in Everyday Places**

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Abstract

The main purpose of this research project is to see whether if two unrelated fields of study, architecture and *ninjutsu* (the art of the *ninja*, infamous for being Japan's espionage agents), can meet on common ground.

Research Goals:

- Define Japanese anthropological space, tracing the creation of *kukan* or three-dimensional objective space (to broaden and deepen an understanding of space).
- Find different means to document movements stemming from *ninjutsu*, especially in terms of the relationship of body, space and movement.
- To capture spatial relationships in *ninjutsu* and find equivalencies in everyday places

The methodology of this project will mostly be of the qualitative and experimental type. The training of *ninjutsu* is a purely a kinesthetic practice, where the one's own experience and interpretation are more important. I will also include case studies when necessary, or use phenomenological examples to help find reasoning for my findings. I will also conduct experiments using various mediums to help illustrate my points. I will also keep a journal as a record of my findings in the experiments or my personal opinions.

The main methodology used to link the two worlds became the use of the helmet cam. This showed first person perspectives of the spaces experienced in *ninjutsu*, and I compared them with the spaces found in the everyday (between bodies). The second part was analytical diagrams that show the objective spacing between bodies to also help make a comparison.

From this research, I have concluded that *Ninjutsu* and the everyday places we as architects create are both involve the action of spatial negotiation. By juxtaposing the two, *ninjutsu* and the everyday, the former is an intensification of the latter. They involve similar concepts, yet manifest in different ways.

Background/Field of Study

The existing field of study stems from previous coursework at the University of Hawaii at Manoa School of Architecture. It also stems from my interest in the martial arts. I started taking *karate* in the 3rd grade. While I cannot say it was absolute passion, I enjoyed it and continued practicing up until I reached high school. In the 9th grade, I joined my high school's *judo* team. While only a flash of inspiration, I did a research paper in the 10th grade on *ninja* after stumbling upon some books in the library; I was especially interested in *ninjutsu* from that point on, as they seemed to know no limits—they seemed like real incarnations of the *jedi* from the Star Wars series, who seemed to be sages, wizards warriors, and espionage agents. In this year, I also joined the high school wrestling team to further improve my weaknesses. I continued *judo* to the 11th grade and wrestling to my senior year. I carried the value of these experiences to college as well.

During my second year of architecture school, for the study of modular systems, I chose to research the human body, especially in the martial arts, and somehow apply it to design. After some research of Japanese Aikido to the works of Oskar Schlemmer, I came to the conclusion that simplification was necessary in order to apply it in the short period of a few weeks. It changed into a study based on the basis of human movement—walking. This project really influenced my design, and I eventually found myself also interested in Japanese architecture and space.

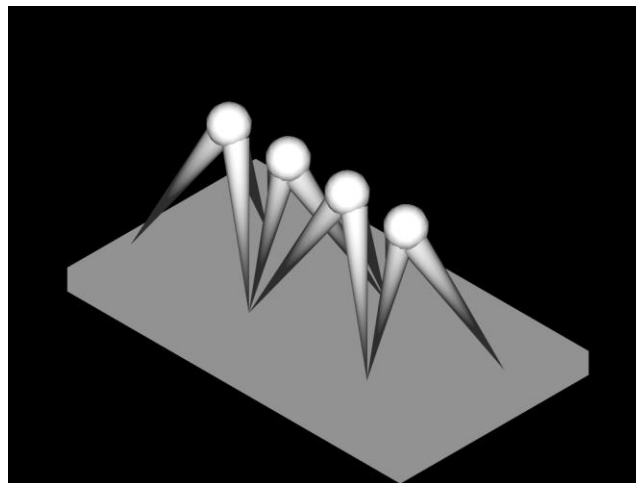


Figure 1: Simplified structure of the human walk

Source: image by author

It was in the same year, that I was lucky enough to gain a source of learning more or less authentic *ninjutsu*—through DVD lessons and testing similar to online college classes. I faithfully practiced these with partners and friends to the nth degree. I found out that *ninjutsu* had more to it than mysticism and smoke—it truly was about space and form and the interplay and dialogue between these two.

Through these two experiences, my interest in the human body and its background of space intrigued me. For the following years, they would be what I thought about and catered to most. For my portfolio review, I even had a small section showing some movements with regard to the body and space.

In my fifth year of architecture school, I was able to finally find a *sensei*, who was both authentic and of flesh and blood, in the way of the ninja. I immediately enrolled and I trained diligently. It was around this same time, that news got around about an experimental studio would be taking place over the upcoming summer—it would carry the themes of movement and architecture, while also involving the human body and the martial arts. It seemed like everything was just falling into place, and I took the class. Through this class, I realized that linking the two fields of *ninjutsu* and Architecture perhaps through the human body was not so farfetched and was already given momentum by my previous experiences.

For my first Practicum in Hawaii, I continued these studies for the practicum research project. However, I took the advice of my mentors and made it more applicable as a design tool. The research was still a study of the body, but focused more on how through moving through a series of spaces and conditions, could overall affect the experience as a totality. Eventually I finished my paper and my presentation materials and gained more insight into what my topic may become. The final presentation, named *Enhancing the Experience of Architecture through Movement*, in front of 90+ people concretized my confidence—the audience

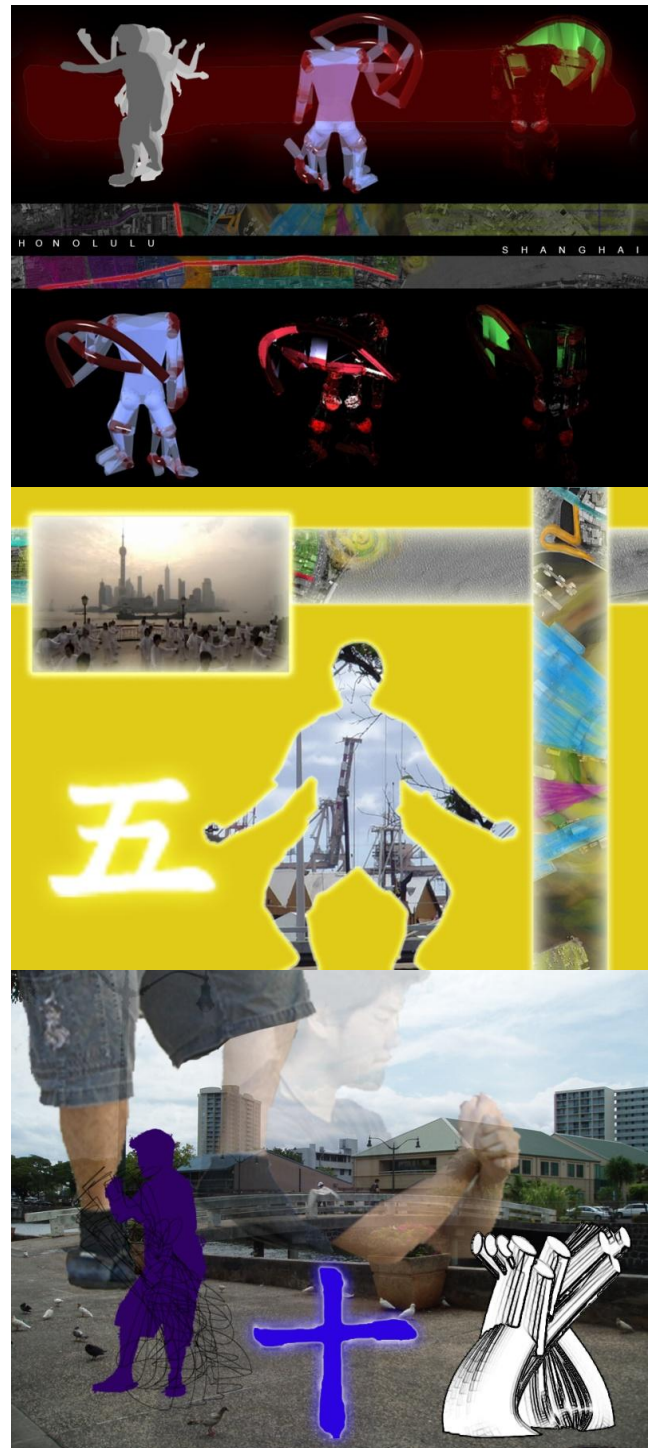


Figure 2: 3 Examples of “Tai Chi” movements and the relation to two cities

Source: images by author

understood, enjoyed and applauded my research, presentation, and demonstration of the goals I strived for. One of the principals came up to me and told me he understood exactly what I meant, and that he now knows why Japanese architecture can be so beautiful. The main book that this research was based on was Gunter Nitschke's, *From Shinto to Ando: Studies in Architectural Anthropology in Japan*.

When I arrived in Japan for my second Practicum experience, I was still pursuing where my last practicum research left off. However, when I presented my previous research to Gensler-Tokyo, they said they did not feel the same way about Japanese Architecture and movement in the human body; fortunately, this was more of a lost in translation moment—they said in terms of dynamism, they said energetic places in Shibuya or Shinjuku sounded more like the idea of movement, and tranquil Japanese Architecture sounded like the antithesis. When I explained it again in another way, they got the idea that perhaps my research was more of along the lines of spiritual or emotional movement rather than a bodily movement. Perhaps a better explanation would be meaningful movement—hinting at the idea that stillness and movement were both needed.

In any case, perhaps I was too hasty in trying to study movement in the human body, when I did not even understand the importance of the body in a “static” way. Similarly, in mathematics, there are levels that build up; for example, trigonometry studies the more static principles of analytical geometry, whereas calculus builds up on that and studies the dynamic principles of analytical geometry. For that semester, I thought that following this pattern would best suit my research and provide a good foundation for my studies on the human body. The research focused more about the phenomenological aspects of body's experience in architecture, and revolved around the Juhanni Pallasmaa's book, *Eyes of the Skin: Architecture and the Senses*. The presentation to the firm was a great success and they enjoyed it very much.

During this time I was training in Japan with 3 *Shihans* of the *Bujinkan*: Toshiro Nagato, Yukio Noguchi, and Rob Renner. I also went to Grandmaster Masaaki Hatsumi's classes to train. In addition for influencing my personal being, these also influenced my studies towards the D. Arch Thesis. The training with Fraser sensei in Hawaii has the same feeling as Japan. It is a transmission between bodies. Perhaps one of the most simple and best quotes that illustrate this point is from Grandmaster Hatsumi: “No think. No talk. Train.”¹

The accumulation of these experiences have shaped and formed the direction and evolution of this project. This is not a short term goal. This will be perhaps a lifetime study that I hope to keep on developing. The most important aspect of the *nin* in *ninja* is to keep on going, and keep enduring. This is also found in Japanese culture as *Gambatte!*

¹ (Cole and Hatsumi 2003, 21)



Figure 3: Nagato Sensei, the author, and Grandmaster Hatsumi at the Hombu Dojo

Source: image by author



Figure 4: The author, Noguchi Sensei, and Fraser Sensei at the Hombu Dojo

Source: image by author

Historical Context of Negotiation

Ninjutsu is an art of negotiation. This can be traced through its long history of nearly 900 years. By delving into the birth of ninjutsu and following some of history, perhaps we can some perspective on the unique traditions and encounters that shaped the need of negotiation.

As mentioned previously, the character of “nin” conjures up the concepts of perseverance and enduring; however, another meaning that is more infamously known but related, especially within the martial arts community, is of stealth and invisibility. By examining the definition of “nin” as both endurance/perseverance and stealth/invisibility, especially within the context of ninja history, we see that the two meanings are closely related.

“In 1182, during the Japanese Gempi (sic) war, Minamoto Yoshinaka, a general from the mountainous Nagano region of Japan, captured the capital city of Kyoto. After this victory, he found himself under attack by his cousin Yoshitsune. When Yoshitsune's troops successfully crossed the Uji river, a key strategic defense for the capital, Yoshinaka withdrew, only to be killed as his horse fell through the ice of a frozen rice paddy.”²

After Yoshinaka’s forces were defeated, one of his samurai retainers, Daisuke Nishina, found himself fleeing to survive. “Wounded and battle-weary, he was forced to flee his home of Togakure village, in present day Nagano, and wander in exile to Iga province, hundreds of miles away to escape the post-battle slaughter.”³ Accordingly, Daisuke met a warrior priest named Kain Doshi, who taught him mystical arts to add to his *shugendo* practices (“a practice of warrior asceticism and power development in which attunement with and direction of the natural elements is gained”⁴). Daisuke Nishina changed his name to Daisuke Togakure and along with Kain Doshi laid the groundwork and foundation of Togakure Ryu Ninpo.

The ninja’s philosophy was based on practicality. Survival became the basis of the ninja’s art. Even if one’s family and life was seemingly destroyed, one could always start anew by escaping behind a shield. Being invisible (hiding behind) the very mountainous and forested area of Iga province, offered protection and re-growth—a continuous chain of life. In this regard, flight, covertness, and inaction/evasion became highly important ideals.

Our first President, George Washington said, "To be prepared for war is one of the most effectual means of preserving peace."⁵ Aristotle also comments on this, saying that “We make war so that we may live in peace.”⁶ We see a sort of symbiotic relationship, perhaps negotiation between peace and war. The ninja shadow warrior, had their roots in

² (Seibel 1995)

³ (Hatsumi, Hayes, et al. 2008)

⁴ (Hayes, Ninja Volume 3: Warrior Path of the Togakure 1983, 27)

⁵ (QuoteDB n.d.)

⁶ (Quote World n.d.)

the upper class of society (the samurai) as shown per in the history Daisuke Togakure's, understood that the upkeep of peace went hand in hand with military prowess.

The ninja in American culture is seen as mercenary assassins; in Japanese culture they are seen as mystical wizards. The truth is probably a little bit of both and more. The ninja owed their alliances to their family based clans. The *Sengoku Jidai* (Age of the Warring States or Age of the Country at War) pitted a multitude of feudal lords of provinces in a power struggle for the position of the military commander of Japan (Shogun). This period of great civil war is known for its constant military conflict. The ninja provided temporary covert services that would serve the survival and prosperity of their clans or the totality of the universe best.

“Ninja could be hired for specific, short-term operations or might be taken along with an army for campaigns of an unspecified or unknown duration. A siege, for example, could take months, during which ninja would be used for intelligence gathering or to cause confusion inside the castle.”⁷

Besides providing intelligence and espionage service, the ninja also provided indirect warfare. The ninja that were attached to a main force, were generally used as *teisatsu* (scouts), *kisho* (surprise attackers), and *koran* (agitators).⁸ Their means of indirect warfare through a balance between fight and flight, overtiness and covertness, action and inaction/evasion, made them highly sought after during this period of unrest.

During this period, one lord found the ninja to be more than a thorn in his side to conquering Japan. Nobuo Oda sent a force of nearly 12,000 men to take Iga; surrounding it, and dividing his force along its three main mountain passes from Ise (one direction), he attempted to invade the secluded, mountainous province of the ninja. The ninja with their superior information gathering quickly assess the situation. Their precognition and preparation, along with their unconventional means of warfare, allowed them to easily obtain victory.

“The defeat of Oda Nobuo's invading troops in 1579, by the guerilla fighters of Iga, represents one of the most convincing triumphs of unconventional warfare over traditional samurai tactics in the whole of Japanese history. Trapped by ambushes in the dark valleys that led down into Iga, the samurai of Oda Nubuo (sic) fought each other in confusion.”⁹

Unfortunately for the ninja, this was the eye of the storm. What would later be chronicled as *Iga no Ran*, Nobuo's father, the more ambitious Nobunaga Oda was very displeased with his son's performance. With this, he envisioned an attack from six synchronized directions with nearly 44, 300 men.¹⁰ From their information gathering, the Iga ninja knew they did not have the manpower to ambush six separate armies; they were

⁷ (Turnbull, *Warriors of Medieval Japan* 2005, 172)

⁸ (Turnbull, *Warriors of Medieval Japan* 2005, 148)

⁹ (Turnbull, *Ninja: The True Story of Japan's Secret Warrior Cult* 1991, 65)

¹⁰ (Turnbull, *Ninja: The True Story of Japan's Secret Warrior Cult* 1991, 67-68)

outnumbered nearly 10 to 1. They could not employ their guerilla tactics as there literally was no room. They fought valiantly but were defeated. This was the first major loss to the ninja. They had no choice but to leave their home that had been a refuge and a sanctuary for more than 500 years, and scatter into other provinces.

The ninja survived in secrecy throughout the ages. Some assimilated into the police force. Some became body guards for VIPs. One particular ninja is well-known after this *Iga no Ran*, Hanzo Hattori. He served Ieyasu Tokugawa, the man who would later become Shogun and unify Japan, faithfully and loyally. In one example, Hanzo and his team of ninja and gave Tokugawa friendly passing to safety in dire times. A coup against Tokugawa's ally, left him unprepared and surrounded. It was Hanzo and his ninja who got him back to his castle safe and sound. In one exciting story, the ninja stored Ieyasu in a ship, which also shows Ieyasu using ninja methods:

“The ship in which Ieyasu fled from Ise was searched by Akechi's men, who had been ordered to be on the lookout for him, so Ieyasu was hidden under the cargo in the hold. The soldiers began thrusting their long-bladed spears into the cargo to find anyone concealed therein. One of the spearblades cut his leg, but Ieyasu responded coolly by taking the headtowel (sic) from his forehead and quickly wiping the blade clean of blood before it was withdrawn.”¹¹

This sense of negotiation also permeates the ninja's fighting arts. The reason is that in real combat, hidden weapons or armed versus unarmed is a commonality. Weapons add another dimension to fighting, in that they require one to not engage an armed opponent directly head-on (in the weapon's effective range), especially when unarmed. In a life or death situation, one is never sure if the opponent has something up his sleeve. A sort of mutual respect takes place, in that all combatants are dangerous and can invoke death. This respect ushers the fact that one cannot be blinded by his own intention or the opponents, nor can he completely disregard either. Also, especially in the case of a surprise attack, one has no idea what the opponent will do—pull out a knife and stab, punch, kick, grab. So receding creates enough breathing room space, to change the tempo of the fight—effectively slowing down so one can orient one's bearings on the situation at hand and discern properly the right tactical movements.

If both armed opponents rush in blinded by their intention, there is a high probability that both parties will be mutually destroyed (similar to the old civil war tactics where the gunners stand in rows and fire off in volleys). Generally, modern day action movies with gun firefights showcase a process of negotiation—a gunner will shoot, then move behind cover to safely receive the return retort of bullets, perhaps sometimes tactically change positions, and return fire again. This is the process of negotiation in space. Sun Tzu said it is best to first know oneself, and the opponent; those who know both better, will surely capture

¹¹ (Turnbull, *Ninja: The True Story of Japan's Secret Warrior Cult* 1991, 79)

victory.¹² In a sense, I feel that this is also an exchange between two polarities similar to the negotiating. One uses space, the connecting gap, to do so.

Throughout history, the ninja balanced on a tightrope between life and death. Their method of negotiation was based on a model of nature—perhaps a matrix of intersecting polemic elements. Yasuyoshi Fujibayashi, the author of the *Bansenshukai*, a sort of 17th century ninjutsu encyclopedia, prominently describes the methods of the ninja:

“Attaining the core essence of the ninja art begins with the paring away of unessentials (sic) to reach a base state of personal spiritual purity, and culminates in the ability to move freely without defilement between the polar realms of brightness and darkness, as necessitated by the scheme of totality.”¹³

¹² (Tzu and Cleary 1998, 109)

¹³ (Hayes, Ninja Volume 4: Legacy of the Night Warrior 1985, 11)

D. Arch Project Statement

Architecture Vs *Ninjutsu*: is study of the body and space in flux. Architecture itself is very much an interdisciplinary study of many fields; perhaps due to the fact that a work of architecture dwells on its spaces and what field occupies it. *Ninjutsu* is also an interdisciplinary martial art: it includes everything and anything, including strikes, grappling, unarmed versus armed combat, multiple opponents, espionage, geography, astrology, psychology and the list goes on; similarly to architecture, such a bricolage is very much organized spatially. The body is our sole vehicle in experiencing life. If we use the Japanese concept of space as unlimited potential, we identify space with movement. We metaphorically associate movement with vitality, and consequently stillness with death. As such, there is an intricate relationship with body and space (the prospect of moving onward).

This study is perhaps more geared towards Japanese architecture and space and the space involved with the body in *ninjutsu*. This is more of an anthropological and perhaps also a phenomenological study of space. This is a study of the human body and its experience of space.

In Western society, the human body has been severed from the head; repressed from in all of its naturalness and spontaneity. Feeling and intuition, the instantaneously acting and deciding, sublime powers of the subconscious has been suppressed. The rational and logical, conscious mind is at the helm of a long established patriarchy.

“The whole body sense for the *budoka* (practitioner of warrior ways) will come to be developed...Modern education considers having a good head to be the first thing. We often divide people into those whose body is eight, seven, or six times the length of the head, and make that proportion a criterion for beauty. Granted the body is seven times the length of the head, modern man values only one seventh of the former; the remaining six sevenths of himself he discards or forgets. Even if graduated from a highest institution of learning, one cannot live in society with one-seventh sense...Man lives with all his body, and so I should like people to become aware that the remaining six seventh are important. Otherwise one’s own hands and feet will not move as one intends. Coming to understand this, one will naturally understand how to live as a human being.”¹⁴

~Dr. *Masaaki* Hatsumi,

34th *Grandmaster of Togakure Ryu Ninpo Taijutsu*

¹⁴ (Hatsumi, *Togakure Ryu Ninpo Taijutsu*, “Purple Book” Translation 1983, 6)

This project will provide a foundation for not only how to relate two seemingly unrelated disciplines. Also, it provides framework of Japanese anthropological space. This is a study of the dynamic relationship between bodies categorized by spatial concepts. This is a study of spatial negotiation between bodies, with both parties trying to reach their goal, yet not endangering themselves.

This project documents the spatial negotiation found in ninjutsu. Ninjutsu is about tactical spacing—moving into positions that will offer the greatest advantage in a given situation. Perhaps the ideal is a zero point, a place where one can move freely in any direction. Zero or empty space, is potentiality

This D. Arch Project has been a process of experimentation and discovery for me. The basis of intent has always been to find and establish a relationship between two arts of space: Architecture and Ninjutsu. Figuring out the means and methodology was truly the most difficult part.

In the first part of this D. Arch Project, different mediums were used to map out the dynamic exchange between bodies and space. First a series of still images were used to document ninjutsu movements, and then the idea of a video camera was introduced. Perhaps the most significant and innovative evolution of this thought process was the introduction of the helmet cam to give first person experiences of the space. This framed much of the studies, and eventually became the medium of the end product—a final video.

Other trials, such as scaled down figurines were used. The space between these figurines was filled in with clay; in one case, their “movements” were traced with wire. Even building models and the space between body and building was slightly explored. While many of these creative studies did not appear in the final product, they did affect my way of thinking and defining characteristics of this study.

In ninjutsu there is an important concept called *saguri-dori* that means searching techniques. This refers to night searching methods for fighting (were by feeling through the dark, one traces the outlines of the body to reach certain target areas) and/or surveillance techniques for traps and even weak spots in castles. This is done carefully and surely. I hope that this project, even though traveling down a remote and new path, will act as a guide for anybody that wishes to follow their dreams—no matter how crazy and eccentric they might seem.

Part 1

Defining Kukan

Defining *Kukan*

“Militarists avoid the full and strike the empty, so they first have to recognize emptiness and fullness in others and themselves.”

–*Du Mu*, comments on the Art of War¹⁵

In *ninjutsu*, understanding the *kukan* (loosely translated as space) seems to be the most important thing. When I was training in Japan, Grandmaster Hatsumi would always remind us “You have to live in the *kukan!*” This illustrates the main difference between *ninjutsu* and other martial arts: occupancy of one’s own *kukan*, and occupying the *kukan* of the opponent(s). “[one of the top four teachers under Grandmaster Hatsumi] (*Noguchi sensei* speaks) ‘by not moving in, you are in your opponent’s space. You have to create your own space. Don’t remain in his space; make your own.’”¹⁶

Günter Nitschke states that the compound *kukan* is a modern invention; it is basically a semantic loan creation that describes three-dimensional, objective, Cartesian space, which does not exist in Japanese language.¹⁷ He defines the first character of *ku-kan*, *ku* as “empty” in terms of physical space, and “void” in Buddhist metaphysics; however, he states that it originally denoted a ‘hole in the ground’ and only later depicted its present form as a ‘hole in the sky’ or a ‘hole in the universe’.¹⁸ He defines the second character *ma* (becomes *kan* when used in a compound)¹⁹:

“Originally, [*ma*] consisted of the pictorial sign for ‘moon’ (月) – not the present day sun (日) – under the sign for ‘gate’ (門). For a Chinese or Japanese using language consciously, this ideogram, depicting a delicate moment of moonlight streaming through a chink in the entrance way, fully expresses the two simultaneous components of a sense of place: the objective, given aspect and the subjective, felt aspect. The translation of *ma* as place is my own. The dictionaries say ‘space’, but historically the notion of place precedes our contemporary idea of space as a measurable area.”²⁰

Arata Isozaki adds to the definition of *ma*:

“In Japan, the concepts of space and time have been simultaneously understood by the single word ‘*ma*’. *Ma* is literally defined as ‘the natural interval between two or more things existing in a continuity’ or ‘the gap between two things, an opening; the

¹⁵ (Tzu and Cleary 1998, 133)

¹⁶ (Cole and Hatsumi 2003, 46)

¹⁷ (Nitschke 1993, 52)

¹⁸ (Nitschke 1993, 52)

¹⁹ (Isozaki 2009, 162)

²⁰ (Nitschke 1993, 49)

space encompassed by columns or folding screens' or 'the natural pause or interval in which phenomena arise through time'. By comparison, the word '*ma*' does not differentiate between western understandings of time and space. Rather it describes both time and space through a notion of interval...Space was perceived through the events that happen within it over time. It can be said that space was recognized through the mediation of time...space and time in Japan were omnipresent and mutually responsive parts. In a chaotic, mixed condition, space could not be perceived independently of the element of time. Likewise, time was not abstracted as a regulated, homogenous flow but rather was believed to exist only in relation to movement or spaces."²¹

Because *kukan* is a marriage of both Western and Japanese ideas, in my opinion, it carries a rich and diverse set of meanings. Literally, it is translated as "empty space" or "place of emptiness". It was created to describe an objective, measurable three-dimensional Cartesian X, Y, Z space (imported modern idea); however, as shown through the interpretations from Nitshke and Isozaki, when the compound is carefully deconstructed, the idea of an experiential and existential space (traditional Japanese idea) also emerges.

Kukan as Tactical Space

The *ninja* were renowned for their ability to read the *tsuki* (lit. to stab, but can also refer to a place to stab) in bodies (human or castle and fortifications). *Tsuki* refers to weak points, gaps, or holes in a defense. This is important in the occupying of tactical space—the *ninja* move to a place where the easiest access to these gaps or even with the greatest amount of gaps. Stephen Turnbull, one of the few Western expert historians on *ninja* quotes from the *Buke Memokusho*:

"They travelled in disguise to other territories to judge the situation of the enemy, they would inveigle their way into the midst of the enemy to discover gaps, and enter enemy castles to set them on fire, and carried out assassinations, arriving in secret."²²

The foundation of *ninjutsu* seems to lie in the study, taking, and creation of tactical space. The first principle is moving into the gaps of the attack (being where the attack is not) and moreover being in a place in preparation for the next attack (either from the same opponent or another opponent). This positioning is called *kurai dori*. *Ninjutsu* is a spatial endeavor: techniques hold less importance compared to tactical space. By moving into the correct place, the next options of movements reveal themselves. It seems that in this way, space is very comparable to movement; space is the potential that allows for movement to exist. Stephen Hayes, the first American *Shidoshi* (teacher of the ways of enlightenment) of the *Bujinkan*, states "*ku* [which is sometimes generally translated as void: not occupied, not

²¹ (Isozaki 2009, 156)

²² (Turnbull, Warriors of Medieval Japan 2005, 117)

inhabited, being without something specified]²³ is the creative potential of becoming whatever is appropriate for the situation and the direction of energy from one level of awareness to another as needed"²⁴; he further states it is the 'great emptiness of potential.'²⁵ In the film, *3 Generations of Avant-Garde Architects*, Itsuko Hasegawa also speaks of space conveying a sense of both emptiness and potential.²⁶

In Dr. Hatsumi's videos, the title "Martial Arts of Distance" always appears in the introduction. Distance is one of the three doctrines of the *Bujinkan* practice. The corporeal understanding (measure of one's modularity: length of limbs, stride, skip) of distance is of extreme importance in combat. By having more distance, one has a shield or barrier of both time (for reaction) and space (that opponent has to cross by some means in order to attack). By changing distance (moving away or closer to an opponent) one in effect, expands or contracts the space and time. It is important to find the correct distance appropriate to the situation; changing the distance, expands or contracts the space between oneself and the opponent(s).

Once more, Isozaki illustrates the importance of distance with the concept of *ma*:

"*Ma* signifies both the distance between two points – the in-between space – and the silence between two sounds – internal time. Both imply blankness. The ability and technique to sense *ma*, the blank or gap, can be the means to aesthetic and artistic expression. Maintaining distance was deemed imperative in human reactions as well; those who ignore this were called *manuke* (missing or lacking distance), meaning 'idiot'. In this manner, the concept of *ma* became customized and widespread in many aspects of Japanese life...To sense something invisible is an essence of Japanese art. It also pervades various aspects of life and culture in Japan. In painting, the focus has often been on the margin rather than on shape, in music on silence rather than the notes and in dance on stillness rather than movement. All these can be expressed by a single term: *ma*. This concept reveals that in Japan there was not even a distinction between space and time like in modern western thought."²⁷

Distance describes proximity and the range of one's own movement, as well as the opponents. By using distancing alone, one can move to a position out of an opponent's reach, or even move into an opponent to jam or interrupt his attack. Also distancing determines the leverage one can apply.

Angling, another component of tactical space, describes a position of one body in relation to another or other bodies. In Figure 1, a sword *kamae* (posture/attitude of the mind, body, and spirit), *ichi no kamae* (posture of one) is employed. The eyes have trouble discerning exactly how far away the sword is, and its associated blade length (The distance

²³ (Bale, et al. 2005)

²⁴ (Hayes, *Ninja Volume 1: Spirit of the Shadow Warrior* 1980, 34-35)

²⁵ (Hayes, *Ninja Volume 1: Spirit of the Shadow Warrior* 1980, 28)

²⁶ (Frampton, et al. 1988)

²⁷ (Isozaki 2009, 162)

between the sword tip and the camera is roughly 3 feet, and the blade's length is about 22 inches). In combat, this deception is very important as it tips the favor; it adds another variable to the situation. Figure 2, taken from a different place with a different perspective angle and distance of *ichi no kamae*, illuminates information missing from Figure 1. Although distance objectively "measures" space, it can also be influenced by our perception. In Figure 1, the sword tip overlaps the blade length and obstructs the eye's line of sight; the eye perceives in planes and cannot view through solid objects. Thus, angling (by moving one's location) allows us to uncover "hidden" information that distance alone cannot reveal. In the Japanese language, seeing is an ideogram of an eye sitting on two legs²⁸; in this manner, one has to move their body (point of view) through three-dimensional space to critically and fully see. With this series of multiple perspectives, a model/object begins to appear in the mind, not just a flat image.



Figure 6: *Ichi no Kamae* & Depth Perception

Source: image taken by author



Figure 5: *Ichi no Kamae* Side View

Source: Photoshop image modified from

<http://taziedevil.files.wordpress.com/2008/09/adelaide-2008-5763.jpg>

This strategic positioning not only presents an advantage in visual information, but it also provides structural (skeletal + muscular) advantage.

First, a quick analyzation of the body structural resistance is necessary. For basic purposes, the human body is very much like a rectangular column. In Figure 3, the body is in *shizen no kamae* (natural body posture/attitude). With its largest measurement being its height, H, it transfers gravity in gradiance (head, spine, hips, and legs axis) with the arms cantilevering off of the spinal/torso core through the shoulders. The second largest dimension, its shoulder width W, resists lateral movement to some degree. The body's

²⁸ (Nitschke 1993, 41)

smallest dimension, its depth D is both a strength and weakness. If the body is tipped along this axis, structural failure will ensue (collapse). However, the body is not static and has a failsafe: it will almost automatically take a step to maintain structural integrity. It is only because of this structurally weak dimension (in terms of inertia), that the body can lean forward and use the legs in a series of controlled stumbles and falls for movement: walking/running. Structural weakness equates to movement; both rigidity and stability refer to limiting movement.

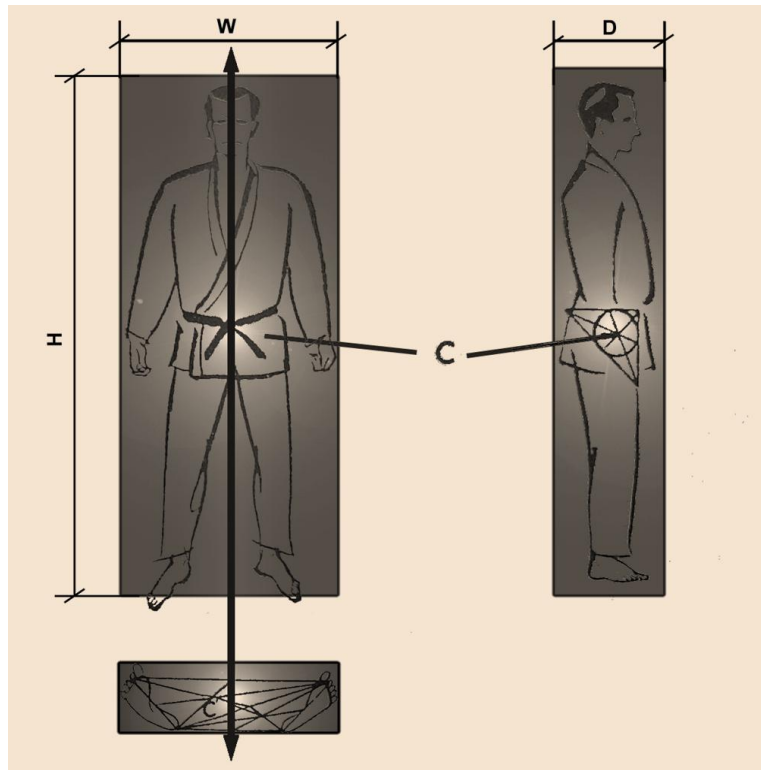


Figure 7: *Shizen no Kamae*

Source: image from (Watanabe and Avakian 1990, 41), modified in Photoshop

Now back to angling. As noted before, the body's failsafe is to step to counter forces that threaten its structural integrity. So to fell the body, one would need to generate a force greater than the legs resistance as a buttress. Martial arts are more about skill than power. While many martial arts provides techniques to increase weight to power ratio, *ninjutsu* relies more on tactical (spatial) acumen. Instead of just constantly forcing the body back or forth on a straight line trying to overpower it, in *ninjutsu*, one guides the body along different routes (angles) until the legs can no longer accommodate the forces along the centerline. The key angle in *ninjutsu* is one that is 45 degree relative to the opponent while he steps (and/or also punches).



Figure 8: Force against Centerline

Source: image by author

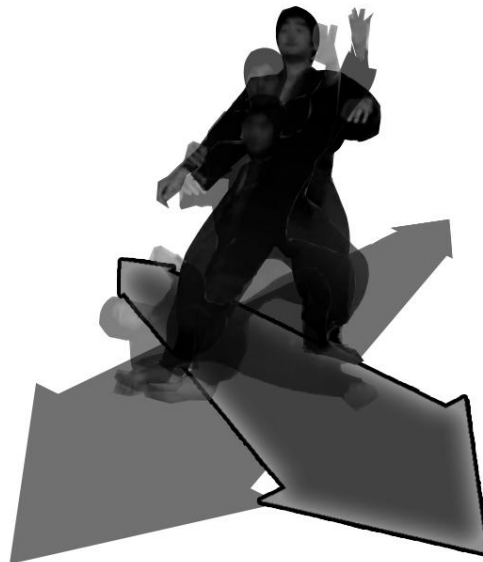


Figure 9: Force along *Shikaku*

Source: image by author

This is known as the *shikaku* (lit. dead angle). This angle is in accordance to the opponent's movement and is related to the steps he takes. Figure 4 shows force working against the centerline of a body. The legs respond by stabilizing against the force. In Figure 5, *shikaku* is shown; relatively little amount of force is needed on this angle. The muscle system can no longer keep the skeletal system from collapsing. There are many angles to experiment with, but this is one of the most well known.

Safe Space versus Dangerous Space

The kanji “*Nin*” is made up two lesser ideograms spatially organized as sword or blade over heart. While some may be quick to assume that this conjures up the idea of assassination (because of the negative stereotyping of Hollywood ninja), this is inaccurate. It truly conveys the meaning that “[a]lthough the enemy holds his blade menacingly over my heart, I will endure and eventually prevail.”²⁹ Thus, ideas of perseverance or even endurance or forbearance emerge. In the case of historical *ninja*, they did whatever it took to survive or for their family to continue on. Consequently, *ninjutsu* is not just about fighting—it is about survival. In the film, *Enter the Dragon*, Bruce Lee states to a bully, “My style? It’s the art of fighting without fighting”³⁰ before aptly demonstrating a victory without conflict; *Sun Tzu* states “To win without fighting is best.”³¹

In Figure 6, the momentum of *zenpo tsuki* (forward punching) is shown. The red portion of the path indicates the dangerous ranges of the punch sequence (dangerous space to be in); the magenta portion of the path shows the potentially dangerous range of the punch sequence (safe space soon to change into a dangerous space). The body is somewhat biased to forward movement, as it is naturally more efficient and easy for the body to move forward; on another note, the sensing organs of the body (besides the skin) are all frontally oriented. Backwards movement on this plane can produce an adequately safe space, out of danger’s range; however, when squarely facing an opponent backwards movement (while it can be useful) is not the most ideal movement—the opponent can and will move faster and more surely of its surroundings.

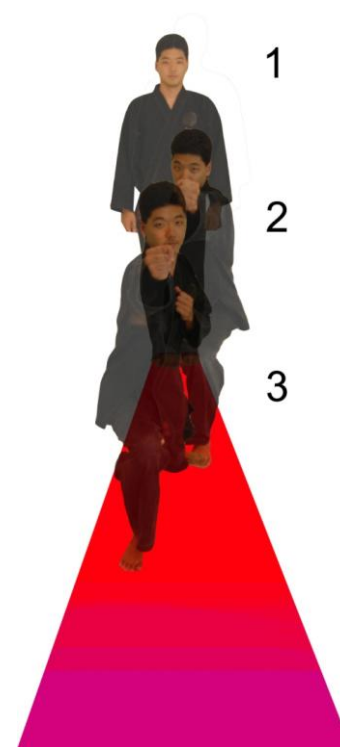


Figure 10: Momentum of Forward Punching

Source: image by author

²⁹ (Hayes, *Ninja Volume 4: Legacy of the Night Warrior* 1985, 2)

³⁰ (Lee, Wall, et al. 1973)

³¹ (Tzu and Cleary 1998, *Front Matter*)

A dangerous space is any place where one can be hit, thrown, or otherwise hurt; again, *ninjutsu* is about being able to intuitively distinguish between dangerous and safe places, and how these qualitative charges can abruptly change according to the dynamics that happen within the space. Reexamining Figure 6, face to face is perhaps the most dangerous orientation to be in with an opponent—the opponent has all of his weapons ready to strike: head-butts, elbow strikes, punches, kicks, and knees. The most dangerous space can be defined as within range of a strike in single movement or interval; one's reaction, perception, and appropriateness is critical in this case. Being in a place where it takes more effort to be attacked, e.g. an interval of two movements distance is a much safer place to be at. This situation means that the one with the greater skill or power will prevail. An attack (punch, kick, etc) is only as effective as the space it occupies. Thus if the ranges of attacks are kept in mind, getting within an opportune range for striking and also moving out of the opponent's attacking range is important; this is why the feet and its range of different types of steps, are held in such high regard—footwork is highly important in both movement and the production of space with the body. Thus the most ideal tactical space one can occupy is where it is easy to attack an opponent, and yet the opponent has difficulty in retaliating back.

Angling adds another dimension to fighting, and showcases *ninjutsu* as a spatial practice. Moving inside or outside and/or higher or lower in reference to an attack produces a safer space. Both Distancing and Angling are instrumental in establishing tactical space. Tactical space also refers to the difference between safe places versus dangerous places. Surviving is the general basis of life. Sustaining and continuing life is the ethos of *ninjutsu*; yet it can also be said that the preservation of life is the thesis of all martial arts.

There is one more dimension significant to this equation: timing. As said before, the Japanese concept of space is dynamic. As noted before, Japanese did not differentiate time and space (now they use the words *ji-kan* and *ku-kan* respectively).³² Timing is important as it denotes a measure of change, adding a new dimension. When an opponent attacks or moves, the space around him is in flux—empty space is filled and solidity changes to nothingness. Reading these changes in space is important. Timing is also related to continuity in a processional flow, which will be discussed later in this paper. Let us look at the concept of *jodan uke* or upper-level receiving. There is the long-distance *jodan uke*, which is either achieved by the initial starting distance between oneself and the opponent, or can be achieved by a slightly or adequately early timing or a fast, abrupt movement such as a skipping hop to be in the same position. There is also a mid-distance *jodan uke*, which is achieved by having adequate timing. Lastly, there is a short-distance *jodan uke*, which can be achieved with a slightly late timing. The logic of this slightly late timing, short-distance *jodan uke* is perhaps one was walking down the street and somebody walked up close and threw a surprise punch. With such little reaction time, this movement can be very appropriate. Ironically this same movement can be used if there is little space; for example, if one were attacked in an elevator. In this sense, perhaps time and space is both more closely related as the Japanese original definition of both in *ma* (a distance far away can both be delineated in both a temporal or spatial reference).

³² (Isozaki 2009, 162)



Figure 11: Long, Mid and Close Distance *Jodan Uke* (Upper-Level Receiving)

Source: images by author

All three of these ideas of Distancing, Angling, and Timing all refer to the Japanese term *maai*.³³ *Maai* is often translated as an interval between opponents. *Maai* is dependent on one's own body—the length of one's arms, legs, and total body as well as its proportions and limits in flexibility. A person who is 6'-5" tall and stocky compared to me (5'-10", medium build) will have a different measure of *maai*. If that person was standing an arm's length away from me, I would be within his *maai* but he would probably be out of mine (in terms of reach). The orientation of frontality (*shomen*) and relative positioning between bodies also determines this *maai*. While *maai* "designates the spatial aspect, but the word 'ma' also includes the idea of seizing the chance, or of timing."³⁴ A faster or skilled person can afford to keep a larger *maai* than a slower or amateurish opponent. In *kendo*, *Issoku Itto Maai* is the proper distance where one can avoid a strike from the opponent with one step and this is also the distance in which one can strike with one step.³⁵ This *maai* is dependent on one's body size, as well as one's control of their body. The addition of weapons also changes this *maai*. Generally, the design of the majority of weapons is usually to enhance one's own natural *maai*—adding to the effective striking range or interval—especially if we trace from swords to spears to bows and arrows to the advent of the gun. *Maai* is the interval of useable or potential space between bodies.

It is also about constructing these spaces through the structure (skeletal + muscular) via joint locks. One immobilizes the opponent, and moves through his now crystallized gaps; one seeks new gaps depending on the situation (multiple opponents, danger from weapons, or change in environment). Also in constructing spaces, one can strike the opponent to open up other spaces. In this, tactical space is flowing, changing, and alive. Tactical space is not just about being reactive or recessive, it is also aggressive. One needs to occupy the opponent's space. Nagato Sensei (another of the top four teachers under Grandmaster Hatsumi) said when I was in Japan that *ninjutsu* is "a negotiation"; one is not selfish to just do the things he wants to do, and yet one is not too complacent to let the opponent play his game.

³³ (Jones n.d.)

³⁴ (Ozawa 1997, 38)

³⁵ (Ozawa 1997, 38)

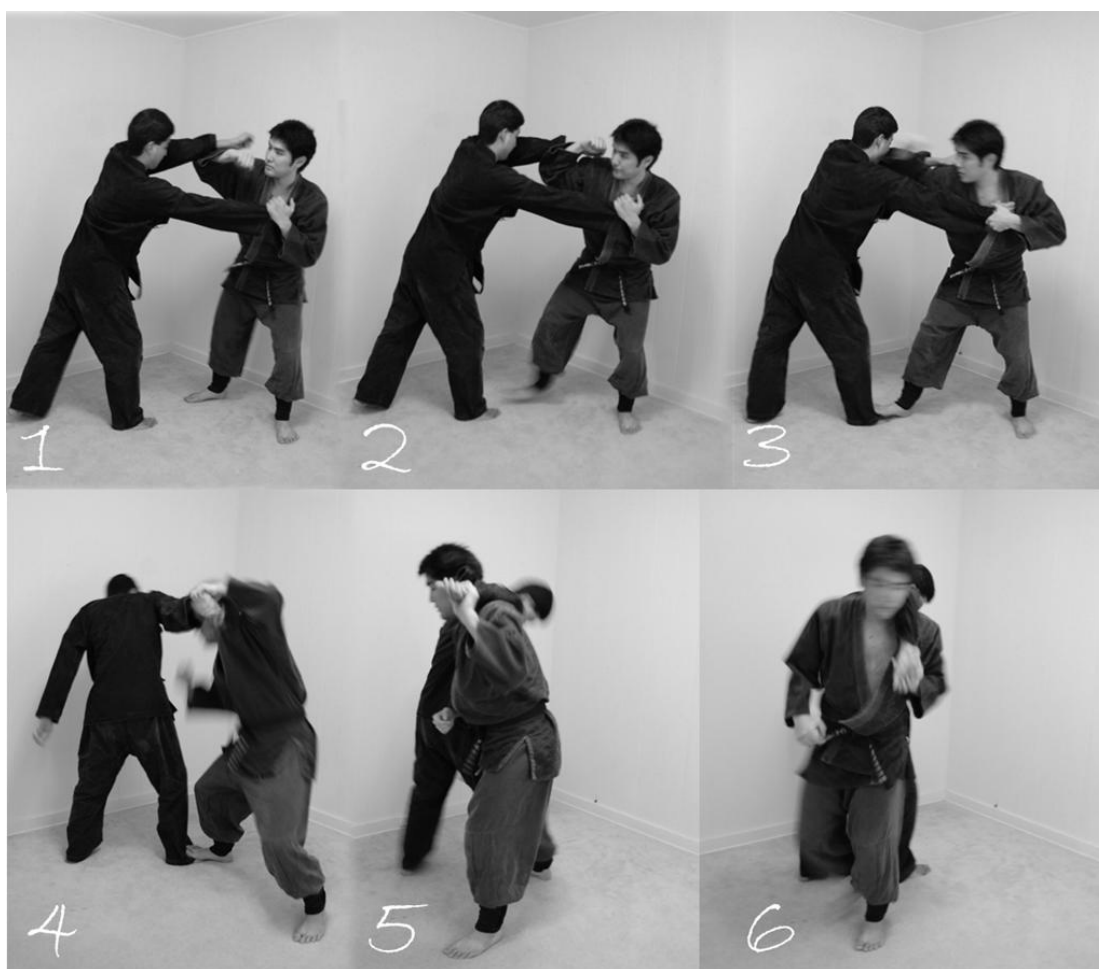


Figure 12: Creating and Occupying Space

Source: image by author

In Figure 8, both the creation and occupying of space is shown. Image 1-2, attacker grabs and punches at the defender; the defender simultaneously moves slightly out of the trajectory of the punch, parries the punch, and covers the grabbing hand. Image 3-4, the defender strikes in the gap to the attacker's temple; this shifts the attacker's line of sight to the away and downwards and also momentarily stuns him. Also important to note in image 4, is that the strike shifts the attacker's weight away from the defender; this loosens the grip on the defender, and he is able to twist the attacker's wrist in a lock where the muscles bind on the bone. Image 5-6, the defender moves under the attacker's arm while elbowing him in the ribs to maintain help enter the space; the defender then pivots, further binding the attacker's arm and wrist. It is important to note in Image 6, that this pivot step can be used for both binding the attacker's arm, but also to search the horizon for other possible attackers; in real combat, Grandmaster Hatsumi says "You are not just fighting one opponent. You are fighting the unknown."³⁶

³⁶ (Cole and Hatsumi 2003, 249)

Tenchijin

Tenchijin is a triadic composition that literally means Heaven (*ten*), Earth (*chi*), Man (*jīn*); this is the “archetypal Chinese definition of the tripartite structure of the universe.”³⁷ Much like the Chinese language, the concept was first brought to Japan and then indigenized.

“In Japan, the use of three components – one large, one small and one medium sized – to create a dynamic balance of odd numbers is not merely limited to garden architecture, but lies at the heart of Noh theatre and the art of flower arrangement (*ikebana*). Thus the three basic compositional elements of *ikebana* are the ‘branch of truth’ (the tallest), the ‘accompanying branch’ (slightly shorter) and the ‘flowing one’ (the shortest)...A later text on garden architecture defines this same compositional archetype as a trinity of forces, one horizontal, one diagonal and one vertical, which correspond to the triad of Heaven, Earth and Man.”³⁸

The concept of *tenchijin* is a concept of spatial relationship with Heaven (or *jōdan*: upper position), Earth (or *gedan*: lower position), and Man (or *chudan*: middle position). This also refers to the spheres of influence of the heavens and the earth. The ninja was both skilled in astrology and the cosmos (*tenmon*), and both in geography and the weather (*chimon*). This also refers to an aspect of understanding the flow of these polarities and affects man. “Those who made decisions about Buddhist construction clung to the idea of the axis that connects the earth, human life, and the heavens, but they expressed their adherence to this concept in a kaleidoscope of changing forms.”³⁹ The stupa’s central post later transformed into the pagoda, yet still kept the connotation of *axis mundi* or axis of the world.



Figure 9: Ninja waiting in a tree (Heaven)

Source: (Hatsumi, *Ninjutsu: History and Tradition* 1981, 96)



Figure 10: Ninja concealed in the ground (Earth)

Source: (Hatsumi, *Ninjutsu: History and Tradition* 1981, 183)

³⁷ (Nitshke 2007, 25)

³⁸ (Nitshke 2007, 25)

³⁹ (Johnson 2001, 351)

Because *Tenchijin* refers to three levels, it is very much a spatial idea; in my opinion, it seems to be also where one places himself relative to the opponent. For example, *Ten* is when one is in a vantage point above lying in wait for the opponent. Ninja also surprised from below using *doton-jutsu*. They hid underground and surprised their enemies. Perhaps the middle level of Man was played out in many different ways. One way is the ninja's *hensojutsu* or disguise methods were an extension of this blending in. Ninja dressed up as traveling priests, merchants, *shakuhachi* playing monks, samurai, etc. They not dressed the part, but they could speak appropriate dialects, speak their trade's jargon, and perform the appropriate duties.

Tenchijin does not just refer to Heaven, Earth, and Man as separate, individual levels; instead, it refers to a flow along this vertical axis. For example: when the opponent punches, if one gets out of the way and then stomps on the tips of his toes (*chi*: earth or lower level) the opponent will react by wincing in pain and reaching for his foot. This will bring his head (*ten*: heaven level or high level) into position for a kick with the same foot that created the toe stomp. This is shown in Figure 11. The timing is also very important as the opponent's focus is changing, and the space is fleeting. The timing between the 1st and 2nd part can be slow to confuse and throw off the opponent's timing/rhythm; the timing is especially critical in the 3rd and 4th part of this movement and needs to be quickly successive. In Figure 11, the black spaces between the pictures signify the temporal gaps between the movements, demonstrating the rhythm of the movement.



Figure 13: Flow of *Tenchijin*, low affecting high

Source: images author

Tenchijin seems to refer to taking the fight to a place where the opponent(s) do not expect; if their movement occupies a certain level, one is not fixated, and can move into another level to surprise them. This refers to the Sun Tzu's Art of War and the stratagem of fighting without-fighting. One does not fight where the opponent is strong or aware; he must take the fight to a place that disorients, desensitizes, and most important is not expected. Most fighting arts are two dimensional: volleys of attacks are fired back and forth along a single plane. *Ninjutsu* utilizes movement along these three levels and also the flows between them. When the concept of *Tenchijin* is combined with the 8 cardinal directions, a three-dimensional realm where one can play and help events unfold emerges.

Living in the Kukan

In Gunter Nitschke's essay *Time is Money, Space is Money*, he notes that there are two subjective types of experiences of the space-time or place: a space imbued experience, or a time imbued experience. According to Nitschke, a time imbued experience is where "one tries to shorten the lapses of 'empty' time by compressing experiential space through speed and ease of movement. Time is gained by 'killing' (compressing space)."⁴⁰ Perhaps it can also be said that the quickest, most direct path between two points also produces the same effect. Comparatively, a space imbued experience is made by "expanding space by increasing experiential time through the reduction of speed and the obstruction of movement. Space is created by 'killing' (slowing down) time."⁴¹ This is really evident especially in Japanese gardens where one takes a meandering path, and takes a much longer path between A and B; in this way, one becomes immersed in the space. "The size of experiential space is not so much determined by its physical dimensions, but by our concrete experience of the quantity and quality of the events contained in it."⁴²

Space is very much animated in the Japanese vernacular homes. One of the distinguishing factors of Japanese architecture is "the flexibility of space partitions and room functions."⁴³ The names of vernacular Japanese rooms are somewhat hard to translate into English because of the shared or multiple functions of a space. Spaces usually have a vestibule area attached to it, where all the furniture (tables, seat cushions) can be folded away and stored—effectively emptying the space and raising its potentiality. Furthermore, the sliding screen doors (or rather walls) are utilized for both demarcating (severing detachment) and expanding (parasitical attachment) of space. In this manner, the space is dynamic and changing depending on the events and actions that fill the space.

Path as Successive Architecture

Similar to Nitschke's argument, Mitsuo Inoue states that there are two types of layout of space: geometric architectural space and movement-oriented architectural space. Geometric space is generally one that is developed in an inward to outward organization (either a circle or rectangular layout), which is "based on radii [or axes] extending from the center or concentric circles around that center."⁴⁴ The relationship between architectural spaces is in terms of Cartesian coordinates and polar coordinates based upon an origin or reference point of importance, such as a castle or palace. Comparatively, movement oriented space is "complex and irregular...and [has] no axis or center."⁴⁵ The relationship between movement oriented spaces is based on the spaces, their order, and the thresholds or spaces in between each point.

⁴⁰ (Nitschke 1993, 34)

⁴¹ (Nitschke 1993, 35)

⁴² (Nitschke 1993, 35)

⁴³ (Engel 1985, 13)

⁴⁴ (Inoue 1985, 138)

⁴⁵ (Inoue 1985, 144)

“Successive observation is the principle upon which this type of architectural space is based. Space is never revealed in its full extent all at once but is shown instead a bit at a time...While proceeding from one space to the next, there is no choice but to observe scenes successively.”⁴⁶

In experiencing consecutive spaces, one automatically qualitatively compares values of one space’s experience to the next; in this sense, one experience conditions the next (Thorndike’s halo effect).⁴⁷ Much like a film or story, space becomes a stringing or flow of events, successively gaining momentum, and leading to a climax; space is then comparable to riding a wave—a processional flow.

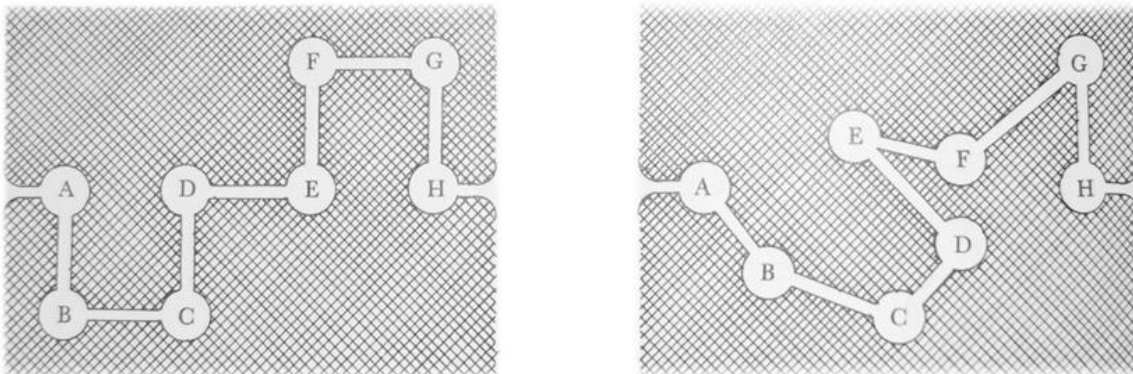


Figure 14: Two Examples of Movement Spaces

Source: (Inoue 1985, 144)

Metsubushi and Kyojitsu

Metsubushi (eye blinders or distracters) is traditional weapon used by the Ninja; it is sometimes in the form of hollowed eggs filled with crushed glass, blinding powder, or metal shavings or even smoke bombs. The concept of *metsubushi*, to draw one’s attention away from the present situation is a hallmark of *ninjutsu*; this idea can be any sort of theatrics or tricks to suck or spew out one’s attention like a black hole—a mirror reflecting light, dropping a \$20 bill or even a pornographic magazine on the ground are all effective variations. This can even apply to architecture to help produce a climax.

⁴⁶ (Inoue 1985, 146)

⁴⁷ (Wikipedia.org 2009)

A related concept is *kyojitsu*, which is usually translated as falsehood and truth. A more accurate definition of *kyo* is where one's attention is being drawn related to *jitsu* or reality.⁴⁸ One example of *ninja biken* (the ninja's secret sword method) is to combine both *metsubushi* and the sword. This juxtaposition of truth and falsehood where one becomes so confused about the situation, he is stunned and becomes disoriented in the space. Modern day special forces employ this tactic using flash bang grenades (a mixture of a loud explosion of sound and bright flash of light that breaks the balance and hearing, as well as blinds anyone caught in it) and guns. In *ninjutsu* practice, one of the models of this is the *ku no kata* (form of emptiness).

Figure 13 shows a variation on *ku no kata*. Image 1-2, the defender receives the punch by shifting to an angle and parrying. Immediately the defender interrupts the attacker's next movement by firing his right hand with exposed fingers at the attacker's eyes. The attacker flinches back to protect his face and eyes; the yellow area shows where the attacker's ray of sight is and the space he is now blind to. Note: if the opponent does not react to it, the fingers will then pierce into his eyes and he will flinch anyway, and this will possibly end the fight anyway. The attacker blindly tries to fire off a punch with his left hand, so the defender shifts his weight onto his left foot and enters a gap to the attacker's right and kicks the unguarded, unaware space below—the defender kicks the side of the attacker's knee with his heel. The defender opens up the attacker completely and can now fire off a volley of punches or kicks as he collapses. It is a set of reaction and counter-reaction.

Kyojitsu is very much related to the concept of *Tenchijin* as well. By attacking high (one polemic extreme) it leaves the lower end unawares (the opposite polemic extreme). The thesis of Sun Tzu's Art of War is deception. By allowing an opponent to become sucked into a feint, one inevitably is better positioned on the ladder of knowledge; it creates a glaring gap in their defenses. It is a strategy that raises the odds in one's own favor.

Ku no kata illustrates shows both *metsubushi* and *kyojitsu* by drawing the attacker's awareness to another place (through expectation), thus



Figure 15: Variation of Ku no Kata

Source: images by author

⁴⁸ (Fraser, *Kyojitsu* 2009)

playing with his perception of reality. This is an example of how the *ninja* were able to disappear in combat by controlling the opponent's line of sight, and playing with *kyojitsu*. The phenomenology of sight is focus that deteriorates radially outward and the spectrum of between visibility and invisibility.

The great tea master, *Sen no Rikyu* created such a cinema of space based on *metsubushi* and *kyojitsu*:

“...*Rikyu* built his last teahouse somewhere on the mountains overlooking the Inland Sea. When it was completed, he invited his most noble friends for a direct taste of his mature design talents. They made the long laborious ascent, passed through a carefully designed garden, but were disappointed. The view to the sea was blocked everywhere by the old fool. Before crouching into the teahouse they were made to step down and rinse their hands and mouth. Bending down, just at the surface of the water they were treated – through a tiny opening in the hedge—to a full view of the grand scenery of the Inland Sea.”⁴⁹

Rikyu created a space on a false premise and played on his guest's expectations. He effectively crushed and contained his guest's imagination of space and at the very height of their disappointment near the end of the journey (expectation: no more room on the spatial canvas for the Inland Sea), he gives them a slice of infinite space to satiate their hunger. He used the idea of *metsubushi* and *kyojitsu* so that such a grand space can sneak up on the users.

⁴⁹ (Nitschke 1993, 44)

Introduction to the First Journal Series

Concurrent to the research on defining the anthropological space of Japan in the form of *kukan*, experimentations of capturing and documenting the multifarious qualities of *ninjutsu* movements were also taking place. This is a record of many of my personal ideas as well as both my progress and process. I must note that not all of the experiments have made its way to this journal; however, the majority did, and I have selected key examples to illustrate main points.

Due to the nature of the main overarching theme of combining two seemingly unrelated subjects (architecture and *ninjutsu*), I have also included anything and everything that either inspired me or profoundly has affected this project. I tried to keep the range of the journal entries quite large and open. I must also note that some of the journal entries are not actual experimentations, but supplementary research to understand my progress.

I must add that the time allocation of the journal entries is more or less sporadic. In reality, the timing of the journal entries overlaps each other. Instead, the journal entries are given a date that chronologically illustrates when these points were coming about.

I hope that the journals reflect the same sense of spontaneity and liveliness found within the practice of *ninjutsu*. I must add that this is stemming from my own personal interpretation of *ninjutsu*; *ninjutsu* is so prismatic that in Japan, if one were to practice with each of Grandmaster Hatsumi's top 4 *shihan* (denotes gentlemanly teacher, perhaps could be translated as a life-model example?), one would receive a very different and unique flavor, even though they were working off of the same *kata* (model form/concept). The only real criterion in budo is if it works, and it saves one's life. Similar to Fisher's definition of phenomenology, I hope that in these journals I am touching upon the "essence" of *ninjutsu* as an "account of space, time and the world we 'live' them."⁵⁰

⁵⁰ (Fisher 1969, 27)

Journal Entry 1: August 30 – September 5, 2009

While technology is a wondrous extension of mankind and his prowess, there is always a negative condition—the human body is becoming lost in a digital age; we are becoming displaced in reality by being so distracted by technology. I wanted to give precedence to the body, as it is integral to our perception of self and a reference point to our understanding of the world around us.

For this experiment, I wanted to document the movements of *taijutsu* (an art involving the whole body) and the changing of space between bodies; secondly, I wanted to portray the feeling of envelopment and the changing relationship of “enveloper” and “envelopee” in a *taijutsu* movement. I came up with the idea using a poncho.

In a metaphysical sense, I wanted to show a movement of *fu* or wind. While wind can pierce through tunnels, it can also be very adaptive—encircling and enveloping objects. The traditional body posture that came to mind is *hira ichimonji no kamae* or flat one-line posture. Stephen K. Hayes comments on this:

“[This] posture reflects the lightness of the air, and the fighting techniques employed from this pose make use of an evasive, whirlwind feeling. The body weight and consciousness are centered in the chest at a point behind the middle of the breastbone, and as this center moves the body.”⁵¹

According to Hayes’ description of the posture with the body weight centered relatively high up in the body, a feeling of airy lightness is the effect; this allows the body to effortlessly spin to escape or surround. Perhaps the body is supposed to feel very much like kite or sail, deftly drifting along the edges of an attack reacting to it like a breeze. A sail became a useful metaphor, as it is flexible enough to expand or contract and thus provide the changing relationship of envelopment between two bodies.



Figure 16: Poncho exaggerating the transformation of the body’s space

Source: images by author

⁵¹ (Hayes, *The Ninja and their Secret Fighting Art* 1981, 65-66)

An interesting point that simultaneously came about was the color of the poncho. Originally when I purchased the poncho (a couple of years before this revelation), I chose the color red because it is actually a very good color for hiding at night. For some phenomenological reason, it seems to disappear very easy at night, perhaps because it has the “weakest” wavelength of a color; this is very counter-cultural/intuitive as most believe that black is the best color to hide at night (black only works in extremely dark settings such as pitch black caves or perhaps a moonless night). In any case, it is very vibrant and bright with a lot of light present.



Figure 17: Scene from the film *Floating Weeds*, showing the use of red as a method of indicating space.

Source: (Nakamura, et al. 1959)

The great Japanese filmmaker, Yasujiro Ozu, uses bright red objects to delineate space in his works among a colder backdrop. For example, in his film *Floating Weeds* he uses a composition of two quarrelling characters, a storming rain between the two sheltered characters, and a red umbrella across of the set. I believe that it was a very conscious choice, as the amount of encounters with red objects is quite substantial—red objects are almost in every scene in the film. One example is in the very beginning where a red post office box is emplaced along a backdrop of the sea. Another is when two characters, father and son are fishing off of a small pier and the father has a red fan located in the back of his belt. A third example is a scene looking out the window into the landscape and framed by red flowers and a red carp flag.



Figure 18: Series of scenes from the film *Floating Weeds* that uses red objects for spatial composition.

Source: (Nakamura, et al. 1959)

Now back to the Ozu's red umbrella across the street. I believe he did it to activate the audience's peripheral vision. Peripheral vision occurs as a byproduct of central (also called foveal) vision. Where we place our focus, our peripheral vision follows. In *ninjutsu* practice, we use less of central vision and more of peripheral vision because it is more useful in perceiving the space and motion within the space and also for low-lighting settings; pilots use peripheral vision for spatial orientation.⁵² It is very strange, but in order to use peripheral vision to watch opponents, one has to look slightly off to the side of the opponent. In Ozu's scene, the red umbrella among the drab backdrop really catches our eye, our central vision. As such, Ozu wants his audience to view these scenes spatially composed (he zooms up on details such as close shots of the characters for emotion without the prominent red objects otherwise); he gives the troupe master much more space (for pacing and behind him) whereas the actress (who used to be a common whore) a much more crowded space to indicate class difference (perhaps opportunities in where they are able to go or move about).



Figure 19: *Pali* Lookout showcasing phenomenology of color in depth perception

Source: image author

⁵² (Reinhart 2007, 143-144)

A phenomenology of perception is that the eyes + mind perceives brighter, warmer colors to be closer and dimmer, desaturated/colder colors to be further away; this is probably due to light scattering in the atmosphere and affects the perception of distance in objects (related to luminance contrast and color saturation). The famous French painter, Paul Cézanne, used this effect in his paintings by having closer, bright objects (such as fruit) upon a darker, colder background; this produced a sensation of foreground, middle-ground and background and gave the planar, 2D composition a depth—effectively creating the illusion of a 3D space.



Figure 20: Cezanne's painting of fruit

Source: <http://psartgallery.files.wordpress.com/2009/10/cezanne-compotier-pitcher-fruit8.jpg>

The combination of all these factors culminated into the idea of the use of a red poncho. So I decided to test a series of movement with the theme of “enveloping instead of fighting”. The following are two of the experiments that I think captured both the use of the red poncho and the concept I want to communicate: *Ninjutsu* is a practice of understanding three-dimensional space between multiple bodies (one’s own and others); this space is both the objective space (Cartesian X, Y, Z) as well as the subjective perceived space.

Image 1

Uke does a right Punch

Image 2

Tori kneels down with his right knee, effectively smashing the tips of Uke's toes

Image 3

Uke is stunned by the pain

Tori slides up Uke's leg (keeping in contact and thus keeping track of Uke)

Image 4

Tori starts moving both up and behind Uke.

Image 5

Tori completely moves behind Uke, while clawing hold of Uke's face.

Image 6

Tori breaks Uke's balance by completely taking up his space

Image 7

Tori leans forward while forcing Uke's head back to easily throw him over

In this sequence, I wanted to really exaggerate the body moving into the tactical gaps of an opponent's attack. I also wanted to show how enveloping, not technique or unnecessary power, can be used to suppress and subdue an opponent. The importance of moving to the right place is a hallmark of *ninjutsu* training. This is why the feet are so important—they are rooted to the ground and determine tactical space (frontality and relative positioning); documenting foot placement probably would be a great experiment for another time.



Figure 21: Sequence of Red Poncho Test

Source: images by author

Journal Entry 2: September 6-12, 2009

On Sunday, I was walking around Costco shopping for groceries. While walking past the electronics section, I came across some kind of sports video camera. It was very tiny and it seems that it was designed to be mounted on bicycle handlebars or helmets. For some reason it really intrigued me and the idea of it opened up possibilities for my project. Unfortunately, I did not purchase it and it went out of stock.

During this week, I gave the helmet or bullet cam (the slang name given to it by skateboarders and bikers) more thought and it would be worth testing. In the practice of *ninjutsu*, as I have before, set or routine techniques are not part of the curriculum. It is taught as an extension of one's own body and idiosyncrasies. Although the teacher models a concept or theme, one has to adjust it to the situation at hand (some examples):

- Is the opponent much taller or smaller than I?
- Is the teacher modeling the movement taller or smaller than I
 - Does the teacher have longer legs, hands, a thicker build, etc.?
- Is the opponent attacking differently than in the model?
 - Does he grab with a cross grab or same hand?
 - Does he punch with the right or the left or with the fist oriented vertically, diagonally or horizontally?
 - Does he punch with more energy, faster, or at a closer distance?

Some of these things cannot really be taught. The *ninjutsu* practitioner must be able to adapt, adjust and make the situation work for him. This is very realistic and practical ideal to use for real self defense. Instead of trying to force and impose a movement, it is more important to feel out the situation and improvise, but by using tactics taught in *ninjutsu*. The formal models are useful to illustrate situational concepts because they eliminate much of the guesswork of how a person might grab and punch, draw a weapon, etc; however, the *henka* (variations) become more important as they reflect the uncertainties of a real encounter.

This means that the subjective, personal perspective becomes much more important. The art only becomes alive when one's own and whole being (body + self + mind+spirit) interprets it and transcends the forms. The most important aspect of *ninjutsu* is function—did it help one to survive.

My other hypothesis is that the helmet cam may also be used to give a new and fresh view of martial arts. For one, it could put the person in the skin of the user. Also, it may help viewers to see the space in a movement with much more clarity. When portrayed in books and videos, most martial arts are taught in a planar format, i.e. side views of the two contenders exchanging volleys of attacks back and forth. This could be a revolutionary point, especially with *ninjutsu*, an art of space, as the primary catalyst.

After doing some consumer researching, I am strongly leaning towards VHoldR's Contour HD. It is the only High Definition bullet cam on the market at this time. This was a

determining factor in my partiality to this bullet cam, because I want footage as clear as possible. I see myself using for both the camera's first person perspective novelty and using it as a high quality substitute for regular camcorder uses. The only drawback to this bullet cam is its high price at \$329 (comparatively other non-HD helmet cams are roughly between \$50-200).



Figure 22: Contour HD Helmet Cam

Source: <http://news.cnet.com/i/bto/20090427/ContourHD.jpg>



Figure 23: Helmet Cam Comparison

Source: <http://www.youtube.com/watch?v=srXG4snhsbk>

Perhaps there were multiple ideas that led to this spark. For one, I play a lot of first person shooter video games. These are games that have evolved from the likes of *Wolfenstein*, and *Doom*. One thing interesting about these games is the lack of depth perception; this especially interesting when the games include melee-type enemies. One inherently keeps a vast distance between these types of enemies, and perhaps one learns the correct distance especially after being “hit” in game. These games have become very sophisticated in this three-dimensional zoning; for example, in *Left 4 Dead 2*, a zombie-survival video game, the Heads-Up Display or HUD, indicates from what direction one is being hit by the melee enemies, as one can be surrounded by a mob of 20+ zombies. This simulates the function of the skin. Also the game’s addition of melee weapons to the players also makes one aware of this spatial awareness—if one wields a baseball bat for example, one needs to know its spatial modularity so that one does not exchange hits with the zombie enemies.



Figure 24: Claustrophobia inducing zombie mob in *Left 4 Dead 2* (1st Person POV)

Notice the red pain markers indicating both location and activation

Source: image by author

Some movies have jumped on this first person experience as well. From Spielberg’s *Saving Private Ryan* to J.J. Abrams’ *Cloverfield* to the Spanish zombie horror film, *REC*, these movies use the first person perspective to effectively let the audience occupy the skin of the characters. Ironically the video game *Doom* was also made into a movie, but only at the end a short 10 minute scene harkens back to its POV origins.

Journal Entry 3: September 13-19, 2009

I just cleaned out one of the rooms that I intend to use for filming eventually. Before this, it was a storage room for books, materials, extra furniture, and boxes. After shifting majority of it to a closet, and taking out the permanent furniture, the space's potentiality became infinite. I could use it for a makeshift workroom just by placing a board on top of a box, in order to create a temporary table. This triggered the idea of the temporariness of space especially in Japanese architecture and furniture, specifically the vernacular home compared to western space and furniture—meaning that the space by being completely empty is more open to possibility. Just by placing the make shift table and leaving it there, I was more inclined to use the space as my work area, doing computer work or reading books. If I placed a couch in the room, I would be inclined to completely and lazily lie on it and relax. When I removed the makeshift table and stored it away, the space transformed into a room where I could stretch, and practice rolls and cartwheels. The more dominating a form's presence and the easier its accessibility within the space, would make me more inclined to be influenced by it; for example, the top layered book that just so happened to be next to where I sit, subconsciously (if I did originally intend to read it) I would be more likely to read that book than a book farther away, at the bottom of another stack. This happened while I was cleaning the room.



Figure 25: Room space filled up

Source: image author



Figure 26: One-hour later, empty space equates potential

Source: image author

In the martial arts there is a famous adage that in order to maximize their learning process, they need to empty one's cup. "The very first step to learning is to become a completely blank slate. Some ancients have used the terms 'blank sheet of paper,' 'empty tea cup' or 'uncarved stone,' but they all mean the same thing...The hardest thing for the student when he begins training is to throw away all of his preconceived notions and conclusions."⁵³ This adage is indeed a reference to empty space.

This adage also makes its way into the movie, *The Forbidden Kingdom*, starring Jackie Chan, Jet Li, and Michael Angarano. In the particular scene, Angarano's character, Jason Tripitikas wants Chan's character, Lu Yan to teach him techniques from famous *kung fu* movies, such as "Buddha Palm, No Shadow Kick, Iron Elbow, and the One Finger Death Touch." Lu Yan is serving tea to Jason, when the cup begins overflowing. "The cup's full. Stop! It's full!" cries Jason. Lu Yan replies, "Exactly, how can you fill your cup if already full? How can you learn Kung Fu, you already know so much. No Shadow Kick, Buddha Palm! Empty your cup!" A similar situation happened between a religion professor and a Zen monk.⁵⁴



Figure 27: Scene from *Forbidden Kingdom*, Empty one's cup to receive fully

Source: (Chan, Li and Angarano 2008)

In *ninjutsu*, the space is very important. *Kamae* (body, mental, and spiritual attitude or posture) is both referring to the form of it, as well as the space. The general use of *kamae* is to protect one's weak points; however, it can also be used to expose one's weak points to make the opponent fully commit to an attack. Bruce Lee sometimes referred to body posture as bait. Ted Wong, one of Bruce Lee's personal students, recalls that Lee used to leave his front lead hand down to appear less threatening and to draw his opponents in; apparently Lee's rationale was that it also gave him more options: for him to throw an uppercut, a hook, or a quick lead and perhaps through increasing both mobility and

⁵³ (Furuya 1996, 27)

⁵⁴ (Furuya 1996, 37)

balance.⁵⁵ This is the *kyojitsu* involved in *kamae*. By deliberately leaving openings, gaps or weaknesses one has a better idea of where the opponent will attack from.

For example, both the defender and opponent are in *daijodan no kamae* (large upper posture; this posture is where one holds the sword over one's head). As a note, *daijodan no kamae* itself is quite a deceptive posture, as it has a large opening for a *do suburi* (horizontal cut across the belly); however, the sword coming down from *daijodan* is quite fast and will probably beat a horizontal cut in speed because of the weight of the sword and gravity. The defender lowers his sword to tempt his opponent. The opponent sees the opening, and fully commits to cut down the defender or knock his sword down. The defender at the last moment possible, and dodges the blow and counter cuts with a horizontal cut; only if the vertically downward cut is avoided first, the horizontal cut is effective.



Figure 28: *Kamae* as bait, luring the opponent in for a deterrent attack

Source: Images taken out of context, and composed and edited from (Ozawa 1997, 100, 103, 113)

The distancing for baiting postures is extremely crucial. One cannot be too far away, if not the opponent may not be enticed enough to attack; one cannot be too close, if not the opponent may actually hit his mark before one can move out of the way or interrupt. One has to be right on the edge of danger—close enough where the opponent feels he could get you and far enough so you can avoid the strike. Without the ebbs and flows of attraction and repulsion, combat would be more of two opposing forces clashing and imposing—with the strongest as the victor.

⁵⁵ (Wong and Tom 2005, 166)

Journal Entry 4: September 20-November 5, 2009

For this period, videoing was used to document movements that showcased the uniqueness of *ninjutsu*. First an outline was created that held some of the prominent concepts of *ninjutsu*. This outline was revised and expanded with the help of Shihan Robert Fraser; the main change was the organization under the theme of space. The main categories are: *Maai* (Distancing, Angling, and Timing) and *Kukan* (understanding the space), *Kurai Dori* (tactical positioning in the environment), *Kyojitsu/Metsubushi* (falsehood and truth/eye blinders or distracters), and *Nagare* (flow).

The filming process for movements is made up of three parts. First the attacker wears the helmet cam on his head first and receives the movement. I feel that *ninjutsu* is about secrets and surprises and the unexpected; thus it should be starting point to show a movement. I want the audience to see the experience the most limited piece of the puzzle first. The experience of seeing the defender only to end with the defender vanishing (usually because of *metsubushi*, eye blinders/distracters) is quite theatrical. Second, the defender wears the camera to show the larger piece of the puzzle; the audience can see where the defender is going and more or less see how he affects the attacker. Lastly, the camera is shown in at least one objective 3rd person perspective. This is achieved by using either a mini-tripod (viewing height of roughly 6 inches) or a full tripod (viewing height of 2-5 feet). This is the largest piece of the puzzle, and it shows both the defender and attacker, and the movement. The phenomenon in the 1st person perspective is that one rarely sees the whole body of the other. Usually only the upper portion, or a stray hand or foot, or nothing but the ground, the walls, or a window can be seen.



Figure 29: Helmet Cam mounts: Full Tripod, Airsoft Goggles + Mask, and Mini-Tripod

Source: images by author

I am revealing the movements in this way, to signify the way I learn them in class. Currently, I am the class *uke* to Fraser *Sensei*. I am the one attacking and thus receiving the example. When I go back to my training partner, I have to try deciphering not with my eyes, but with my body the movement. I have to remember what I did and how it was used against me. I then have to reverse these pieces of the puzzle to practice the movement on my training partner. All these perspectives combine for the total understanding of the movement.



Figure 30: First Helmet Cam+3rd Person Video Trial

L to R: Attacker's POV, Defender's POV, and 3rd Person POV

Source: images by author

The helmet cam connects to the adjustment band of airsoft goggles + mask. I was originally looking for a ski or winter goggles, as they look comfortable and do not have the face plates (and also have anti-fog lenses), but they were not available. The airsoft goggles + mask were cheap and readily available, so I purchased them. They are slightly uncomfortable because the foam around the lenses is quite hard, and also, long filming sessions is somewhat difficult because the lenses tend to fog from the body's heat and sweating. It affects the rhythm of the filming somewhat, but it is not a great determining factor. The mini tripod is very useful in getting slightly subjective 3rd person perspectives; it can shoot low angles which can showcase both the foot work and make the subjects appear superior (perhaps showcasing the bodies more) or it can be placed on top of air conditioners, or high shelves to give a more aerial view and also make the subjects appear slightly inferior and (perhaps showcasing the space overall space more).⁵⁶ The mini-tripod has generally been more useful as it is much more mobile and can get interesting angles. The full tripod produces view similar to the level of person's viewing perspective and was employed at times.

After some trial and error with filming, I found out some important information about the helmet cam itself. One, the helmet camera needs a lot of lighting. If not, the HD quality drops to almost cell phone video quality, and everything becomes very pixilated and blurry. There are two settings on the camera, one is the HD that is very high quality at 30 frames per second; the other is a SD (standard definition) but at a smooth 60 frames per second. The difference in frame rate did not seem to matter much, because when slowing down the footage through Adobe Premiere, the fast blurs shot on the HD mode visually exaggerate the speed of the movement. Almost all of the footage is shot in HD, except for a few trial takes. There is also a slight fisheye effect coupled with a wide angle but is only noticeable in certain vantage points, such as a plan view roughly two feet above the filming area.



Figure 31: Transformation of the room through fisheye effect + the bodies in movement

Source: image by author

⁵⁶ (Schroeppel 1982-2002, 34)

For the subsequent filming, two types of effects were added to the raw footage. One is Echo, which induces a shadow of the previous frame and the other is Invert, which turns the white walls to black and changed all other colors to their opposites. It seems that people, who do not practice *ninjutsu*, like the Echo effect better because it allowed them extra frames to figure out what is going on in the movement. This is easily understandable as the art is very complex, and in its highest forms, extremely subtle. It also shows a really good sense of flow and movement; the montage of the present frame and past frames are really interesting to see side by side to illustrate the relative speed (more of a temporal measure) of movements. I found out that the Echo is really effective for the 3rd person perspectives, because it really shows the occupying of space in the movements. In my opinion, it does not seem to be as useful for 1st person perspectives because it is very disorienting and tends to wash out the spatial features. In my opinion, I see the Invert having potential especially to showcase the bodies + space issue. In my opinion, it seems to wash out the most of the noise of the background, i.e. the objects in the background carry less importance on association and more importance on orientation and reference. I think the Echo effect showcases bodies + movement = space equation better though.

Also in editing, I changed the 1st person perspective footage to 25% speed so that the space can be more easily seen being entered. This is very useful, as within the movement, the camera in 1st person shifts from frame to frame much more rapidly and the entire scenery shifts and not just the objects within the space. The 3rd person perspective footage is slowed down to 50% speed so that some of the energy is preserved in the movement, yet the movements are readable.

The most time consuming part of the video process is actually the rendering portion. The added effects is definitely a factor, but still even the 16 minute raw footage took 2 hours to render the entire video. The worst part is that the videos need to be constantly rendered after each edit, because the frames inherently change; so while working, rendering is almost a must to see how the effects affect the flow and readability of the footage.



Figure 32: Echo versus Invert in the same frame

Source: images by author



Figure 33: Playing with the *kukan*

L to R: Attacker's POV, Defender's POV, and 3rd Person POV Echo Effect

Source: images by author

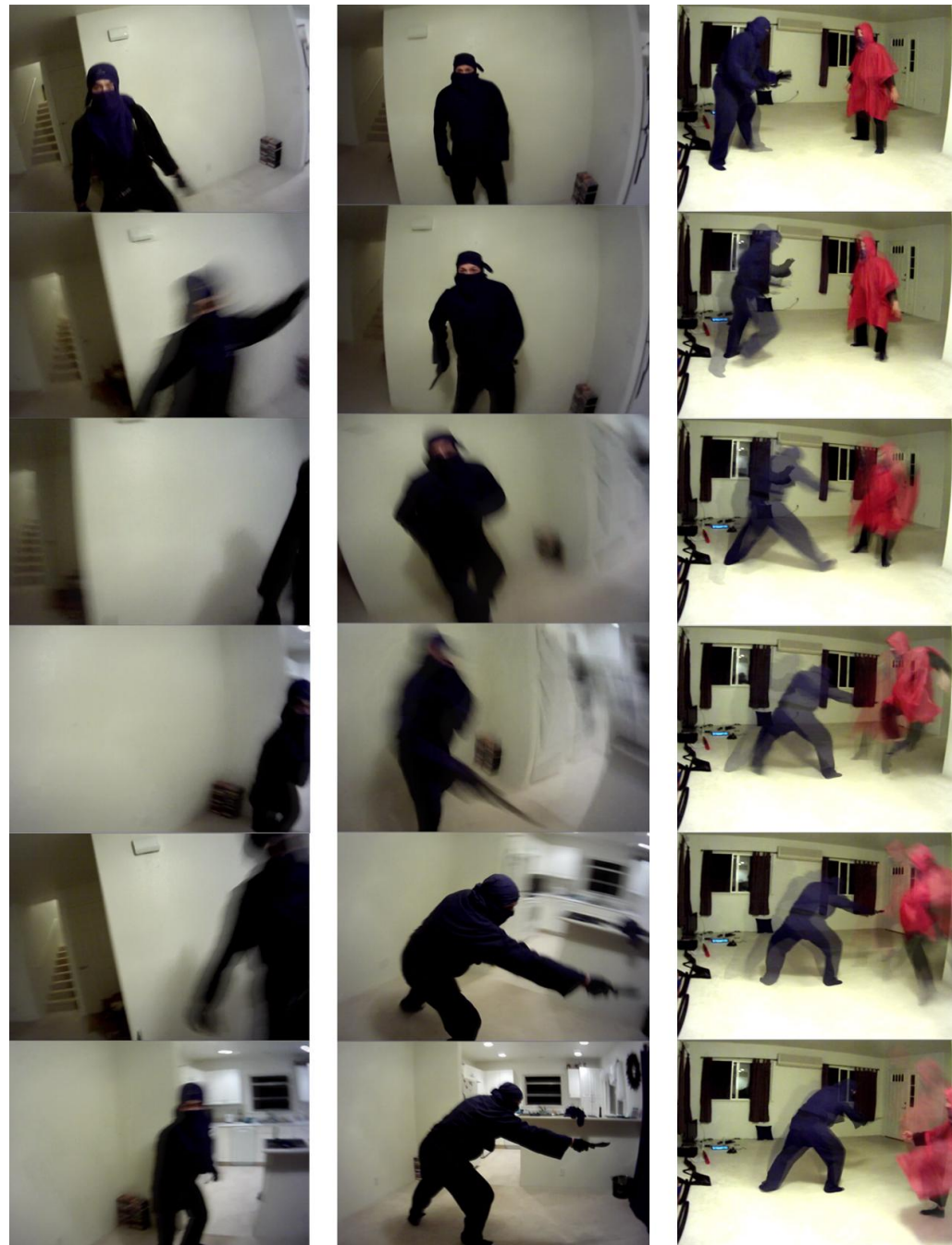


Figure 34: Knife Defense Long Distance

L to R: Attacker's POV, Defender's POV and 3rd Person POV Echo Effect

Source: images by author

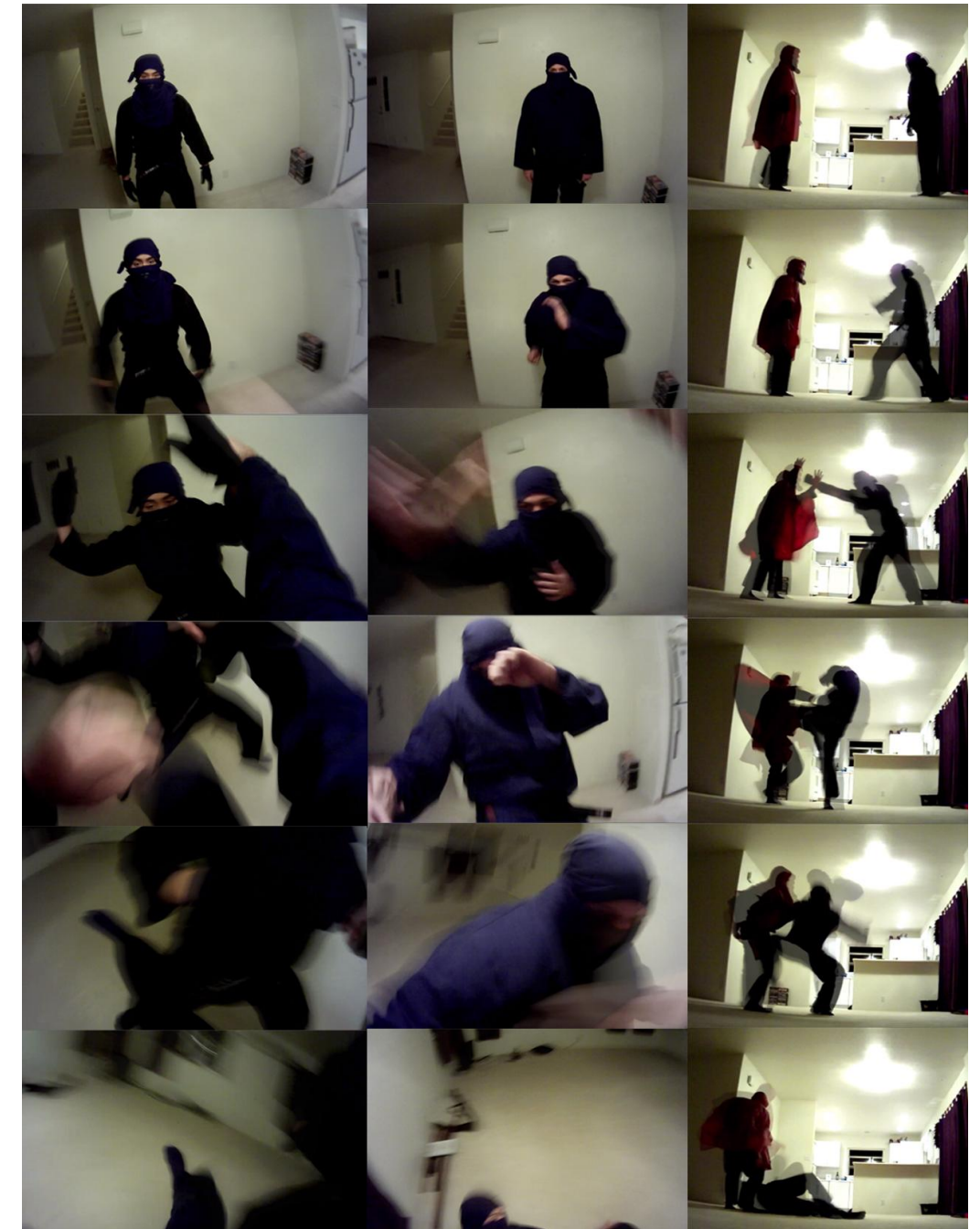


Figure 35: Tai Sabaki (body manipulation) as kyojitsu (falsehood and truth)

L to R: Attacker POV, Defender POV, and 3rd Person POV Echo Effect

Source: images by author

Journal Entry 5: November 6- 21, 2009

“*Ma*” is the gap (interval) between, and it is both a reference in time and space; “*Maai*” is the gap between bodies in combat. This concept steered the following experiment. The process is taking very articulate action figures and mirroring the postures that were used in the video. This process also required some me to draw from my body’s memory to move the figures into the correct places (distance and angling). As a side note, I marked where the figures footing were to get the proper orientation as well. Then after the figures were in place, I documented the elevations and plan views of the situation through photographs. The final process of this was to cast the space between the figures. The space around one’s own body is not so much included in this experiment. I translated the clay from body to body, point to point. If both figures are facing each other the clay stems from one’s right shoulder to other’s left shoulder; if one figure is facing the other figure’s back then the clay stems from the one’s right shoulder to the other’s right shoulder. The footing process came out a bit different. In order to construct the clay models, the foundation of the clay had to be relatively thick; thus, the bottom of the model includes the space between the figure’s legs.

In *ninjutsu*, the feet are the most important aspect. They determine both orientation of the body and the place to where the body is situated. *Kyojitsu* (falsehood and truth) can also refer to the relationship of the hands and feet. The hands are *kyo* (falsehood) and the feet are *jitsu* (truth). Noguchi Sensei in Japan would refer to this in his movements some times; he would point his hands up into your face saying “*kyo*” and while you reacted by pulling your face back, he would kick you in the stomach saying “*jitsu*”. This *kyojitsu* is also found in the *ku no kata* (form of void) mentioned in the definition of *kukan* section.

The process of the clay molding continued throughout key points of the movement. The way I chose key moments from the movements were points where the opponent would have impacted or his balance is broken and he is completely helpless. I marked the temporal gaps between these moments by utilizing a corrugated plastic board that had a steady beat of lines for measure. The Adobe Premiere video is measured in Hours, Minutes, Seconds and 1/24 of a second. For ease and quickness, I used the 1/24s of a second to measure the movements. Each line thus measures 1/6 of a second (roughly 166.7 milliseconds).

The critique that came about of this process is that it is missing the subjective experience that came from 1st person perspective footage. Perhaps the reason that the *kukan* is studied first in terms of *maai*: distancing, angling, and timing, is because one needs to understand the real, objective space. This is the pragmatic aspect of *ninjutsu*, as it is first and foremost about survival and combat. I think that this foundation is then built upon, with controlling the perception of the space through *metsubushi* and *kyojitsu*. Especially since the film footage includes both more objective 3rd person perspectives and more subjective 1st person perspectives. Perhaps in further experiments, the subjective space will also make an appearance in model form.



Figure 36: Bricolage of Objective in-between space (*maai*)

L to R: footage of movement; elevation views of key moments (reenacted by action figures); plan views of key moments; clay castings of space, elevation views; clay castings, plan views

Source: Images by author

Concurrent to this experiment, I tested the concept of *maai* in a similar way. I was seeking a way to illustrate the changing of *maai* when two bodies are in motion. In the clay models, I wanted to test to see how the *maai* transformed throughout the movement. In this experiment the idea of a rotating and translating frame came to my mind. For the frame, I wanted to show the next frame as a slight deviation from the previous and the total form as a consequence of the successive changes between the frames. I first modeled this in Rhino. For my first attempt in the virtual world, I used a 30 degree increment rotation along the y-axis (with the fulcrum being halfway along the right length) for the frame and a translation of 1"; the starting form was with the rectangle oriented vertically and the rectangle oriented horizontally for the ending form. It was not what I was looking for because there were too few instances of frames. I then tried a degree increment of 15, and finally 7.5; 7.5 produced 12 instances which were enough. Something was still missing. I ended up rotating each of the frames along the z-axis incrementally 7.5 degrees at a point 7.44 inches to the right of the first form. This model stemmed from the idea of the evolution of photo to video, which also traces my documentation process.

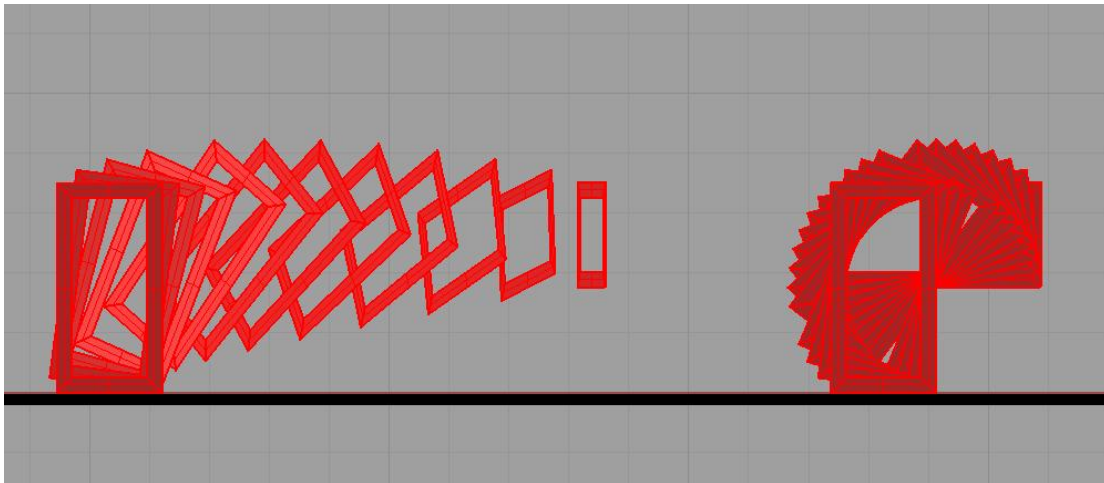


Figure 37: Final Layout and Starting Layout, respectively

Source: Image by author

The Japanese *torii* gate is both a marker and a gateway. It is not a building in that it offers no shelter and one cannot really dwell within it.

“Some theories suggest the term came from expressions signifying something like a “bird perch” (*tori-iyasu* or *tori-ita*), while other theories have suggested that the name originated in the expression “pass through and enter” (*tori-iru*). At any rate, based on their actual present-day function, they can be considered an expression of the division between profane and sacred realms.”⁵⁷

Perhaps furthering this, *torii* gates mark the moment where the past and the future clash to create the present; passing through this gate makes one aware of this particular in-between

⁵⁷ (Encyclopedia of Shinto 2005)

moment. In this project, two Japanese places have strongly suggested this notion: The floating *Torii* of *Itsukushima* off of *Miyajima* and the *Inari Fushimi Shrine* in Kyoto. The *Torii* off of *Miyajima* can be passed through by boat if the tide is up, or sometimes even walked through at low tide; either way it is a clear marker of here and there and the present. The *Inari Fushimi Shrine* is in fact an ancestor to my model, as it is a signifier of the now. In *ninjutsu* there are only two tenses of time: past-present (as soon as you say do something it is already in the past) and present-future (moving in a place to set up for the next movement, where it then becomes the present).



Figure 38: *Itsukushima Torii* with low tide

Source:

http://en.wikipedia.org/wiki/File:Torii_and_Itsukushima_Shrine.jpg



Figure 12: *Itsukushima Torii* with high tide

Source:

http://en.wikipedia.org/wiki/File:Miyajima_Alex.jpg



Figure 13: *Fushimi Inari Shrine*

Source: http://www.khulsey.com/travel/kyoto_fushimi-inari_shrine_3.jpeg

My intention for this model was to be laser cut. I also made tiny men to be used to demonstrate *maai*. The scale for the model is roughly 1"=6'. I laser cut corresponding lengths in the form of notches into a piece of wood to determine the orientation of the frames.

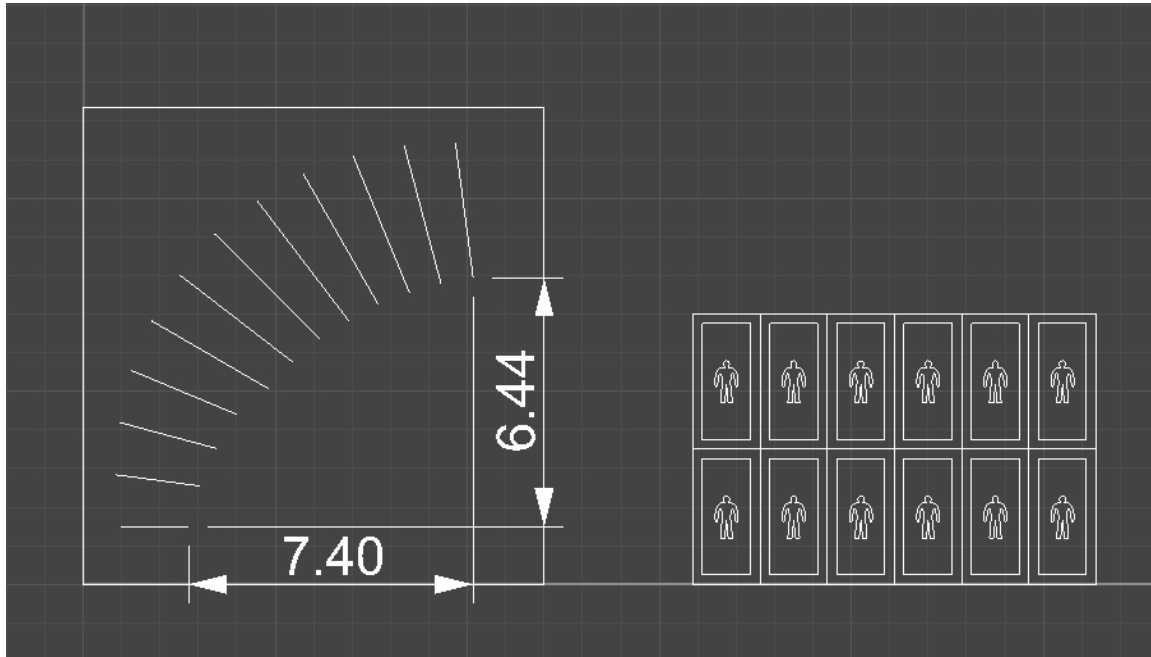


Figure 39: Final Laser Cut

Source: Image by the author

My original intent was to somehow cantilever the final floating form somehow to the grounded ones. I wanted to portray the feeling of lifting off of the ground. For the construction of the model, keeping the frames frozen in space was quite a task; the frames would begin to follow the natural influence of gravity and begin to fall over before I could complete gluing. In essence, I needed to create a frame to hold the secure them in place. I used thin 1/16" dowels to connect all of the frames together.

Lastly, I cut out a path out of clear plastic and placed the human figures on it. I wanted the path to be clear to emphasize the spatial relationship between the two bodies: the human figure and the frame and how this changed as the human's position relative to the change of the frame's.

The process took much longer than expected because of the trial and error with securing the frames (especially since they fell down many times). The easier method would probably have been to laser holes into the frames and use perhaps a metal wire or another bendable, yet resilient tubing material. This would have been easier than to measure each unique connection between the frames. Perhaps there would have been a more consistent feeling in the connections. Overall, I think the model is a good experiment to see what kinds of directions this project is leading to.

Interestingly enough, when photographing the complete model, the camera can only focus on a certain distance along a plane (perhaps similar to the eye). As far as we know, the body can only be in single space at a certain time. *Shikin Haramitsu Daikomyo* is the Bujinkan's motto for bowing into practice. It can be translated as "Every experience contains the potential for the enlightenment we seek."⁵⁸ This means that we have to be aware of every moment, as they are unique and will never truly be repeated. This model tries to capitalize on this. Each frame that the human body passes through is made unique by the frame, the space, and the structure and consequently the experience of each (light passing through the frame creates different shadows as well). Awakening this awareness through the body is perhaps similar to the practice of *ninjutsu*.

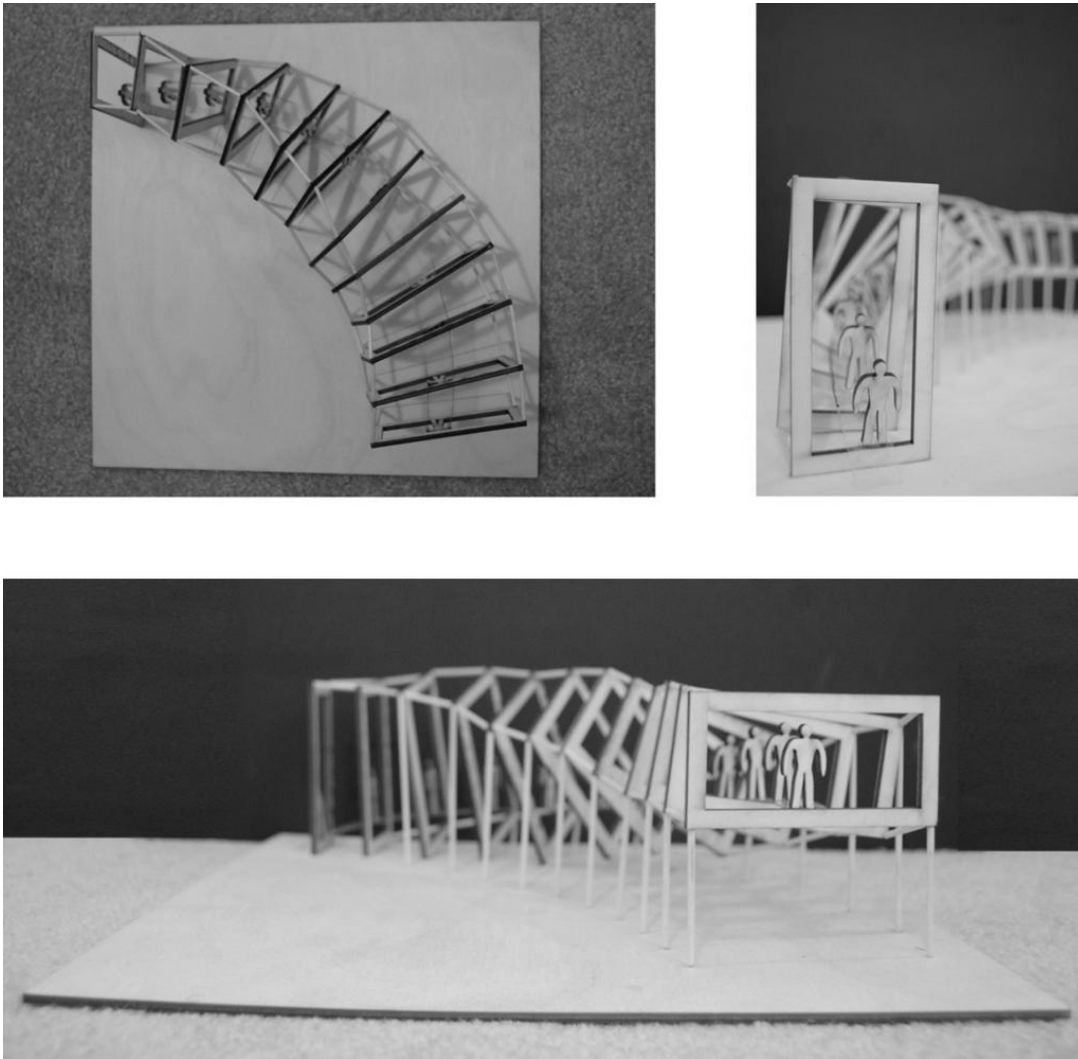


Figure 40: Top, Close up starting point, and Elevation of Model

Source: Images taken by author

⁵⁸ (Joe 2002)

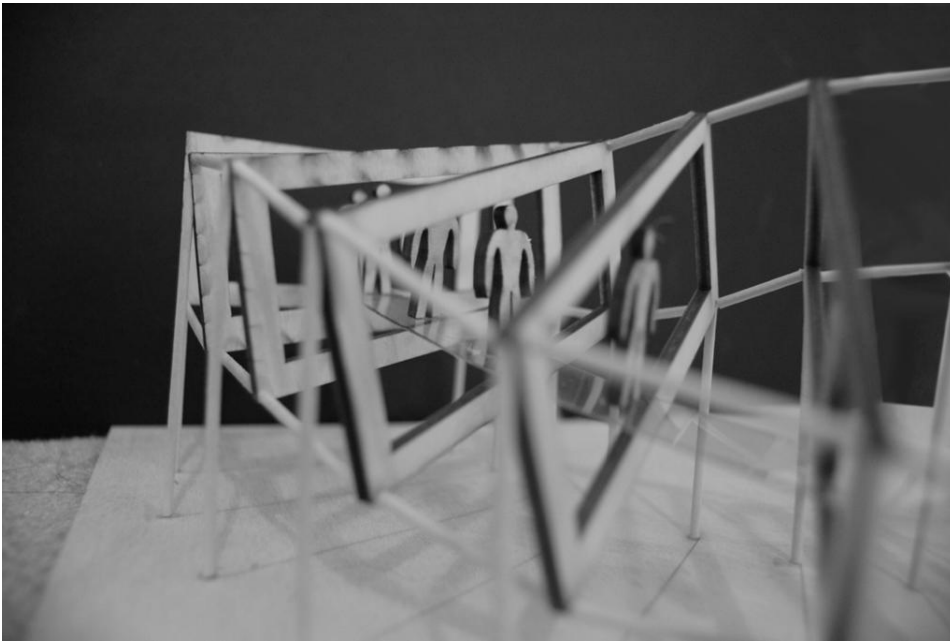


Figure 41: Close up illustrating the slight change of between space

Source: Image taken by author

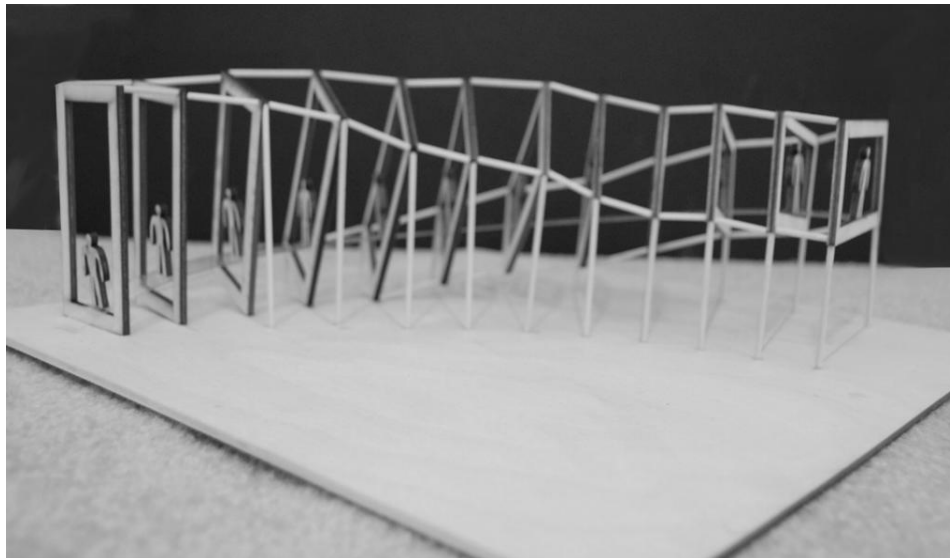


Figure 42: Elevation showing the minute in-between changes

Source: Image taken by author

Journal Entry 6: November 22-28, 2009

Maurice Merleau-Ponty's concept of the Lived Body is very similar to the practice of *ninjutsu*; I do agree in his argument against Descartes' mind/body dualism in that the body is a machine and the mind is a leader to it. In his book, *The Ontology of Merleau-Ponty*, M.C. Dillon, describes Merleau-Ponty's notion of lived body and lived space:

"First, [Merleau-Ponty] shows that practical space is bodily space: it is oriented around both the physical structure of the body and the projects undertaken to fulfill the needs of the body. Thus, near and far, accessible and inaccessible, within reach and out of touch, etc., can be described in term of bodily motility, which includes both the body's physical capacities and limitations, and the body's self-fulfillment or frustration in its pursuit of goals. The crucial point here is the claim that the body has its own intentionality, one which is prior to and independent of any symbolic function, categorical attitude or intelligible condition of consciousness conceived as representation...For example, the lightning movement wherein the lid closes to protect the eye is performed long before the threatening particle is taken as a conscious theme. In short, Merleau-Ponty's claim that 'the body is an expressive space.' Nor is it merely one space among many; rather 'it is the origin of the rest, that which projects significations beyond itself and gives them a place.'"⁵⁹

Asian martial philosophies perhaps even Zen Buddhism holds the highest regard for the subconscious—without the conscious mind's intention—meaning that the body acts accordingly to its own free will. In one of Merleau-Ponty's other works, he describes the patient with an amputated arm, that still feels the arm's desire to perform tasks; he refers to this as the habitual body, and that only when the patient "restructures his world in such a manner that the things no longer beckon to the lost limb, [and only] then the experience of it vanishes."⁶⁰ This also showcases the body's own will and its responsiveness to its surroundings.

Classes in the Bujinkan, are held in Japan unlike any other martial art I have experienced. Grandmaster Hatsumi (or the top teachers under him) run the class at a very fast pace. Grandmaster Hatsumi class will demonstrate a movement, and then shout out, "Play!" Sometimes the students will get to practice it one time each, sometimes a couple. Then Grandmaster Hatsumi will then demonstrate another movement and the process repeats itself. One does not have time to think about the movements. They have to let their bodies figure it out. Nagato-sensei, one of top 4 teachers under Grandmaster Hatsumi, illustrates the importance of this body-learning:

"... 'Only when your *Taijutsu* become instinctive will you be able to survive. When we had the filming at the *Hombu* (main dojo) the other day, there was no preparation, no practice. It was very raw. *Sōke* barked, 'Do it!' and suddenly we were in melee.

⁵⁹ (Dillon 1988, 135)

⁶⁰ (Stanford Encyclopedia of Philosophy 2004)

Those watching the program will feel that what we are doing is not a sport, but true *Budō*. Just as a fight will come from nowhere, you must be prepared to go into *shinken-gata* at any point. One minute you are laughing and talking; the next minute, you are being attacked. In order to survive, your *Taijutsu* must be instinctive. That comes from your preparation, from training properly.”⁶¹

Ninjutsu is not a martial art about set forms (*kata*); it is not learned through rote memorization. The training utilizes the body’s natural capacity; re-teaching our bodies to be sensitive enough to adapt to the situation at hand is one of the hallmark lessons. When one is bicycling, the body does not analyze how it should go over a bump; the body naturally feels and rides it out. Perhaps this is habitualness to the body. The self-preservation or perhaps structural preservation of the body is cultured upon many experiences of trial and error, where the body begins to learn its balance points. When people start learning how to ride bicycles, they have a strong intention of not falling down or falling off of the bike; however, when they finally master the ability to pedal, turn, and otherwise maintain their balance they also lose the intention of riding the bicycle—the body just does and its own will naturally takes over.

America’s most well-known martial artist, Bruce Lee, was intensely “obsessed” with the body. His body was his temple—he achieved such physical prowess that even the cultural body-builder icon, Arnold Schwarzenegger applauded him:

“Bruce Lee had a very—I mean very—defined physique. He had very little body fat, I mean he probably had one of the lowest body fat counts of any athlete around. And I think that’s why he looked so believable. There’s a lot of people that do all those moves and they have the skill, but they don’t look visually as believable or as impressive as Bruce Lee did...”⁶²

Bruce Lee in his last, but perhaps most critical film he concludes a training session with an epiphanous monologue in response to his teacher’s question of the mental attitudes of combat in facing an opponent.

“To have no technique, there is no opponent, because the word ‘I’ does not exist...A good martial artist does not become tense but ready. Not thinking yet not dreaming, ready for whatever may come...And when there is an opportunity, ‘I’ do not hit, ‘It’ [(referring to his fist)] hits all by itself.”⁶³

⁶¹ (Cole and Hatsumi 2003, 250)

⁶² (Lee and Little, *The Art of Expressing the Human Body* 1998, 18)

⁶³ (Lee, Wall, et al. 1973)



Figure 43: Bruce Lee's famous monologue

Source: (Lee, Wall, et al. 1973)

In a related interview (where he stated a similar answer), he added: “Any technique, however worthy and desirable, becomes a disease when the mind is obsessed with it.”⁶⁴

From my experience in the martial arts, I have to agree with this. The intention to do a technique is also the ego, i.e. I **want** to apply this outer-wrist lock reversal/twist (*omote-gyaku*). In real fighting, an opponent is not cooperative—he has his own will and will try to resist and otherwise defend himself against danger if he senses it. One cannot hope to apply an idealized technique. A punch is not even truly a punch because an opponent has his own idiosyncrasies (or even follows a certain style or method of punching) and one cannot plan or analyze these differences; such a minute detail can change everything, and yet a fight is so fast that it leaves no room for thinking. One just has to let the body’s natural sensitivity attune to the situation and adapt to the fluxing context.

Perhaps saying that one needs to have a survival instinct and a survival intention is important. One needs to be a negotiator, not overexerting or overextending himself; he must be somewhat assertive but not overly dominating. For example, if the opponent wants to punch, let him punch full force—just do not be there at the point of maximum impact; one can even be completely altruistic and help him along, accelerating both his punch, and his forward momentum, where he might flip himself over. That being said, *ninjutsu* is consequentially reliant upon the opponent—how much he energy he exerts, how much intention he gives, what kind of spatial contextual framework he provides (in his attack). This is another reason why both *kurai dori* (tactical positioning) and *tai sabaki* (body manipulation, usually referring to one’s own use of to avoid), where a myriad of

⁶⁴ (FightingMaster.com n.d.)

advantageous movements can be implemented or *henka* and flow the ability to change and not be fixated on a specific technique, is so important. It is like moving to the place that brings the most luck to oneself. Movements create themselves, and as such, everything becomes serendipitous. This is how movements in *ninjutsu* become more tactical and strategic, rather than dogmatic and objective. In another interview, Bruce Lee comments on a similar attitude *Jeet Kune Do*:

“Be like water making its way through cracks. Do not be assertive, but adjust to the object, and you shall find a way round or through it. If nothing within you stays rigid, outward things will disclose themselves...Empty your mind, be formless. Shapeless, like water. If you put water into a cup, it becomes the cup. You put water into a bottle and it becomes the bottle. You put it in a teapot it becomes the teapot. Now, water can flow or it can crash. Be water my friend.”⁶⁵

Takamatsu Toshitsugu, the 33rd Grandmaster of the 9 Schools, had many martial names such as *Moko no Tora* (The Mongolian Tiger) and even *Kikaku* (demon horns); yet, one of the other names he held was *Chosui* (roughly translates to clear or pure water). This reflects the nature of *ninjutsu*, an art of blending in with the environment (environment is all encompassing, which also includes opponents).

One of the first videos I have ever seen of Dr. Masaaki Hatsumi, the Tai Kai, gave me a strange, first impression seeing the ninja Grandmaster in action. The somewhat strange, almost pseudo-pornographic music coupled with a seemingly stumbling or old man naturally and nonchalantly moving about just missing danger, and yet leading his enemies right into the heart of it reminded me of the old cartoon television show, Mr. Magoo. Fellow *budo* master Akira Hino in his book, *Kokoro no Katachi*, mentions that *Grandmaster* seems to be in a state of disinterest (without intention) with his opponents.⁶⁶



Figure 44: Grandmaster Hatsumi avoids, walks, spins, and walks away, and somehow the attacker falls over

Source: http://www.youtube.com/watch?v=2I4t3iQj_Kk

Perhaps in the very advanced stages of *ninjutsu*, it has been said that we do not create our own techniques—God (or the universe, the gods, or some similar transcendental entity) gives us these as gifts. It is just our place then, if we are attuned enough, to be

⁶⁵ (B. Lee, Pierre Berton Show 1971)

⁶⁶ (Hino 2005, 93-98, 141)

transmitters of this will. Sometimes when training, my body will take over and perform something itself; I cannot remember nor can I repeat exactly what I did because that situation was unique—the opponent punched a certain way (he punched at a certain speed, at a certain distance, with a certain exertion), perhaps I was in a specific position, or perhaps even the planets were in a certain alignment or the sun was shining in the opponent's face. Similar movements can be produced but usually never the precisely, exact same. In this manner, every moment becomes sacred and may be the key to enlightenment, no matter how mundane and ordinary it may seem; this is actually the Bujinkan motto when bowing in to practice: *shikin haramitsu daikomyo*.

The *sakki* (killing energy or intent) or sometimes called the *godan* (5th degree black belt) test is the rite of passage in order to be a licensed teacher in the Bujinkan school. The test is set up, where the test taker sits in *seiza* (traditional sitting method of the Japanese) with his back towards the tester, and waits for the tester; the tester has a sword (used to be a real blade, now padded bamboo swords are used) and raises it in *daijodan no kamae* (posture where the sword is poised above the head ready to fall, naturally utilizing gravity). Originally, Grandmaster Hatsumi administered this test, but now any of the true *Shihan* (15th degree black belts) can also do so under Grandmaster Hatsumi's supervision. The test taker sits patiently, trying to empty his whole being—clearing his mind, and erasing his self. When there is an interconnection, the tester will silently and surely strike down with the sword. In order to pass this test, the test taker's body will need to not be there when the sword comes down (exact timing); it is important that the test taker does not try to do it himself. When I was in Japan, I saw many of these tests performed. On numerous occasions, Grandmaster Hatsumi would give this important advice: "Do not try to move yourself! Trust in Nagato Sensei (or the Shihan administering the test) to move you!"

I have had the pleasure have a taste of this test, from Robert Fraser Shihan. It is true that one cannot hope to move oneself; by trying to do, one will no doubt fail. Perhaps it is like one is a falling leaf, when all of a sudden a gust of wind comes and blows one to a different place. Perhaps it is a point where one has to completely let their ego go (I want to be a teacher, I want to pass, etc.) and completely trust in something beyond, perhaps a universal law or even the trial and error of the ancestors of the lineage.

This test shows further illustrates that the body has an innate intelligence. Perhaps it can also be said that in the test, one has to be a conduit by completely shutting off the chatters of mind, self, and ego; if not, one will not be able to "receive" the transmission properly. There is some research of this reading of intentionality, by Gavin de Becker, a specialist in security issues. His company provides protective services that screens and assesses threats (MOSAIC) for the Justices of the Supreme Court, Members of Congress, and Governors of the 12 States; it is also currently being used by the CIA, the Defense Intelligence Agency, US Marshalls, and even was handpicked by the State of California to be provided for all of its 600 law enforcement agencies.⁶⁷

⁶⁷ (de Becker 2005)



Figure 45: Sequence of successful sakki test

Source: <http://home.luna.nl/~risu/graphics/godanp.JPG>

In Gavin de Becker's book, *The Gift of Fear*, he identifies the concept of PINS (Pre-Incident Indicators)—a clairvoyant marker that highlights the inherent predictability of a violent threat. PINS are not some special ability that only psychics have. Generally, in each of the cases in the book, the victim (who luckily survived) had an intuition first of something out of place or wrong; this strong gut feeling, was overlooked, yet it was a clear warning to a violent and terrible crime (such as a rape, mugging, assault, etc.). We all inherently have this ability; it is just that we tend not to trust it anymore.

I'm sure that everybody has had an experience where they have at least been part of a similar situation. Perhaps Person A (male) and Person B (female) are both at a public place with a lot of activity, like a Starbucks. Person A originally came to study and drink coffee similar to Person B. Person A notices Person B, and begins to stare intently. This could be of many reasons, not at all inclusive: maybe Person A thinks Person B is attractive; maybe Person A thinks Person B looks like somebody he knows, but is unsure; or maybe Person A just subconsciously is drawn to Person B. In any case, Person B subconsciously notices a change in the environment; Person B looks around, and maybe even in the direction of Person A. Ironically, it seems these occurrences usually only happens when one is not consciously searching for it; this could be because it is our body's own intelligence. The point of this is to say that intentionality is readable; yet, it is our ocularcentric culture that prevents us from believing and justifying the unquantifiable and unobservable (the maxim, "seeing is believing").

Apparently these types of exchanges are very commonplace and according to biologist Rupert Sheldrake, 7 out of 10 people have had these experiences; Sheldrake suggests that perhaps the brain operates on fields of influence that are present throughout

nature. "...these 'morphic fields' organize the development and behavior of animals, plants, social groups and mental activity from human and animal telepathy to such everyday mysteries as the synchronized swooping of flocks of birds...he [further] posits that telepathy is a kind of morphic field, a social field that allows distant members of a pack or tribe to stay in contact or warn of danger. As an example he cites wolf packs, which scatter over hundreds of miles to hunt without losing their group cohesion."⁶⁸

Another point in *ninjutsu* training is the use of the peripheral vision (rather than the foveal/central vision). This does indeed activate the eyes attunement for space, as mentioned in Journal Entry 1; but also, this also helps drop the intention out of the movement. This is called *enzen no metsuke* in *kendo*; it roughly translates into "fixing one's eyes on a distant mountain."⁶⁹ In *kendo* this means to focus one's eyes on the body as a whole, watching for movement and perhaps his intention. In *ninjutsu* this is taken even further. One does not directly focus at the opponent, but off to the side of him. In this manner, one can keep an eye on the opponent, while checking his surroundings, which may include more opponents. This also helps in that, one's attention and intention is not seemingly focused on the opponent; this creates a gap in the opponent as he is surer to fully commit to an attack. "The eyes are the windows to the soul" is popular saying found in western culture.⁷⁰ If this is taken as fact, then dropping intention can be done through the deliberate averting of the eyes.

"The will to power is very strong in vision. There is a strong tendency in vision to grasp and fixate, to reify and totalize; a tendency to dominate, secure, and control, which eventually, because it was so extensively promoted, assumed a certain uncontested hegemony over our culture and its philosophical discourse, establishing, in keeping with the instrumental rationality of our culture and the technological character of our society, an ocularcentric metaphysics of presence."⁷¹

If the majority of the population has a natural sense for intention, it is important then for the martial artist to have the ability to move without intention. This is another aspect of the *ninja's* well known ability to be invisible. Relating to my personal experience of *ninjutsu*, by having too much intention (especially physical intention/exertion) to do a certain technique sends a clear message to the opponent and he will resist that movement. By not having intention, the opponent will not be aware of his detriment until it is too late. This is also referred to having "no power" in the movement. It is not about struggling or forcing the opponents into submission. It is not about imposing my form on the opponent; it is about being in a place where the opponent(s) cannot fight back. Having no intention is very similar to the Japanese idea of space; one can go in an infinite amount of directions.

⁶⁸ (Goodnow 2003)

⁶⁹ (Ozawa 1997, 41)

⁷⁰ (Stover 2005)

⁷¹ (Pallasmaa 1996, 17)

Journal Entry 7: November 29-December 5, 2009



Figure 47: Grandmaster Hatsumi unleashes a *kiai*

Source: (Hatsumi, *Kobudo No Kihon* 2003)



Figure 46: Attacker is completely demoralized and interrupted by the blast of intention

Source: (Hatsumi, *Kobudo No Kihon* 2003)

I must digress a little to the previous journal entry. At the same time, intention is an important aspect of fighting. What I have said above is true in the practice of *ninjutsu*, but intention can also be used for effective fighting. *Ninjutsu* is about gradients and about variations between two poles. On one pole of the spectrum we have pure intention, and on the other we have the absence of it. As noted before, *ninja* were not only covert (as the stereotype defines), but they were also overt as well. Leaning more towards pure intention, such as a *kiai* (a sharp energetic spirit shout) can break the opponent's rhythm and stun him (*kuzushi*), producing an opening. Yet it is the freedom to play on the entire range between both ends that is more important; the rationale is that being comfortable in this wide range, one can adapt to any particular situation.

There is a video game that recently came out for the *Nintendo Wii* (a gaming system most noted for integrating the body with the virtual) that really illustrates this concept; it is called *Dead Space: Extraction* (DSE). The genre is perhaps a survival/horror, 1st person shooter on rails; the game is played as such where the player points the remote and shoots enemies and is led throughout a stage. This hybrid genre is not novel, but the game *Dead Space: Extraction* breaks new ground on many levels.

The game is a cinematic masterpiece of horror. The game really tries to put the audience in the flesh of the character. It simulates a moving body by simulating a camera shake corresponding to walking or even running, and it creates atmospheres of the unknown that make players feel the subjectivities of the character: amazingly dark corridors, where sometimes you can only see faint movements and hear necromorphs (the resident alien monstrosities of the game) approaching; these showcase the limitations of the eye creating an inherent fear of the "unknown". In these exceptionally dark areas, there is a small light source called a glowworm, similar to the glow sticks used by rave dancers; this light source barely illuminates a couple feet in front of the point of view and it needs to be activated by shaking the remote sacrificing steady aim for vision, allowing the players to actively make choices that affect their sensation and interaction of the environment. The game revolves around this constructed atmosphere of terror.

Yet where the game really shines is how the game cinematically takes advantage of the 1st person perspective. The game uses the limitations of the field of vision by hiding enemies outside of it. For example, the camera will be walking around, checking out a room and only turning to see a necromorph jump on the camera, pinning the “audience” to the ground (staring up at both the ceiling and the grotesque figure); at this time, the player must shake the remotes furiously and viciously in order to free themselves to retaliate with gun fire.



Figure 48: DSE, Necromorph surprising, then pinning the player

Source:

http://ve3dmedia.ign.com/images/04/30/43092_orig.jpg



Figure 49: DSE, enemies lurking in the shadows

Source:

http://www.youtube.com/watch?v=0Rrli92Gu_M&feature=related



Figure 50: DSE, frantically barricading an opening

Source:

http://www.youtube.com/watch?v=IZ_3L-whKwQ

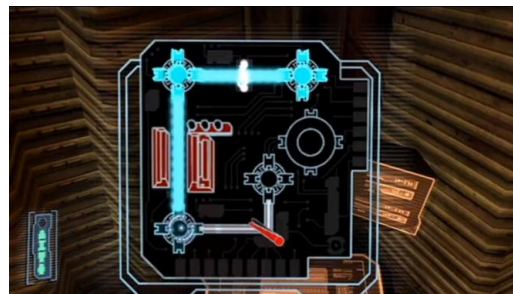


Figure 51: DSE, hacking a console

Source:

http://www.youtube.com/watch?v=IZ_3L-whKwQ

The game uses a very wide range of the moments of lull and action in harmony to create a rhythm of horror. For example, one will be either searching for items (e.g. ammunition or health packs), riveting makeshift barricades, or unlocking a clearance level related puzzle (hot wiring a door or elevator) and out of nowhere the necromorphs jump out! It is this tensional rhythm that pushes and pulls the audience on a tightrope of excitement and torpor that makes the experience of this game exceptional.



Figure 52: DSE, obligatory "monster-mash" intensity given more relative definition from lull moments

Source: http://wiimedia.ign.com/wii/image/article/970/970968/dead-space-extraction--20090408021610533_640w.jpg

The game even creates an air of psychological and sensational tautness. For example, an enemy will appear and rush at you, only for the screen to flash white and the enemy is no longer there; another example is the camera will look down a corridor to see no means of an exit, will turn around to see the previous path no longer exists, and then to search around in frustration to see that the previously walled off area is now opened. As the game progresses, the distrust to the in-game senses, especially of the eyes ("eyes playing tricks on me") ultimately and inescapably ensues. The game thrives on this tensional pacing: allowing both sides of the spectrum to define the other. There are a multitude of variations of this concept strewn throughout the game, and the experience seemingly never ceases to surprise. After finishing a level, one would probably have a mixture of feelings. For a particular level, I personally felt happy that I "survived", emotionally drained from the tension and surprisingly ready to play another round. The game utilizes both *kyojitsu* (falsehood and truth) and *metsubushi* (eye blinders/distracters) very well.

Journal Entry 8: December 6-12, 2009

For this experiment, I wanted to isolate the bodies in space; I hoped to gain a clearer better reading of the body moving through space mostly in the 3rd person perspective. Because of time scheduling of my training partners, I have not been able to utilize the room that I have cleaned out for videoing purposes. Finally, I have been able to film in this empty room. One thing is about the timing of filming; the footage was shot at roughly 5:45pm to 7:30pm. Even with the non-translucent curtains, outside light seeps into the room until the sun completely disappears. Footage is much easier to edit to create the effect of body + space at night time. The only problem is I had to bring in a large lamp so that the helmet cam could adequately pick up the movements.

I tested two more effects on the 3rd person footage. One is an Outline effect which can erase most of the details of the bodies and the environment, reducing them to lines and space. The other one is a more fully Color Key isolation. This was achieved partly to the blank room, but also through the use of fully-covering costumes: *gi* (dojo wear), *tabi* (split-toe foot wear) or socks, gloves, and a t-shirt tied around the head to cover the majority of the face. This combined with keying out certain colors, allowed for the disappearance of many of the distractions in the previous videos.

I left the 1st person perspective footage raw because I like how even though the walls, sheets, and other “textures” of the room are roughly the same color, they act as sources of spatial orientation. If not, the 1st person perspective is more or less seeing the opponent or just seeing blank space. For the third person perspectives, the blank background is okay because it is the canvas upon which the bodies paint space and form. In the 1st person it is as almost if the role reverses. The change in space (orientation and quantity) is much more important.



Figure 53: Different graphical representations of body and space in 3rd person POV

L to R: Invert, Background Color Key, Outline, and Echo effects

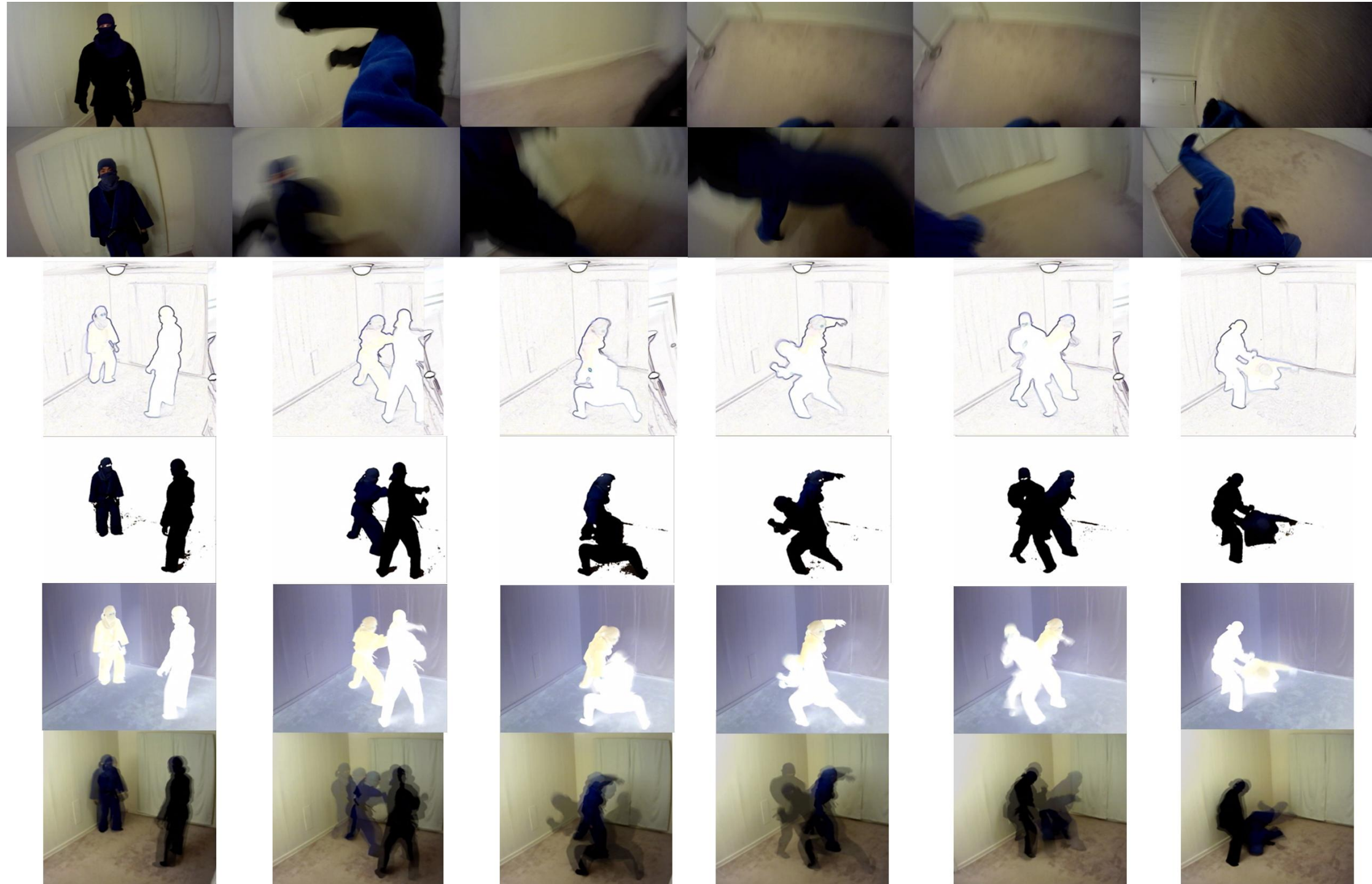


Figure 54: Structure and Space. By twisting the opponent's limb so his whole body becomes wrapped up in itself, a safe space is constructed and one is able to enter

Top to Bottom: 1st Row, Attacker's POV; 2nd Row, Defender's POV; 3rd Row, 3rd Person POV Outline Effect; 4th Row, 3rd Person POV Background Color Key Effect; 5th Row, 3rd Person POV Invert Effect; 6th Row, 3rd Person POV Echo Effect

Source: Images by author

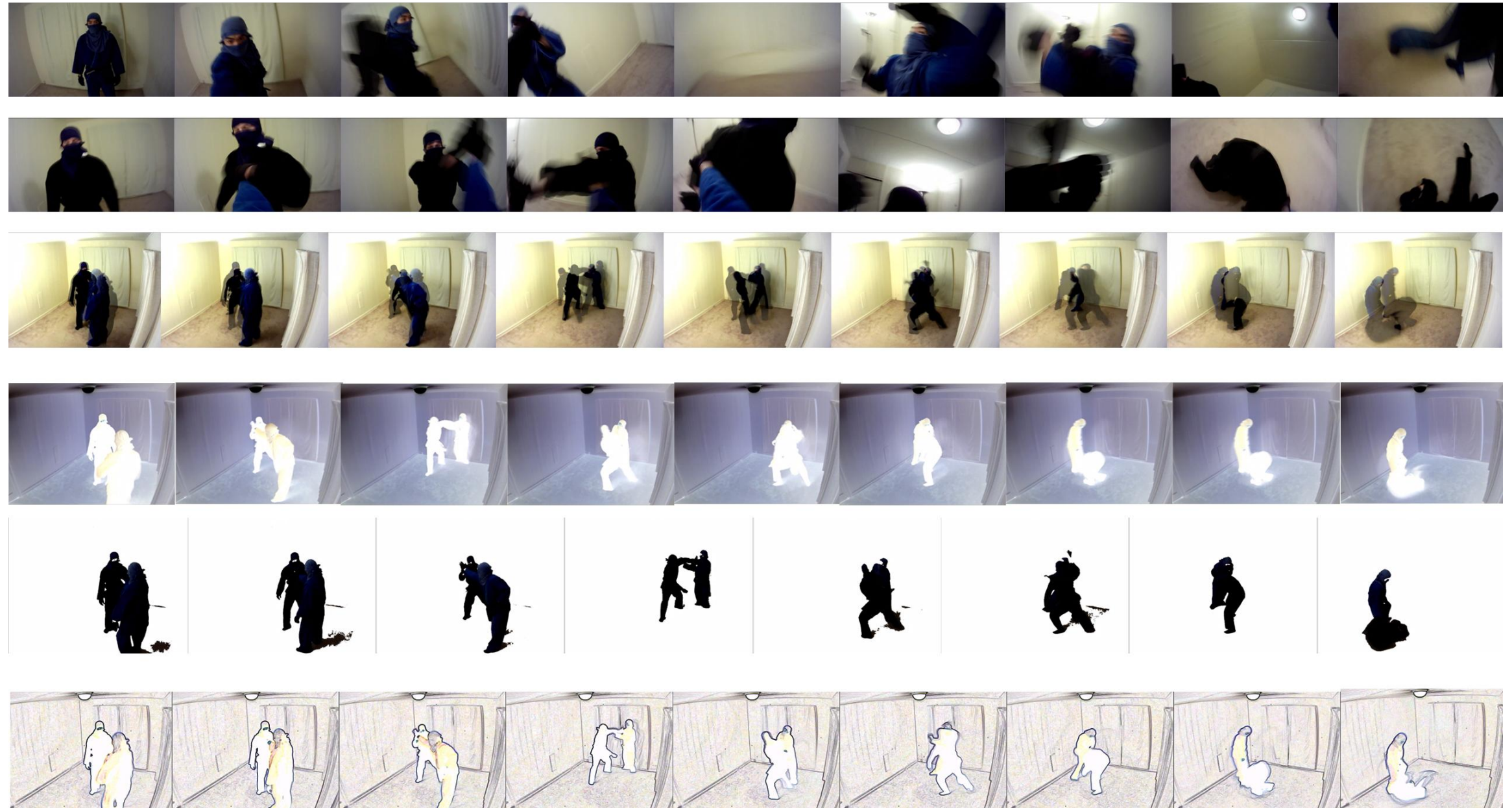


Figure 55: Countering the counter's counter.

Top to Bottom: 1st Row, Attacker's POV; 2nd Row, Defender's POV; 3rd Row, 3rd Person POV Echo Effect; 4th Row, 3rd Person POV Invert Effect; 5th Row, 3rd Person POV Background Color Key Effect; 6th Row, 3rd Person POV Outline Effect

Source: Images by author

For this experiment, I wanted to see how I could minimally model the dynamics of body and space. Inspired by Lebbeus Woods and his demarcation of borders through a jungle of piping, I decided to map out the first example provided in this journal entry. I used clear cutouts from plastic sheets as guides for the movement. Blue metallic wire was used for the defender's movement, while red metallic wire was used for the attacker's. This model took painstakingly long, even while using pliers; however, the end result was definitely an interesting way to document this movement in space.

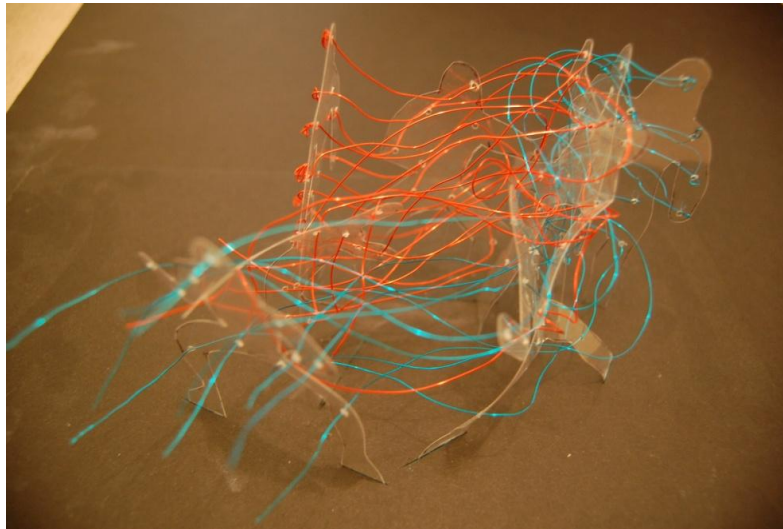


Figure 56: Wires showing the Flow of Space

Source: image by author

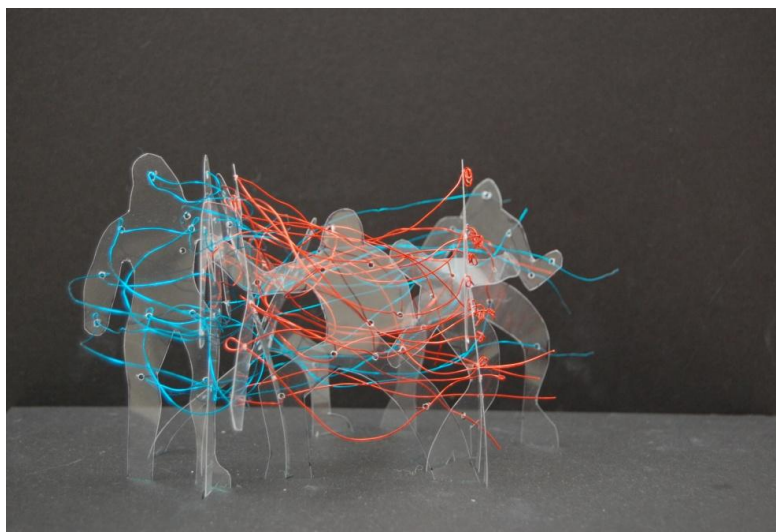


Figure 57: Another perspective, elevation view

Source: image by author

Part 2

Redefining Tactical Space

Searching for Tactical Space in Daily Life

In order to translate tactical space from ninjutsu to other applications, perhaps it is important to first clearly re-define this important concept.

Tactical Space/Tactical Spacing

Pronunciation: \ 'tak-ti-kəl 'spās \ 'tak-ti-kəl 'spāsiŋ

1. A place of safe haven, guarded from danger.
2. A place that grants an advantageous situation.
3. Spontaneous spatial planning in order to achieve an end beyond the immediate action.
4. The act of moving to a place of immediate safety and consequently future safety from collision.
5. The conscious + unconscious understanding of the flux (change over time) in distancing and angling (interval) between at least two objects.

I would like to describe tactical space as equivalent to the hybrid loan-word, *kukan*, defined previously in this paper. Anthropologist Edward Hall describes space based on his study of proxemics, which is quite similar to my findings on *kukan*:

“[M]an’s sense of space and distance is not static, that it has little to do with the single-viewpoint linear perspective developed by the Renaissance artists and still taught in most schools of art and architecture. Instead, man senses distance as other animals do. His perception of space is dynamic because it is related to action—what can be done in a given space—rather than what is seen by passive viewing.”⁷²

Perhaps tactical space, a concept regarding the interrelationship (gap as connector) between bodies, can be most easily applied to social studies.

Danger in ninjutsu is not moving out of the way of an incoming force; this harm is usually some kind of collision. This incoming force can be a powerful punch accelerating to collide with one’s jaw; it can even be a soft the act of another body making contact with one’s own that softly displaces balance (*kuzushi*: mental, physical, or spiritual balance). In that regard, a spectrum of contact appears; perhaps this is one of the things that can be translated to the world of architecture.

⁷² (Hall 1966, 114-115)

To find tactical space in everyday life, perhaps the easiest way would be to look for the concepts that organized the documentation of ninjutsu in part one. The spatial relationship categories for part one are: spatial quality (measured in distancing, angling, and timing), envelopment, kurai-dori (tactical positioning in one's environment), and metsubushi (eye blinders/distracters) + kyojitsu (falsehood and truth). Some of these concepts have evolved in their meaning, as naturally everyday life is quite different from ninjutsu (although it includes it), to more or less be applicable: tactical spacing (also measured in distancing, angling, and timing), entanglement (comparable to envelopment), hidden door (related to kurai-dori), and metsubushi + kyojitsu.

Fight vs. Flight

Ninjutsu is more of a negotiation rather than the conventional idea of martial art. As shown previously in the paper, it is not about imposing one's intention yet it is not being entirely recessive. I more fully understand what Bruce Lee was saying in his last film, *Enter the Dragon*: "When the opponent expands I contract and when he contracts, I expand."⁷³ Perhaps this is similar to the notion of fight vs. flight; this notion includes the body's posture as a gradient to intentionality. It is a spatial negotiation between the opponents and oneself; this can be further broken down into the intentions, space and bodies at play.

Establishing boundaries of space is natural and instinctual in animals and humans. Architecture is an act that extends man's boundary and even demarcating it visually, physically and socially. Overtime, it seems that the evolution of man's technological weapons and tools extends his reach—from the spear to the bow and arrow; from the gun to aircraft; from the satellite to the internet.

One variation of *ichimonji no kamae* involves the creation of both a physical and consequently a spatial barrier. The main purpose of this is to protect the heart, a very vulnerable weak point, from a physical blow.



Figure 58: *Ichimonji no Kamae*; enclosing a space between the heart and the arm

Source: images by author

⁷³ (Lee, Wall, et al. 1973)

This demarcation of this space, which is outside of the body itself but is created inside of the body's enveloping posture, is also a form of the territoriality mentioned above. In a sense, *kamae* (body posture, attitude) reflects one's intent.

The most fundamental purpose of martial arts is the preservation of life—one's own life, family's, nation, or perhaps even race or species; the general context is defense (responsive or pre-emptive) against invasion of and/or violence in one's space. Ninjutsu does this uniquely in that it is one of the only arts that seem to be focused on this spatial aspect. *Tai sabaki* (body manipulation, but in this case referring using body manipulation to avoiding harm) and *taihenjutsu* (escaping harm) are the first and foremost lesson of ninjutsu. Both of these concepts are the act of *ukemi*, which can generally be defined as to safely receive harm. These two types of *ukemi* is generally used to move the body out of harm's way. In old Japanese martial arts, one was usually attacked with a weapon; it would be a foolish thing to meet the weapon head on. Instead, one would aim to avoid the weapon completely and prepare for a counterstrike; or stay out of its zone of influence, and attack around it. In unarmed combat one can more so afford to trade hits with an opponent; this is the antithesis of *muto-dori* (unarmed against a weapon). It is not so in an unexpected, combat situation; one must expect that the opponent has weapons, and will use this deception to his advantage.

Anthropologist Edward T. Hall references the Swiss Zoologist, Heini Hediger, and his work on the critical distance of animals. This critical distance is commonly known as the threshold between "fight or flight" mechanisms. Mobile animals tend to keep a certain distance from other species by moving; however, if they encounter a barrier that they cannot traverse, they will tend to enter attack mode in order to survive. This understanding of this distance was employed as a circus act to woo audiences:

"[Hediger's classic example is of the lion and the lion tamer, where] the lion's stalking is so deliberate that he will surmount an intervening obstacle such as a stool in order to get at the man. To get the lion to remain on the stool, the lion tamer quickly steps out of the critical zone. At this point, the lion stops pursuing. The trainer's 'protective' devices—the chair, the whip, or the gun—are so much window dressing."⁷⁴

In human social situations, perhaps it can be said that this critical distance of "fight or flight" also appears in everyday life. In urban scenarios, people are generally moving to get to somewhere and/or to do something. Be it in malls or on sidewalks, this intentionality is manifested through the directionality in people's movements; this intentionality becomes a template that guides the route of each person. These social spaces are a warzone of social survival where each individual's intentionality and directionality clashes with one another. Social survival lies in getting to one's destination(s) while avoiding conflict. This does not necessarily mean just collisions, as this can relate to uncomfortable or inappropriate social situations. For example, people

⁷⁴ (Hall 1966, 12)

may not take a tight space because it would require brushing up closely against other people and could possibly lead to stigmatic social situations.

“Fight” perhaps is an inappropriate term as people do not necessarily intentionally engage other people; however, it is appropriate for the type of attitude of social survival—I need to get there now. This attitude awakens probably most when a person is under time constraints, such as the need to stay on schedule for a delivery. “Flight” is a very important mechanism as well. In a situation where a collision is eminent between persons, somebody usually gives way to the other. Perhaps this could also occur as a social situation where a person in a wheel chair is coming down the sidewalk and it would make it very inconvenient to make him/her move out of the way.

It is too simplistic to say that urbanites fall in one category or the other. It is probably more accurate that they utilize the full range of the spectrum between fight and flight contextual to the present situation. Similarly, the practice of ninjutsu involves a tori (person who performs the movement) and uke (receiver of the movement). The more advanced levels of ninjutsu practice are sometimes known as *gyaku-waza* (reversal techniques). In these types of practice the roles of uke and tori are in flux and a chess-like game ensues.

An interesting observation is that people do not always overtly signal their intentions, yet they navigate with amazing precision in amorphous (contracting and/or expanding) spaces with rarely ever a collision happening. In regards to tactical space that is defined by the distancing and angling between at least two people, and the change over time of this relationship, it seems that people have a natural capacity for this in urban social situations. Accordingly, in one DVD, Hatsumi Sensei translates *kukan* eccentrically as the spatial relationship between things.⁷⁵ Perhaps this is a skill that people utilize in order for social self-preservation.

⁷⁵ (Hatsumi, Bujinkan Koppo-Jutsu 2005)

Going Down the Aisle

Interestingly enough, many of the places that I seemingly found good footage where long, rectangular corridor spaces. Perhaps the density is most concentrated, and because of the relatively scarcity of space people had to make better decisions on where to go next. Another good point of this is the clear clash of intention—this long space is generally has a two-way antithetical directionality; this face-to-face orientation is perhaps similar in feeling to that of fighting (at least two opposing forces). Thus directionality (of the body) becomes a beacon of intentionality. As a result, the videos tended to provide clearer examples of the negotiation between fight and flight.

For the footage itself, my goal was to get from one end of the aisle to the other (Point A to Point B). The people in the aisle generally had the same intention but with some going in the same direction and others in the opposite (Point B to Point A). Supermarket aisles seemed to be the most interesting condition because of the *metsubushi* (eye blinders/eye distracters) from the spatial reality of the traffic; some people would thus have their intention directed perpendicular to that of the traffic (on the products along the wall).

The first few experiments were to be in full fight mode, not wavering in my intentionality at all. The goal of this first experiment was to see what kind of tactical space people take to avoid collision. By being in a purely fight mode, I threatened a collision by walking towards the person(s) without shifting course; I hoped to force people into flight mode. This situation was created to test the distancing, angling and timing in the persons and their movements of avoidance as well as people's sensitivity to whatever intentions I would project.

One set of experiments was carried out on a two-lane accommodating sidewalk. There is barely any space for movement, so I wanted to see how the subjects would solve the collision problem of two opposing lanes of pedestrian traffic. In one example, one person, who was engaged in conversation with his group of friends, did not even flinch and just subconsciously and naturally moved out of my trajectory at roughly 20 feet away; this allowed him to take gentle angling and timing allowing him to fit perfectly into the rhythm of the traffic (in the gaps). Interestingly enough, by watching the direction of people's feet it becomes pretty clear which direction they will go. There are social studies reading body language and intention related to the directionality of the feet—where the mind wants to go the intention is manifested in the directionality of the feet.⁷⁶

⁷⁶ (Earthwolf 2008)



Figure 59: Subject in grey shirt, subconsciously avoiding a collision with the author

Source: images by author

Another interesting scenario came about with close group of people sharing each others' space. Generally, these were two significant others or close-knit teenage girls. Two different situations arose when I tried to cleave these social bonds. In one case, they were not aware of the speed and direction and/or hoped that I would shift my course; in this experiment, they split apart and met each other after I passed. I have yet to encounter a strange and awkward situation of a long pause with either party hoping the other to move. In the second case, the couple seemed to sense my intentions, and probably at 10-15 feet away already started shifting their course to keep their connection undisturbed.

I have to admit that while I tried my best not to stray from the course that I intended it did not always happen. For example, one lady was walking out backwards out of the entrance of a store while talking on her cell-phone; she was not paying attention and we would have collided. Another example and perhaps observation, is that larger people, generally do not move out of the way; they may at most slightly shift a little in course, but seem to expect others to make the effort; also, people with wagons or baby carriages are very similar. On the reverse side, when I pulled out my cell-phone and stared at it intently, people tended to be more aware and move around me with more certainty; I assume that they felt that I was handicapped in my navigation and way finding abilities, and took pre-emptive measures. This also became a social buffer, as it is more culturally reasonable to be a cyborg distracted by text messaging rather than nearly bowling over people and invading their space.

This test was also repeated in downtown near Tamarind Park. In one of the examples of the video, a lady and a man are being filmed walking. Both are not really consciously paying attention to me and the fact that I am headed straight towards them. At roughly 20 feet away from me, they begin to nonchalantly part at an acute 15 degrees (or less) from me. By the time they reach me, I have adequate space on both sides (roughly 1.5 feet) to them. While this was somewhat explored in the previous example, this footage is very clear, and also the situation is a bit different in that the woman and man are not on congenial terms; they are only related to being in the same vicinity of time and space. Also these two subjects were quite isolated from any other crowds, while the other sampling at Pearlridge had more slightly more traffic behind and in front of me. Judging from the series of images from the helmet cam, the lady gives much more space to me; she starts on the centerline of the sidewalk, and is closer to the edge of the sidewalk on my right side. The man on the other hand, is only about a 1/4 of the sidewalk length away from the edge. This may be because the lady was wheeling around a luggage in her right hand and felt it would be better to give more space to avoid running me over with her accoutrement. The man only had a small plastic bag in his left hand.

This kind of critical distance was also evident in the knife defense video capturing. The feeling of knife defense in ninjutsu is right on the edge of the knife's reach. The reason for this is to either move inward past the knife's zone or either outward far beyond the reach of the knife. It is important however, not to stay on this edge because it is a dangerous place. This feeling was very similar to this experiment in the two subjects; the spacing (distancing and angling) within this time interval was very close to situating a minor collision). Close proximity to a stranger, and even more so to one wielding a knife and attacking, is probably the most uncomfortable zone for people. In knife defense, close is actually a good range as it allows good control of the knife by limiting useable space. Perhaps such a close range is efficient use of space in cities, but usually not to most ideal socially.



Figure 60: Three Uses of Critical Distancing Against a Knife (L to R: Close, Mid, Far)

Source: images by author



Figure 62: Top to bottom, critical tactical spacing in two subjects along a sidewalk in +1 second intervals

Source: images by author



Figure 61: Tactical spacing parting two subjects

Source: image by author



Figure 63: Dense hallway; tight tactical space (one second increments)

Source: images by author

In another experiment to test tactical space, I invited friends, friends of friends, and some family members to my house—the subjects were either strangers or on semi-congenial terms (the only connection was generally through me or my girlfriend). This provided an interesting sampling of space. Sometimes people stayed within a small grouping (brother + brother, friend + friend, or even stranger + stranger) and other times there were not. In total there were nine people squished into a 3.5ft x 22ft hallway and 11ft x 16ft room.

I used the same room for the experiment and also included the hallway in my small home. The only instructions I gave was that everybody stand somewhere, and to chose a point that they needed to get to (intentionality) and pretend they were in a public area. There were very interesting negotiations in space. People would take different angles, or pause for the space to open. Distancing was not as much of a factor, as the density in the small room and small hallway nullified that. It is difficult to tell if speed was a factor, because if there was any increase in speed, it was very slight; plus I did not mention to anybody to be in the situation where they are late for a meeting or some other time-sensitive matter.

I believe that in this experiment, people were searching to fit within tactical space. They molded their bodies usually by twisting their spine. In one of the experiments, one of the subjects sharply twists his body shifting his shoulders parallel to the direction he is walking in. This transformation allows him to skim through the slender gaps in the crowd. This line-form of the body is also a variation of *ichimonji no kamae* (posture of one), which is used to minimize the body's profile while still facing in a frontward orientation.

In ninjutsu there are no stances. In a sense the concept of stance, especially in martial arts, implies something static. *Kamae* implies more of an approach to a situation; if the situation changes, one's responsive *kamae* will also transform. In ninjutsu,

kamae is transitory, and is also done in preparation for the next attack. Shizen no kamae (natural body posture) is the upright, natural rectangular-esque form of the human body; however, this also includes anything that is done naturally such as bending over to pick something up, walking, shifting and turning. To complete a certain task, there could be multiple kamae to solve the problem effectively and efficiently; however, perhaps there are more appropriate ones for each particular situation. People tend to figure these out through trial and error. Kamae is the mind/spirit/intention manifested in bodily form; kamae is used to set up the body's shape and positioning against danger or incoming/future danger.

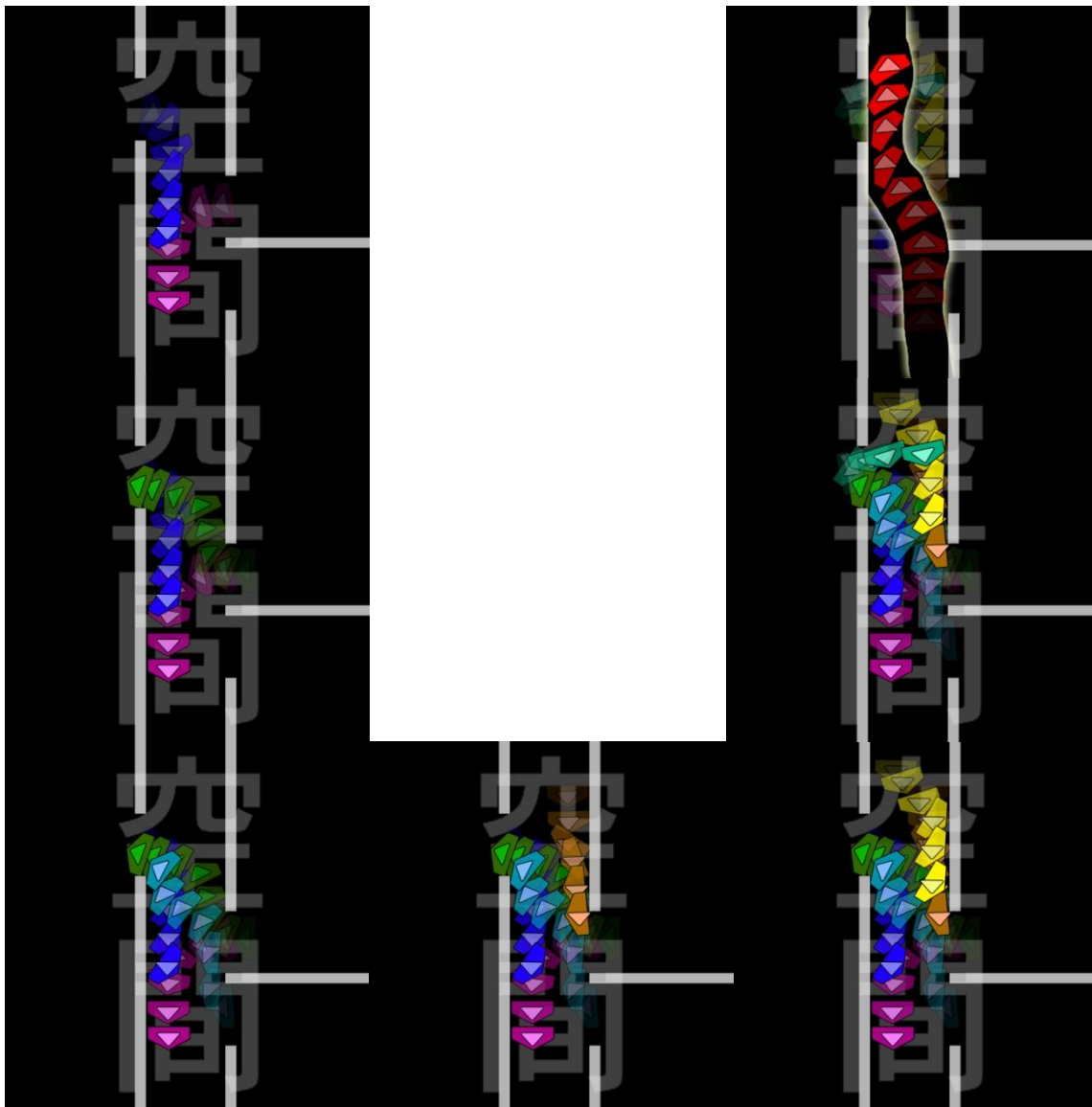


Figure 64: 9 Bodies Fitting in a Crowded Hallway

Source: images by author

As said previously, these samplings provide footage of how we negotiate through space. Sometimes we cannot be in full fight or flight mode. Sometimes we want to get where we need to go as quickly and efficiently as possible. Sometimes the space is being set up before we even get there and we cannot just go where we want to go—we have to divert and shift course because that becomes the new fastest route. I believe we tend to read this in the movements and postures of people as warnings that we follow heed unconsciously or consciously.

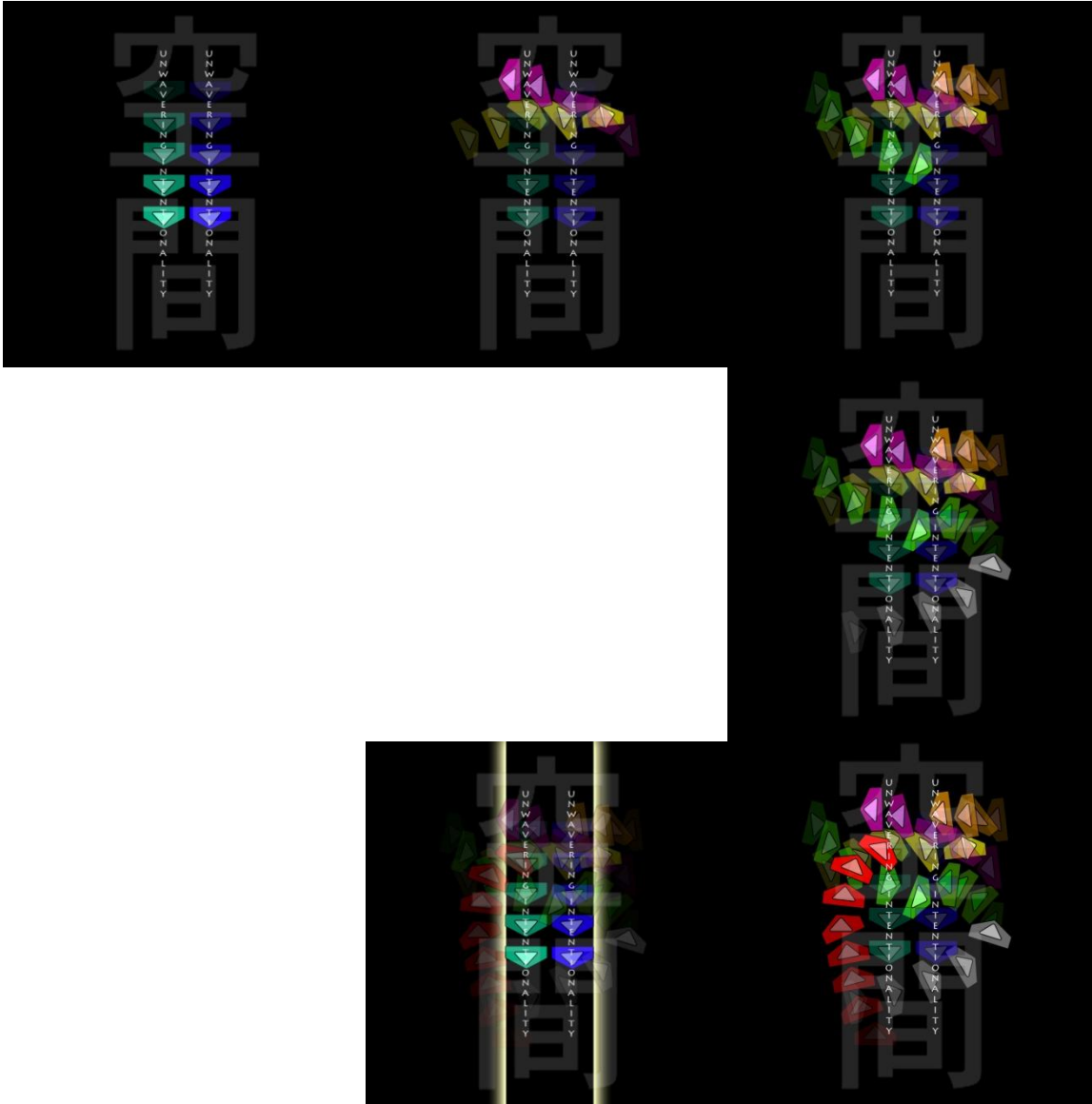


Figure 65: 2 Person Intentionality/Directionality affects Space greatly

Source: images by author

In one of the examples, two subjects paired up walking straight forward. Because of their combined directionality/intentionality, everybody seemed to move around them. They did not really have to divert much from neither their speed nor their path.



Figure 66: Crowded room; two subjects grouped (one second intervals)

Source: images by author

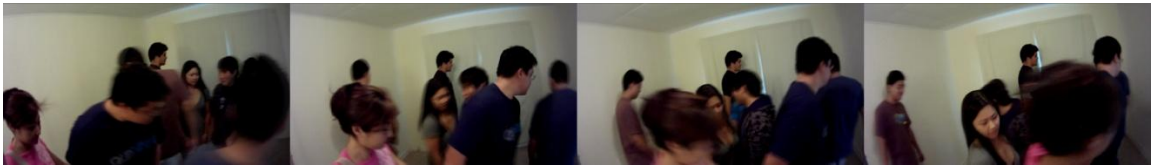


Figure 67: Crowded Room; radical pause and shift in directionality (ten millisecond intervals)

Source: images by author

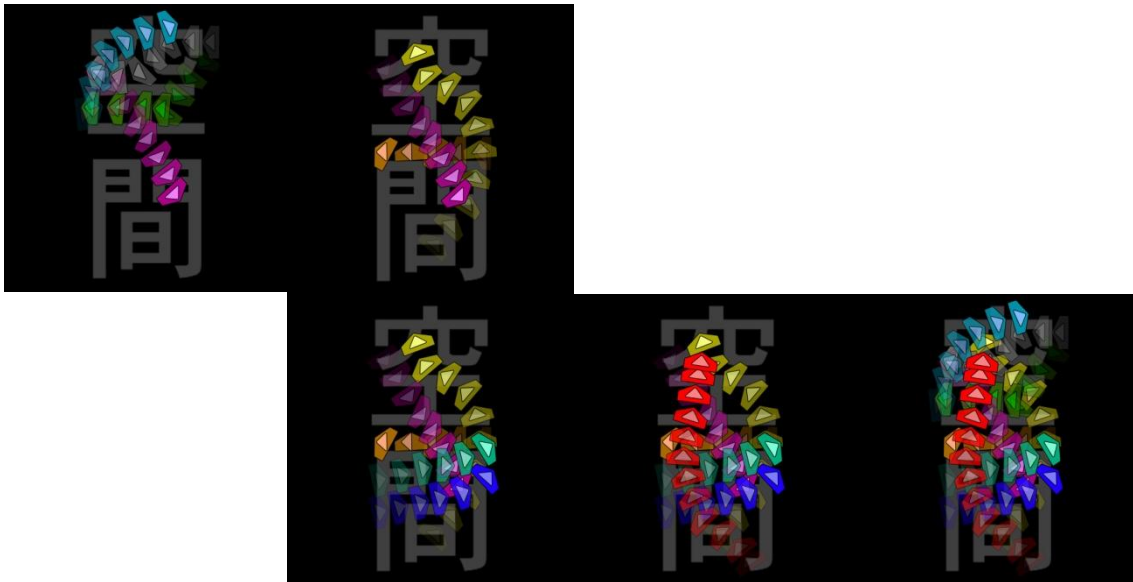


Figure 68: Plan Diagram of Crowded Room (radical pause and shift in directionality)

Source: images by author

The Dynamic Hidden Door

The main school that we practice in the Bujinkan is the *Togakure Ryu Ninpo Taijutsu* (戸隠忍法体術). *Togakure Ryu* translates into the Hidden Door School; its name has architectural connotations. The concept of door is utilized in this school's movements in a couple of different ways. One is the concept of opening and closing a space. Generally the space is opened for the ninja, and then sealed off against the opponents; this is a part of tactical positioning in space. Relating to this concept is using the door as a shield or obstacle. One hides behind this barrier, granting protection against the outer environment; this becomes another aspect of tactical positioning in space. It seems that the basic techniques of ninjutsu are used for controlling positioning rather than actual fighting. In this way, the ninja were able to engage multiple attackers, and escape completing their espionage missions.

“Everyone who has thought even casually about the subject [of architecture] knows that the specific property of architecture—the feature distinguishing it from all other forms of art—consists in its working with a three-dimensional vocabulary which includes man. Painting functions in two dimensions, even if it can suggest three or four. Sculpture works in three dimensions, but man remains apart, looking on from the outside. Architecture, however, is like a great hollowed-out sculpture which man enters and apprehends by moving about within it...Architecture, however, does not consist in the sum of the width, length and height of the structural elements which enclose space, but in the void itself, the enclosed space in which man lives and moves.”⁷⁷

This concept of hidden door is prevalent in ninjutsu movements. In one of the video captures, the defender uses the sword as a trap door. In one manner, the defender uses the sword as a shield or barrier by menacingly pointing it at the attacker's eyes; this intent sharply emits out of the tip of the sword and holds the opponent at bay. If the sword is left here, the attacker, if not intimidated, will eventually try to knock the sword out of its barrier-esque posture. Instead the defender opens the space cordially and practically inviting the opponent by placing the sword behind my body (this posture requires very good control of the distancing/spatial interval) and drops his intention and guard. No longer threatened, the opponent enters the space surely with a fully committed blow. The defender, a few steps ahead, avoids the strike and swings the sword to the attacker's wrists; he then finishes the attacker off with a committed stab. By using the space and by playing with the actions of opening and closing, one can beat a more skilled and faster opponent through this type of spatial deception.

⁷⁷ (Zevi 1957, 22-23)



Figure 70: Hidden Door Concept in Sword and Shopping Cart; 1st Column, POV of Attacker; 2nd Column, POV of Defender; 3rd Column, 3rd Person POV; 4th Column Echo 3rd Person in Social Setting

Source: Images by author

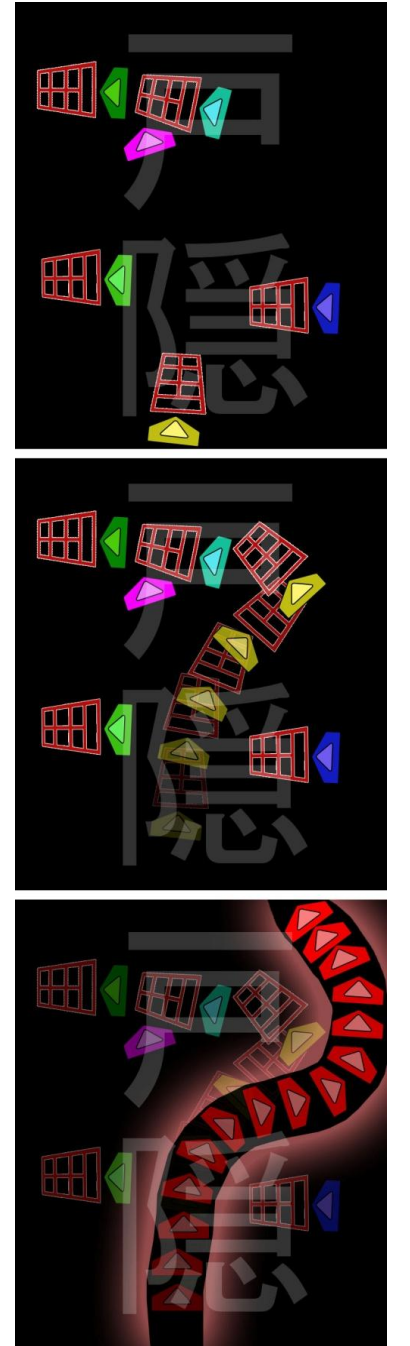


Figure 69: Plan Diagram for Cart as Hidden Door

Source: images by author

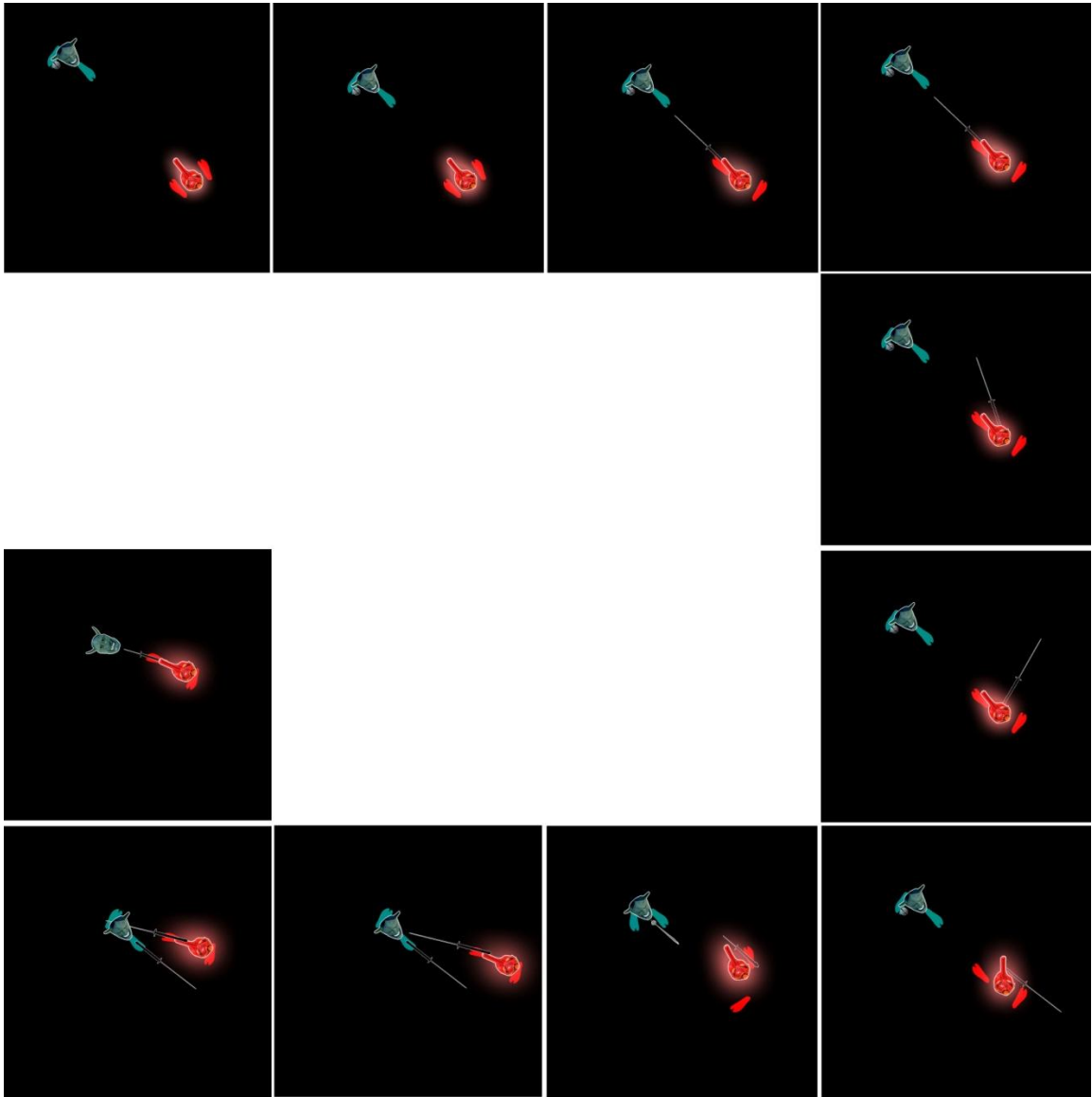


Figure 71: Sword as Hidden Door Plan Diagram

Source: images by author

In one of my favorite video samples, a man in front of me with his wagon (with the same directionality and intention) provides me with a space trail behind him for me to safely follow; the people waiting in line make or leave room for to travel through the space. All of a sudden, he changes from moving through the lines and searching for a good paying line to actually getting in a line (the waiting lines are perpendicular to the route of travel available). He turns his body and subsequently his wagon to get in line to pay for the merchandise; in my opinion, this movement reifies his intention through posturing, and also firmly establishes his place in line. He does not leave much space for people to get around; in effect, he makes a wall that forces me to change my own direction and intentionality. After this abrupt change, I shift back to my original course.

In one video, while going down the aisle with a shopping cart, I encountered another lone shopping cart filled with groceries. I waited for a good 10 seconds, pondering if I it would civil to move the cart myself. Eventually the cart's owner comes by, excuses herself, and opens the gate for me to pass. It was indeed a very strange situation. On another occasion, while passing through, I found myself suddenly surrounded by three abandoned carts! I was surprised as I passed through an aisle of dvd displays, and lurking behind were three strangely positioned carts—it seems like they were waiting for me.



Figure 72: L to R, Cart blocking Aisle. Suddenly surrounded by 3 carts

Source: images by author

Another interesting example of this hidden door is that people use other people as doors while moving in social crowds. For example, Person A (red) is walking trying to get through the jumbled pedestrian traffic area. Persons B (purple) and C (blue-green) are walking side by side (roughly 3-4 feet apart) also in the same traffic area, and walking in the same direction and in front of Person A. By walking behind Persons B and C, Person A is shielded from oncoming traffic (Persons X, Y, and Z). The oncoming traffic flows around Persons B and C, and consequently Person A.

In a different scenario perhaps Person A needs to find a gap to enter into an upcoming store perpendicular to the space of the traffic flow; for the sake of the scenario, perhaps he needs to get to this store quickly to buy a birthday gift, and he is late for a dinner party. Person A might stay behind Persons B and C and wait until a break in

traffic flow (space changes) and then take an appropriate path. Another situation that may occur is that Person A will need to go between Persons B and C, especially if Person A becomes enclosed on the sides. This could happen if Person W enters the scene and encroaches on Person A's space, and subsequently blocking Person A in. Perhaps when the timing is right, Person A slips between Persons B and C (maybe even with a simple "excuse me") and travels to the store.

In the above cases, Person A uses Person B and C like a door: either as a shield or as a gateway. Social space is dynamic and people are generally tactical in that they move to the place that has the best probability of being successful in fulfilling their intention. Decisions are most definitely contextual. For example, if Person W was not in the scenario and Person A was in no rush, he would probably just walk utilize the space trail behind Person C and make his way into the store eventually.

Space trails are interesting social phenomena. It seems that the oncoming traffic does not necessarily fit themselves in the space trails that open up (generally this is only the case if something forces them to move into this zone right away). These trails are temporary artifacts of the people that previously walked through them.

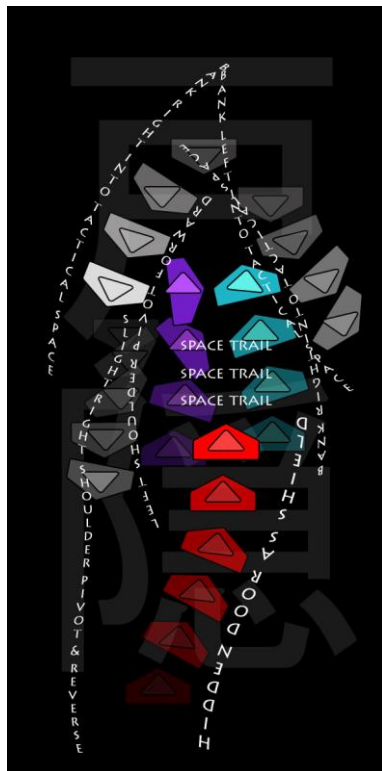


Figure 74 Person A (red) uses Persons B (purple) and C (blue-green) as a shield against oncoming traffic (Persons X, Y, and Z)

Source: image by author

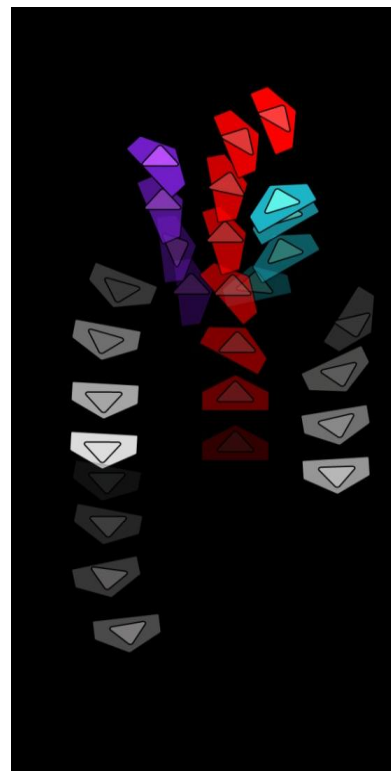


Figure 73: Person A (red) squeezes through Person B (purple) and C (blue-green) and uses them as an open gateway

Source: Image by author



Figure 76: Body + Sword vs. Body + Tree, an experiment of outdoor footage

Top to Bottom: 1st Row, Attacker's POV; 2nd Row, Defender's POV; 3rd Row, 3rd Person POV Echo Effect

Source: images by author

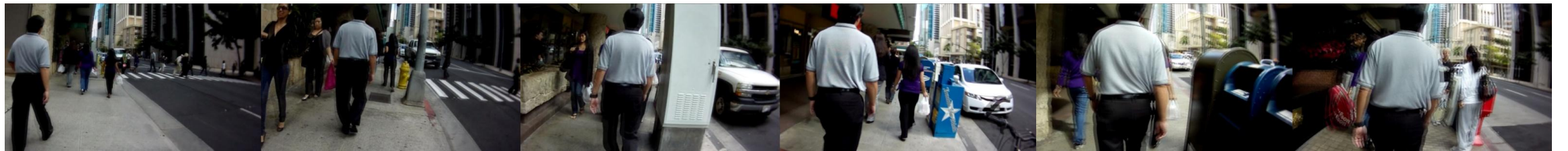


Figure 75: Using Persons as Hidden Door

Source: images by author

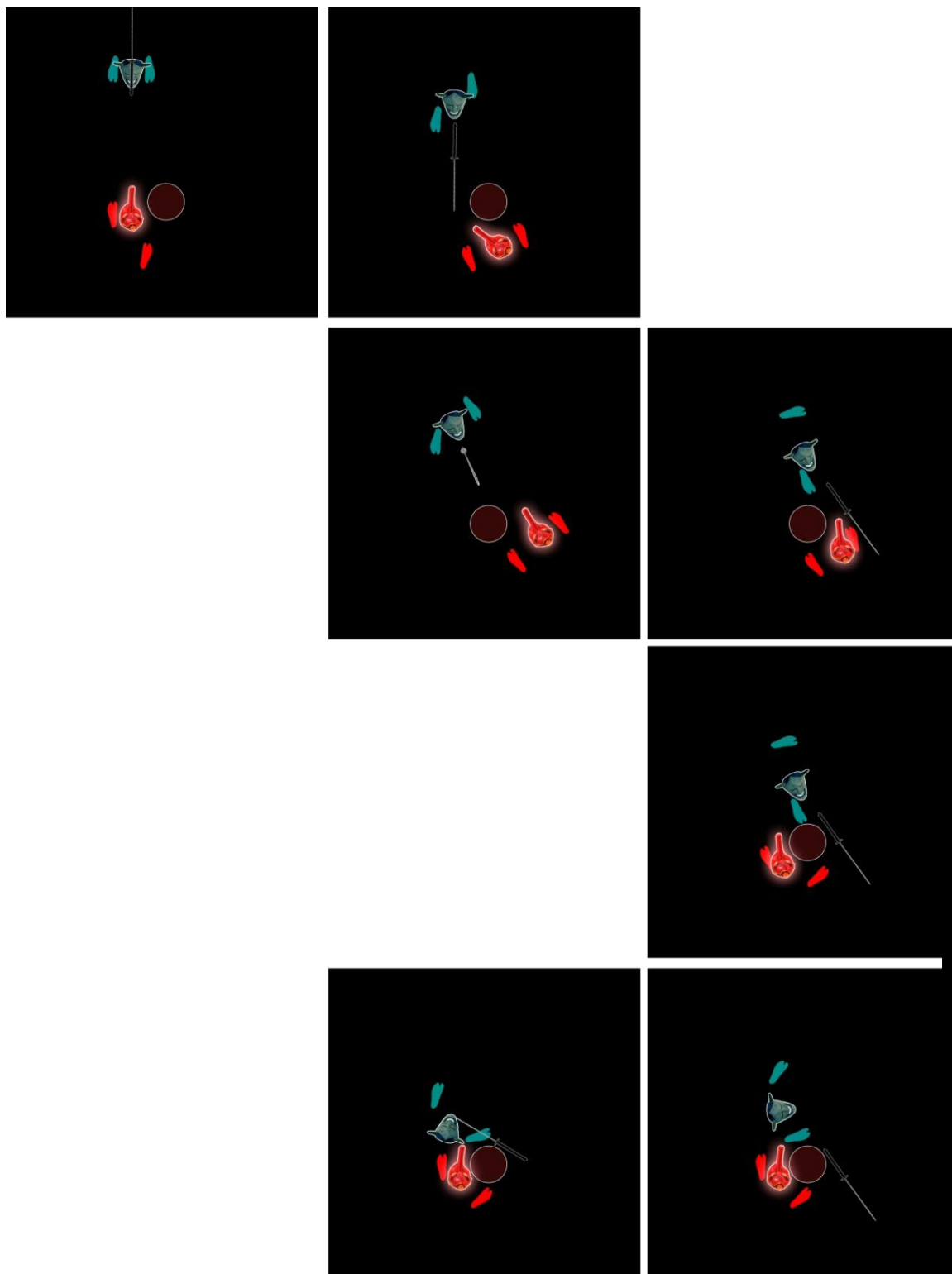


Figure 77: Tree as Hidden Door Footwork

Source: images by author

The concept of hidden door in this ninjutsu example is found in the use of a tree. The tree is used first as a barrier to hide behind from the skilled swordsman. The attacker's advances are nullified as the tree shields the defender moves behind and around it; eventually the swordsman overextends himself, which in turn creates an opening for the defender. The defender takes advantage of the situation and wraps the attacker up around the tree.

Even though the swordsman may be quicker and more skilled, by using the proper spacing (so that the attacker must completely exert himself to adequately engage the defender) and also utilizing the elements in his environment, the defender is able to make an auspicious outcome blossom out of a disadvantageous situation. This concept of hidden door as a dynamic door is very important to ninjutsu. This dynamic door may be how the ninja became famous for their stealth—appearing out of nothing or vanishing without a trace.

This idea of shielding is a natural method of survival that even animals use. For example, in episode one of the nature documentary, *Life*, a single seal uses a small ice flow as a shield against a pod of hungry orca.⁷⁸ By constantly moving around the ice flow, the seal positions the makeshift barrier between itself and the orca; the seal manages to tire out and survive against multiple attackers bent on its destruction.

How do we use this concept of dynamic door in everyday life? The footage example I filmed shows that we use people that are in front of us and traveling in the same direction as shields. A man in the footage dashes into the space trail of three women, who unabashedly occupy almost the whole width of the sidewalk. Their formation and intention sends out a message to others heading in from the opposite direction. They clear the walkway for both the man and me. Sometimes they move out of the way to avoid collision; generally though, they wedge the incoming traffic to only one side of the sidewalk through their intense occupation. The man uses them to get to his destination with ease. We use others to shift the course of would-be collisions some times in crowds. Much like the seal, we cannot always depend on just ourselves; I think it is the essence of survival, that we utilize our surroundings to achieve our goals.

There are many other shielding methods we use in everyday situations. For example, sometimes, I pretend to be talking on my phone more intimately, as a shield, when I see somebody who I do not want to talk to at the moment. In the short on elevator etiquette, we sometimes use certain actions to cover our discomfort in a tight space with complete strangers such as an elevator—we pretend to check our watches or phones, or we watch the elevator floor display.⁷⁹ Somebody told me of an elderly lady who used a shopping cart as a shield to her personal space; she did not have any items when she was looking around. We can even use our own intentionality/directionality as a shield, because generally most people will get out of the way to avoid a collision.

⁷⁸ (BBC 2010)

⁷⁹ (Driver 2007)

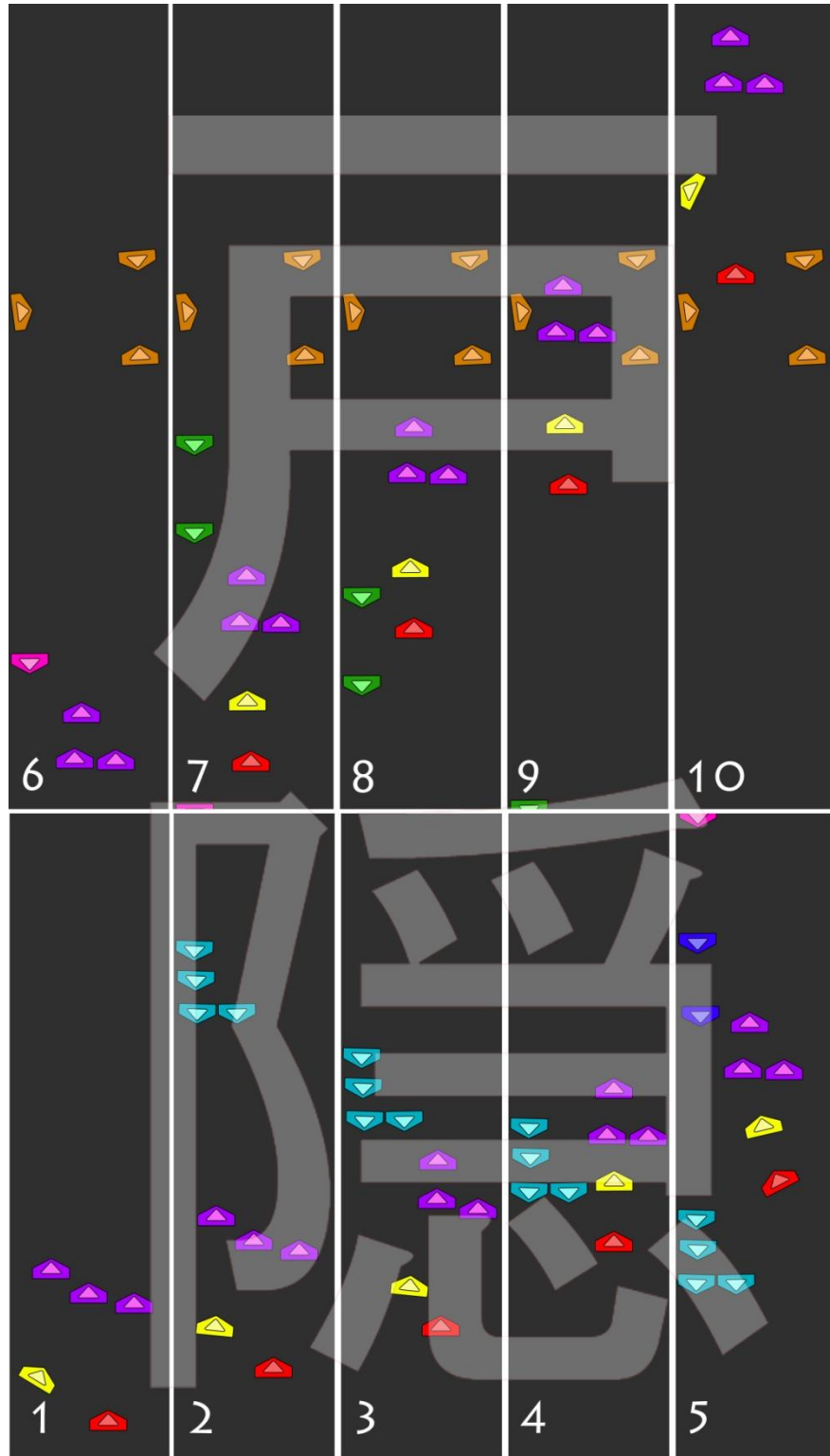


Figure 78: Persons as Hidden Door Plan (Yellow and Red Persons Hide Behind Purple Persons)

Source: images by author

The flows in a crowd are also a body to body transmission. We watch the crowd and if it works for them, we follow their actions. Perhaps this is similar to the transmittal of culture—passed down from one body to the next. Interestingly, I find this similar to the learning process in not only in ninjutsu, but Japanese culture. In Japan, Hatsumi Sensei demonstrates something without an explanation, and asks his students to repeat the scenario. Sometimes, he points out the subtleties. In a sense, we are asked to give our faith to him—to follow his footsteps as a role model so that we learn how to protect ourselves and live life. In Japanese culture, teachers are similar to this concept of shields—they protect us along the path, opening to provide trinkets of knowledge when we are ready to receive them.

Hoko: Entangled within Space

The posture of Hoko (包圍) is one that surrounds and envelops. This is to suppress and control the opponent. More important than a form, it is a concept that can be applied in many ways. It can be used for standing, jumping, or ground level (Tenchijin) and can even be applied through the use of weapons. This also relates back to the Hidden Door concept as one could use an opponent to entangle another, and use the enveloping process as a shield against another incoming opponent. This snaking or winding dragon feeling is also perhaps related to this entangling and enveloping concept.

Envelopment is one of the things that categorize architecture from being different from simply being structures. An envelope is a barrier, protection against some kind of element like a shield. Perhaps an envelope could also be the multiplicity of fibers (singular lines) much like the invention of cloth and weaving. In this regard, perhaps envelopment can occur in social situations and body-to-body relationships.

I think entanglement and entrapment are good words to define the feeling in the practice of ninjutsu. Instead of techniques like punches, kicks and throws, the totality of moving between escaping (from the opponent's enveloping) and then containing and suppressing is perhaps an act of ninjutsu. Again it is a negotiation between the two poles of enveloper and envelopee and is situation dependent.

In one of the video samplings of ninjutsu, the defender entangles an attacker with a very unusual tool—the kyogetsu shoge. On one end, the kyogetsu shoge has a multi-part tool that is a combination of both a knife and sickle; on the other is metal ring. These two ends are joined by a long rope usually made of horse's or women's hair. As a weapon, this farm-rooted multi-tool is used for ensnaring, bludgeoning, stabbing, hooking and slicing. The video showcases the tool capturing an opponent through movement in space.

Juxtaposed to this, is a video sampling I took on a Sunday at a local grocery store. Sunday is their normal busy rhythm, as their sales book is included in the newspaper advertisement. In this video, the string of shoppers ensnare me in the space as I try to get a half-gallon carton of milk and get through the aisle. For some reason, the directionality of the people was going in the opposite direction as I was. I wonder if anybody held any anger or frustration with me. In some cases I was stalled completely, and in a few instances, I had to move backwards in order to make room for the oncoming traffic; in these instances, many of the people apologized before taking the right-of-way. Also, there were none brave enough to trudge through the line; one man attempted to go through, but turns around in a slight frustration, taking a different route. The rope in ninjutsu as a theme seems to rely on continuity and multiplicity. This constant barrage of people seemed to be matching in feeling to that of the rope of the kyogetsu shoge.



Figure 79: Entangled in Space Kyogetsu Shoge and Shopping Carts: 1st Row, 1st POV of Attacker; 2nd Row, 1st POV of Defender; 3rd Row, 3rd POV; 4th Row, Entangled in a string of shopping carts

Source: images by author

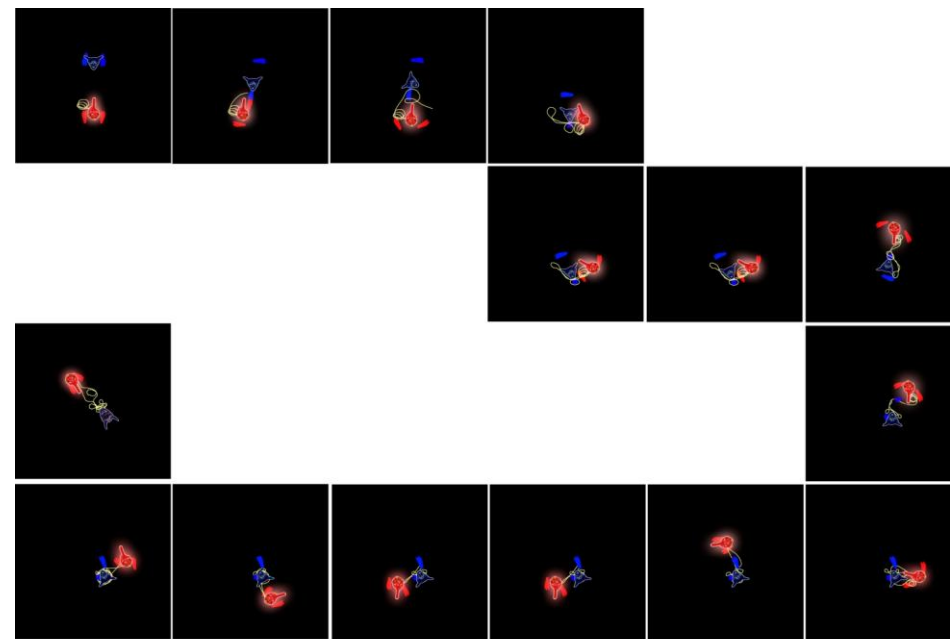


Figure 80: Plan view of Entangling with a Rope footwork

Source: images by author

Furthermore, there is a concept in ninjutsu called *nawa no kankaku*. It is the feeling of being tied up by a rope; this feeling could be also related to *kannashibari*, being frozen or stunned and can even refer to being immobilized by one's intention or spirit.⁸⁰ Also, this concept can also relate to connectedness in time and space. The people in the shopping cart example seem to use this concept. They follow the directional flow set before them, and use this to consciously/unconsciously entangle me for their advantage. The opposite lane was also crowded, so I assume other people turned around and took an indirect route. This "formation" of a flowing string sends a message to all others not participating in this directionality/intentionality—one of imposition, and a hail to victory. This is the only time I have ever seen this grocery store this crowded. I asked one of the cashiers if this was commonplace; she answered that every Sunday the new weekly ad comes out with good sales, so generally it is so. I have to argue that this was a factor, but perhaps another overlay onto this rhythm is the fact that the day of this experiment was also the day right after the big tsunami scare generated from the earthquake off of Chile (February 28, 2010). I went out to video for this very reason. I missed the opportunity to video on the tsunami day, because I was busy packing valuables from my house, which is apparently in the low-ground area; by the time I got some footage in Longs and Walmart on that day, the wave of panicking people were already waiting on high ground. My logic for filming, was that people would still be susceptible to purchase to stock up for a disaster; I do not know if this is true or not, but I was lucky to encounter such a large wave of people in such a small amount of time, in a tiny area.

⁸⁰ (Stewart n.d.)

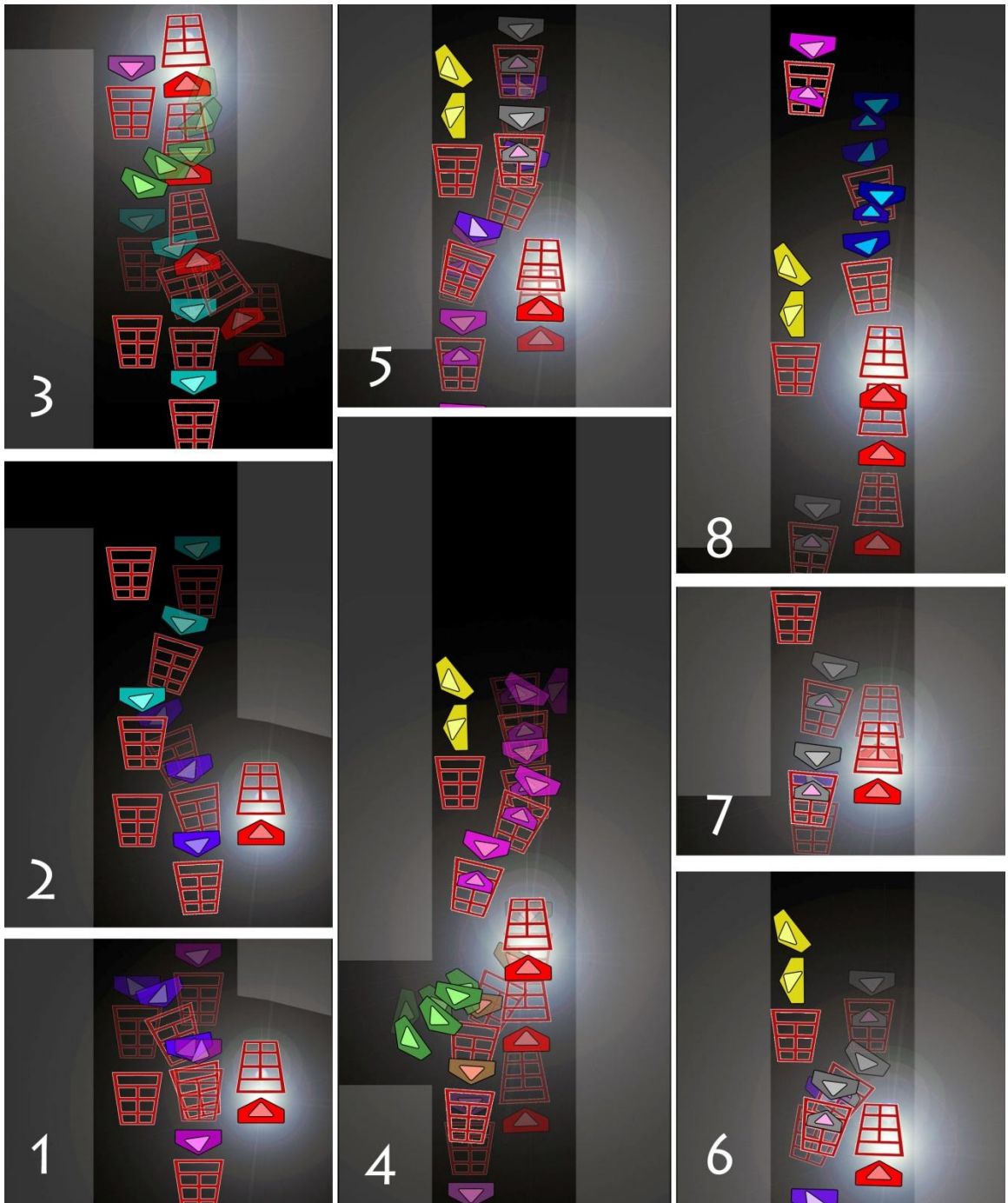


Figure 81: Plan Diagram of Entangled in A String of Shopping Carts

Source: images by author

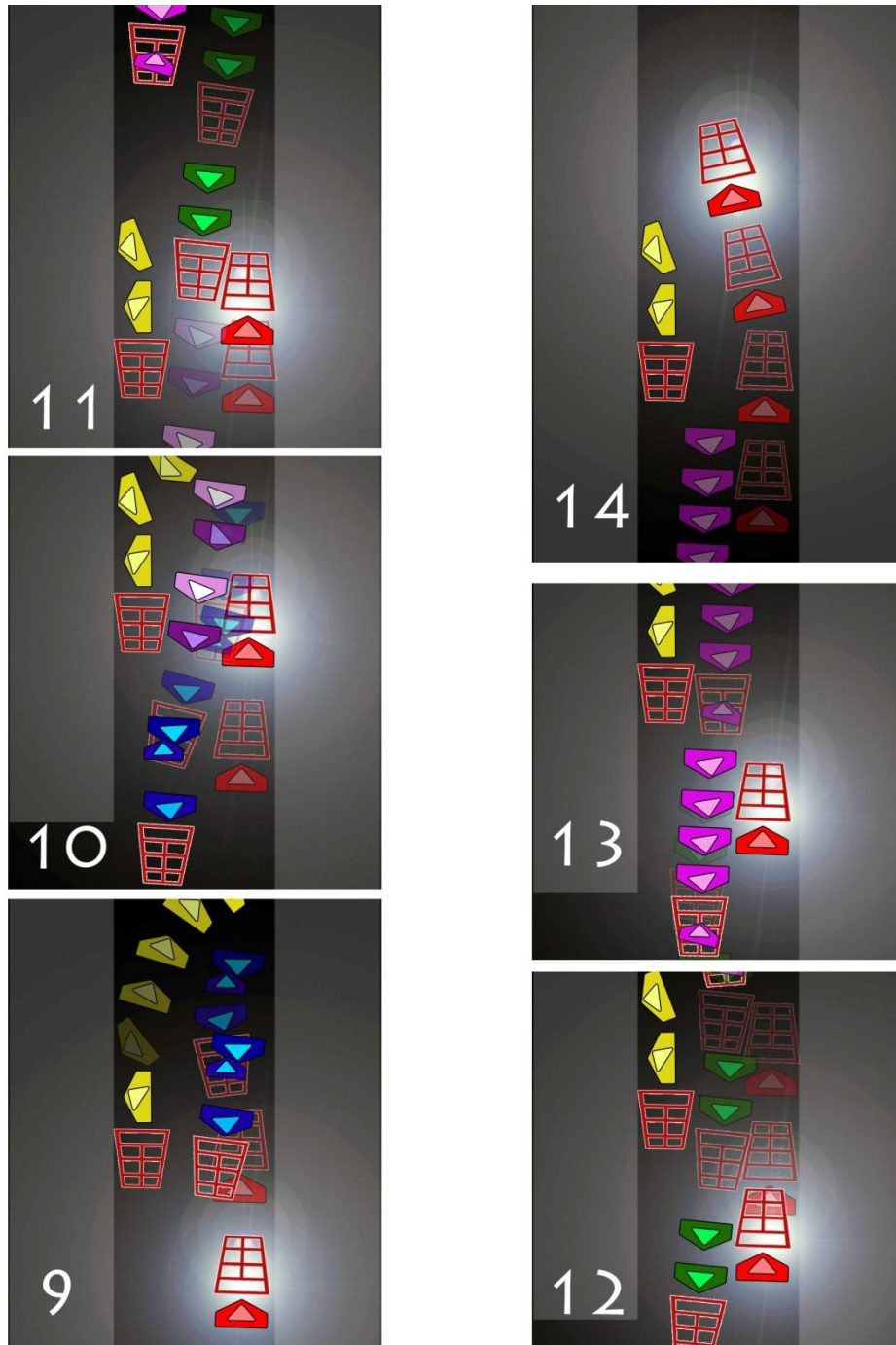


Figure 82: Plan Diagram of Entangled in A String of Shopping Carts

Source: images by author



Figure 83: Entangling Armed Attackers; Top to Bottom, Attacker 1's POV, Attacker 2's POV, Defender's POV, 3rd Person POV; Bottom Row, Shadow Entangled in Shifting Crowd

Source: images by author

In this next example, the defender uses the proper spacing and entangles the two attackers, turning their advantage into a liability. In one movement, he spins with the first attacker's movement, swinging the opponent's sword at the other opponent to stall him. He waits for the other opponent to commit to an attack, and at a good moment, the defender moves out of the way while holding onto the first attacker. This entraps the two attackers' arms. The defender then walks towards a place where the two attackers fall onto each other.

In the everyday condition, Person A walks through the crowd. Person B's objective is to follow Person A as closely as possible, like a shadow. He becomes entrapped in the movements of the crowd. Person B cannot keep up with Person A. This really shows how space is dynamic; it fluctuates as the crowd moves. It is an in-between condition that contracts and expands.

I feel that this is somewhat similar to the previous example. However, I think it is different because in the previous example, the context of situation does not allow for any movement of the envelope. In this one, there is a time delay, meaning that the first person is able to escape unscathed, but the second person following is not so lucky. This experiment was to mimic the concept of the shadow echo of the 3rd Person POV ninjutsu videos in a different light.

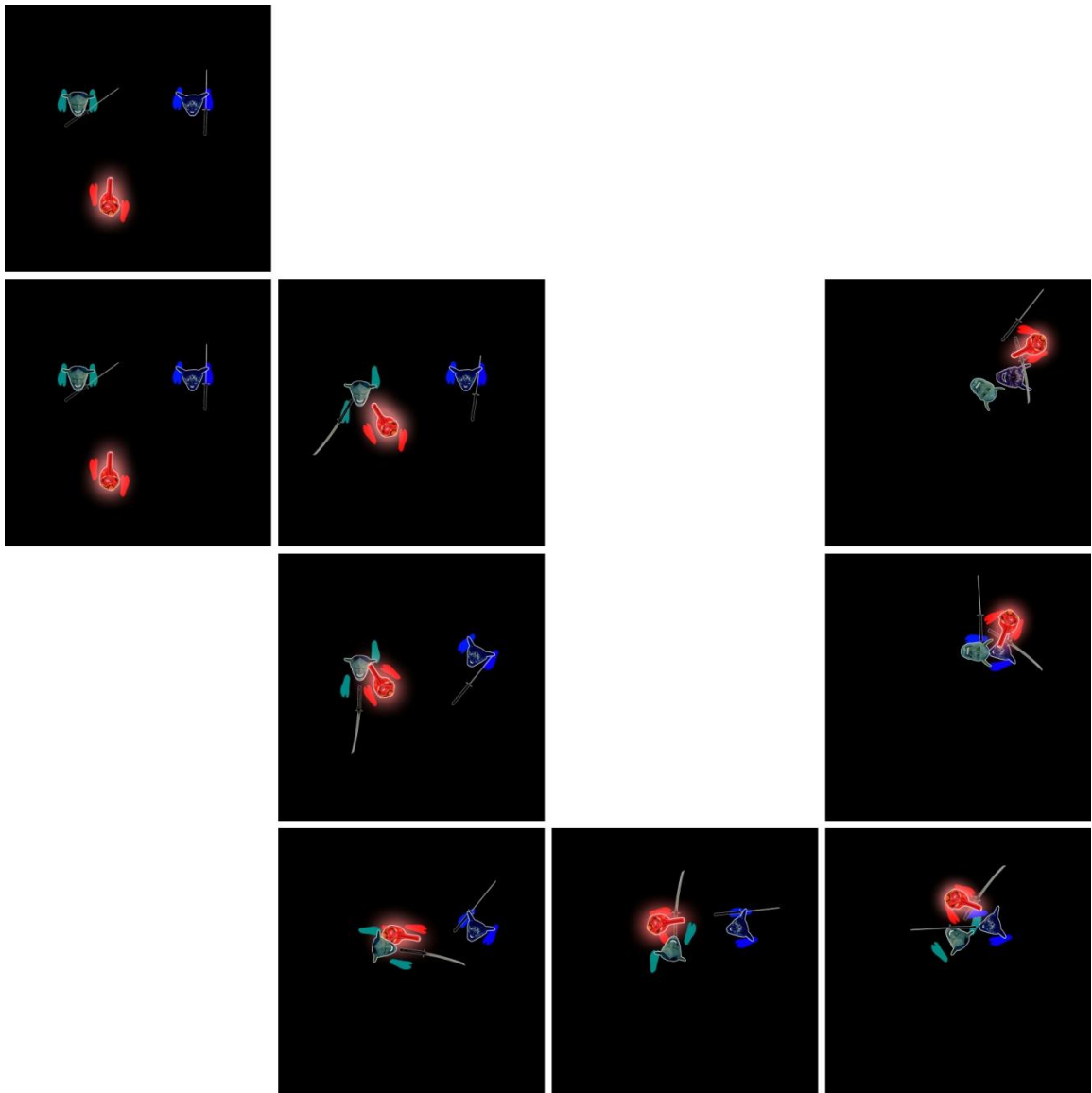


Figure 84: Plan Diagram of Entangling Two Armed Attackers

Source: images by author

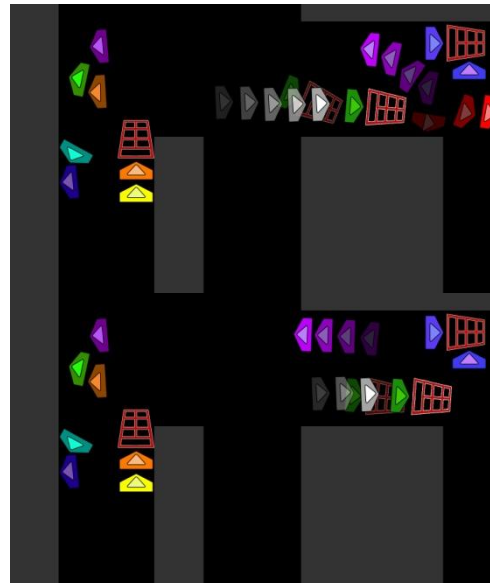


Figure 85: "Shadow" Delayed by Crowd

Source: images by author

In the film *Batman Begins*, Bruce Wayne endures arduous ninja training in a secret monastery/fortress atop a secluded mountain. In Bruce Wayne's final test, he ventures into the unknown and challenges his mentor, Henri Ducard, who hides among a rather large formation of similarly dressed ninja apprentices. Ducard submerges his identity in this sea of ninjas—like doors, the ninjas change their formation to open or close, to direct or mislead, and to reveal or hide space to Wayne. This performance of the bodies creates a powerful flux of spaces and walls. The crowd even changes from unassuming (motionless and statue-like) to aggressive (with raised swords poised to attack). After traversing through and surviving this nebulous place, Wayne eventually finds a way to use this environment to his advantage, and checkmates Ducard.



Figure 86: Subjective shots of Wayne, traversing through the shifting crowd

Source: (Bale, et al. 2005)



Figure 87: The sudden change in directionality and spatiality of the crowd

Source: (Bale, et al. 2005)

Juxtaposition of Truth and Falsehood

Kyojitsu is not just truth and falsehood. It can also mean weakness and strength, emptiness and fullness, instability and stability.⁸¹ The juxtaposition implies a *nagare* (flow) between the two poles; the rhythm of this flow is important—an abrupt, violent shift or a steady, subtle one. This is similar to the yin/yang concept (called *in/yo* in Japanese); they should not be considered separate, but two sides of a coin, each part of a whole. This flow switches from one side to the next and possible back again. When one is more dominant, the other is recessive and vice versa..

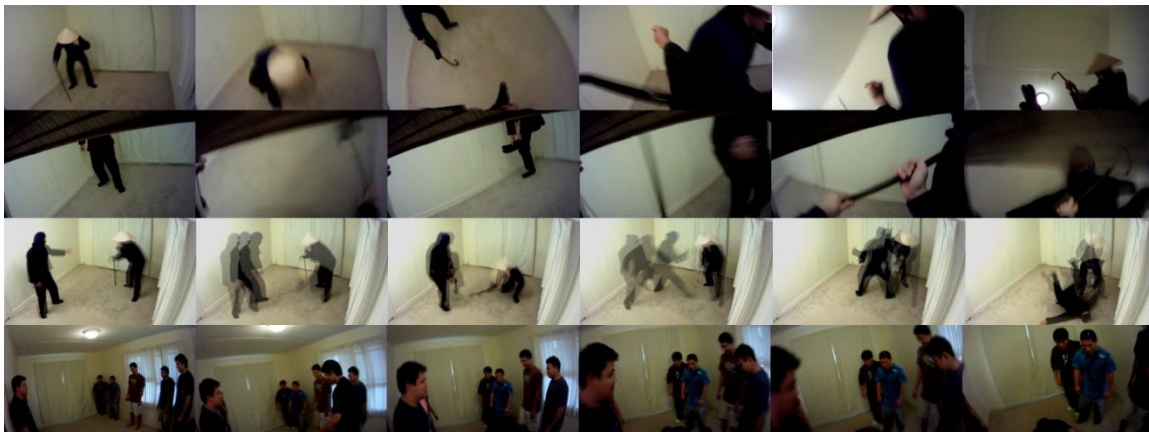


Figure 88: Defender acting as an old man and 9 Person fall down experiment

Source: images by author

In this example, the defender disguises his intentions from the façade of an old man. The preemptive defender abruptly and unexpectedly strikes the attacker's foot with his cane; the cane that appeared to be a beacon of weakness, changes into an asset. The attacker is left dumbfounded in pain. He then retorts with a punch, which the defender dodges and uses the cane again to down him. The defender then finishes him off. This use of kyojitsu keeps the attacker disoriented and dazed. He is confused by the situation. His expectations of weakness/strength and open space/closed space skews his perception of reality.

Unbeknownst to the subjects in the 9 person everyday condition, another experiment was concurrently setup in parallel to the tactical spacing. Everybody was given the order to pick a destination before the exercise commenced, and get there as they would normally. This created the atmosphere of intention and expectation. I secretly told one subject, to fall down in the middle of the experiment to capture how everybody would react to a surprise.

⁸¹ (Shiatsu.com n.d.)

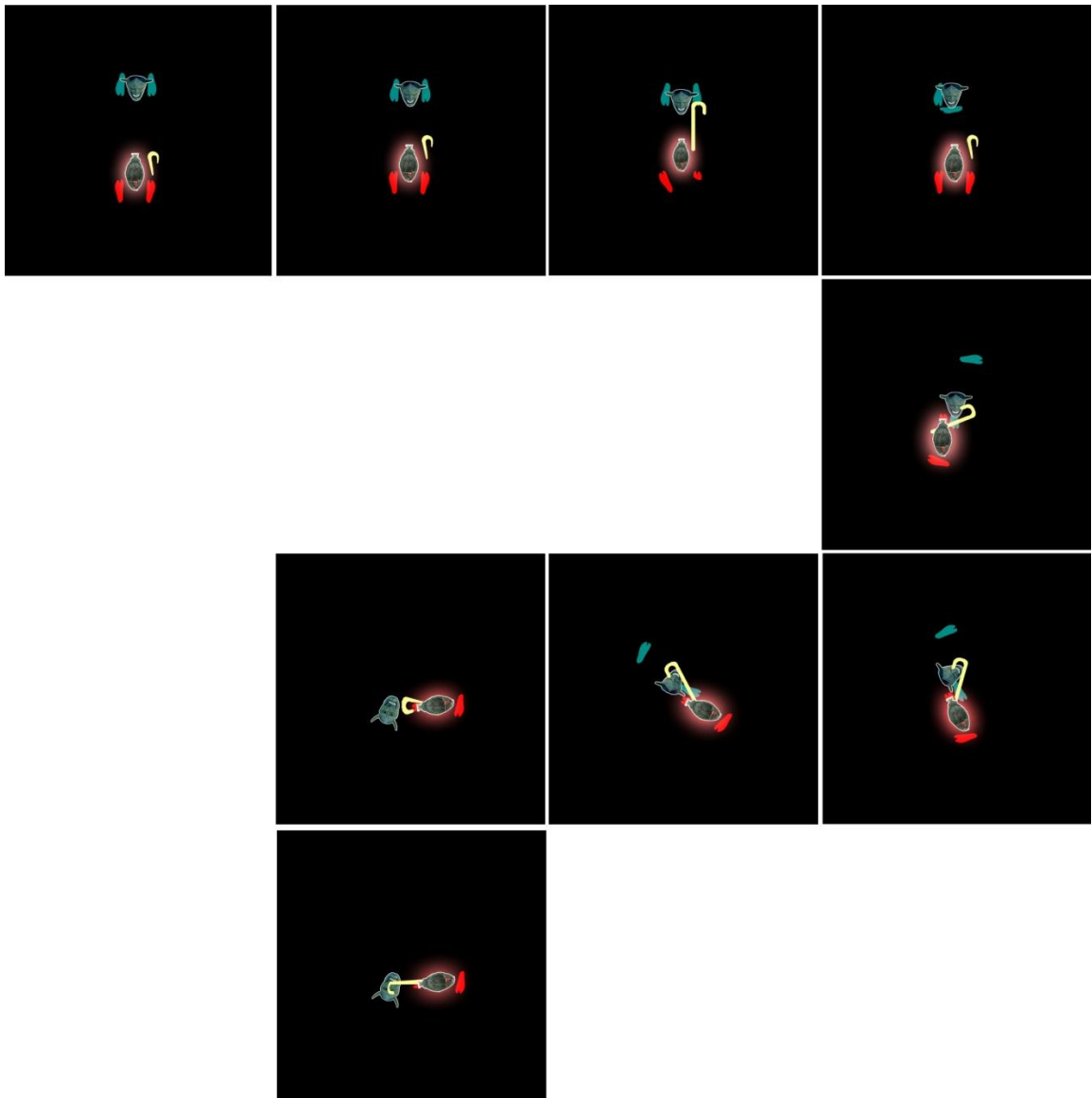


Figure 89: Hiding behind an old man disguise

Source: images by author

Ironically, everybody begins to go about the usual business in the experiment, however, when the subject falls down, everybody freezes completely. Everybody is focused on the subject, stunned. Space crystallizes for a good 10 seconds. In hindsight, I should have used this opportunity to make it through the area to my own destination, as I had the advantage of knowing more or less what would unfold. I believe I was also drawn to the spectacle and everybody's reaction to it. Everybody was completely fixated on the situation, laughing on the unexpectedness, further elongating the stagnation in space. Nobody completed their route because of this distraction (metsubushi).

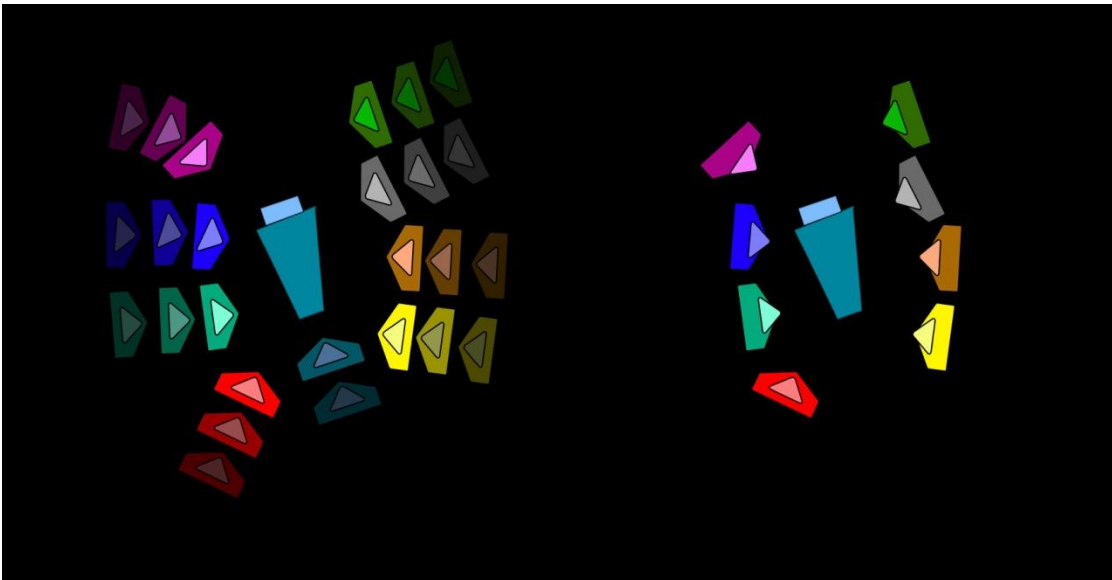


Figure 90: Plan of 9 Person Experiment with fall down

Source: image by author

Everybody had their expectations, their intentions, and I created a situation that completely caught them off guard. Similarly, in popular culture now, ironic humor has become a big hit. For example, in the show *Family Guy*, humor is generally analogous and referential to the situation being portrayed; however, it seems so random that the audience has a hard time anticipating it. As such, the humor always seems fresh, spontaneous and wide-ranged. Everything is fair game—religion, politics, pop culture, art, history, etc. The show challenges and overwhelms using something similar to *kyojitsu*. I believe that is why the show is so popular and funny.



Figure 91: Sliver of Kukan. Top to Bottom: 1st Row, Attacker's POV; 2nd Row, Defender's POV; 3rd Row, 3rd Person POV Echo Effect; 4th Row Miscalculation, then correction of Spacing

Source: images by author

This footage shows the use of the sun's glare to disorient the attacker. The use of *kamae* as a means of bait to lure the opponent and *kyojitsu* (just barely avoiding the sword so that the opponent will keep committing) is also utilized here. The opponent's commitment (his intention in motion) and expectation to hit blinds him as much as the sun. The defender barely moves out of the way of the sword, and a spatial shear is created.

In the everyday condition, two elderly people make their way to the elevator. Their intention pushes them to position themselves centered and in front of the elevator door as the elevator display signals the elevator has reached the current floor. This is *kyojitsu* as they do not really know what is on the other side of elevator doors, and their intentionality makes them even more so a victim of *kyojitsu*. As the elevator doors open, they realize they have miscalculated their spacing and have no choice but to make room for the workers with all of their equipment. However, as the workers start unloading their equipment out of the elevator (a large push cart full of tools and a full-size ladder), the elderly people realize they have misjudged their spacing and create even more distance. I think the *kyojitsu* in this is that the space is revealed from behind barriers, with the outcome of surprise.

“The perceived image projected in one's head is not necessarily the same as the actual space that exists outside. Based on time and place, a space that exists on the outside can be manifest within us as a completely different virtual image. Various transformations occur during the process through which the exterior is transmitted within one's mind. Through each transmission, different kinds of space flicker and fade in and out of existence.”⁸²

⁸² (Isozaki 2009, 150-151)

Both of these illustrate a miscalculation from a somewhat impatient conclusion. I also believe that this kyojitsu is illustrated by a façade somehow quickly lures its victims into a false reality based on an expectation of some kind of prospect. In both cases, the parties affected are blinded by some distant object/objective and place/situation/outcome.

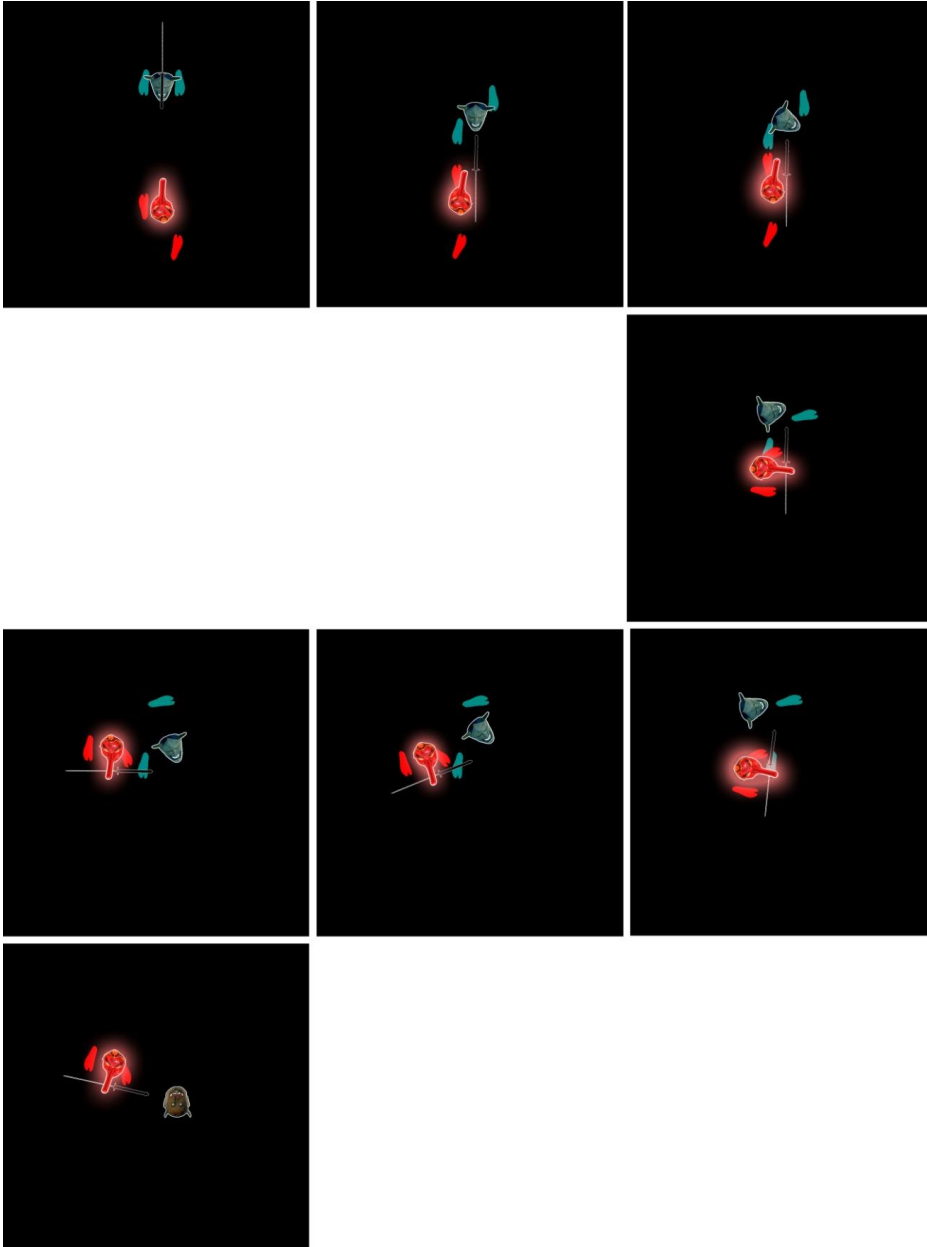


Figure 92: Plan view of Miscalculation of Spacing

Source: images by author

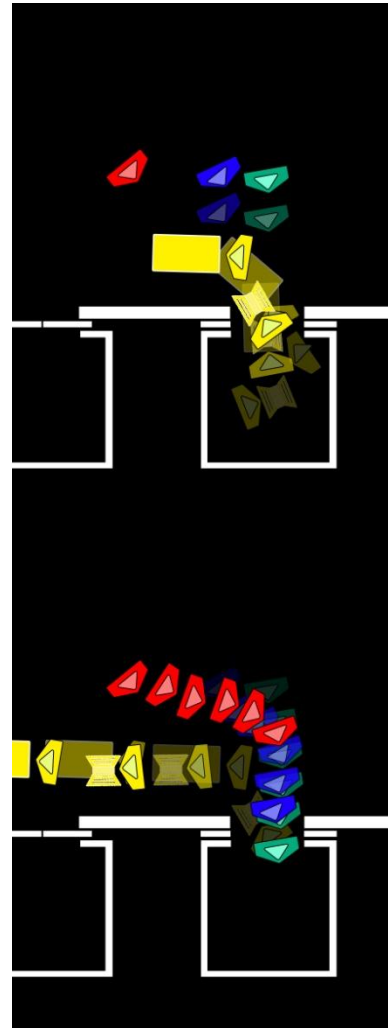
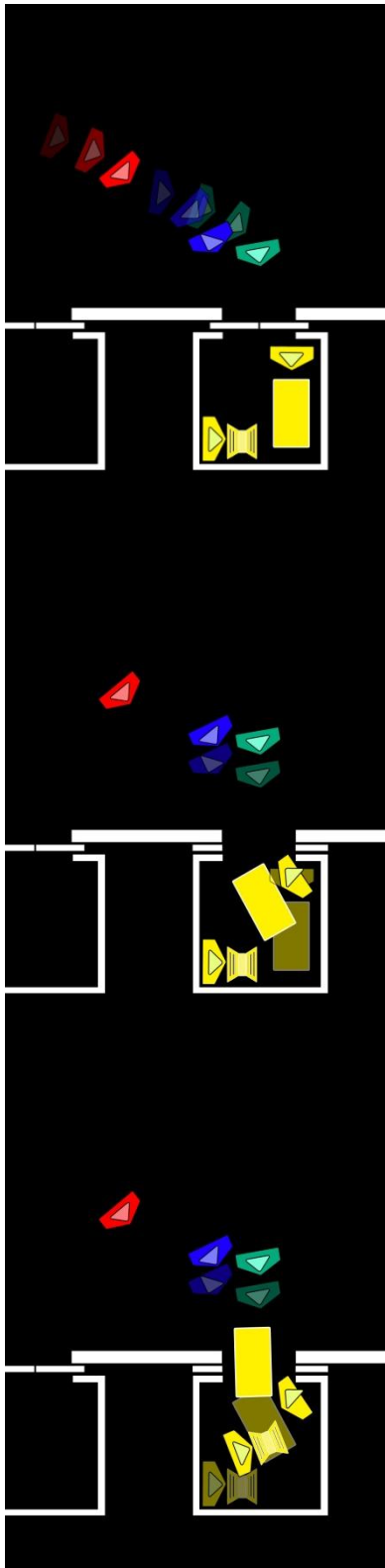


Figure 93: Kyojitsu in Perception of Space

Source: images by author

Introduction to the Second Journal Series

This is the journal for the second semester. When reflecting on the previous journal, I feel that it was a means to communicate the breadth and depth of my experimentation with different methods and mediums. It was also something to document some of my thought processes or other findings that were slightly tangential, but shed light on this project.

The journal was meant to be a fun and spontaneous collection that is in sync with the feel of this project. Unfortunately, it would be a very time consuming process to put all of the footage that I have and analyze each one. Instead only a few are put in this that brought up some interesting thoughts of space.

With that in mind, for the second semester I believe that the experimentation was more of a process of fine tuning. Also, the second half of this semester was spent editing the final video product. I believe that this is one of the reasons that the journal entries will be less frequent and more sporadic. With that, I hope to convey the same sense of exploration and curiosity.

Journal Entry 9: December 13-19, 2009

It seems to me that there are two sides to spatially understanding *ninjutsu*. On one hand, there are the movements that are played out, grounded upon the objective and real space. Then there is the ephemeral, felt, subjective experience that can overwhelm one's interpretation of the objective space. M.C. Dillon remarks similarly on Merleau-Ponty's concept of "Lived Body" and consequently space:

"Merleau-Ponty uses the Husserlian term '*Fundierung*' to describe the relations between (a) the space of actuality and (b) that of possibility, (a) given contexts and (b) constructed horizons, (a) concrete spatiality and (b) abstract spatiality, etc. In each of these pairs, there is a kind of reciprocity: whereas the second (b) is derived from, grounded (or founded) upon (a) the first (which is regarded as prior, primordial, "originary"), by virtue of the process of sedimentation, the second returns, as it were, to the first and informs it. Although *Fundierung* involves reciprocity, it is not a symmetrical relation: the founding term (a) grounds the founded (b). Accordingly, the bodily intentionality instantiated in the first terms of the pairs listed grounds the categorical intentionality instantiated in the second terms."⁸³

The body's experience of the world lies in both objective and subjective space. It seems that the fundamentals of *ninjutsu* lie in understanding the objective, real space (perhaps this is one aspect of the *omote* or front-side of the training) and later, the subjective, felt space (perhaps the *ura* or back-side of the training). Perhaps it can be said that the higher levels of *ninjutsu* is about stretching, pulling, warping, shifting, and twisting the fabric of space and especially the opponents' perception of it; or perhaps is intertwining the two, and/or traveling between these realms. *Ninjutsu* is first and foremost born out of the *kukan*.

"It is common sense that if it is strength versus strength, the stronger will win. But when you work within the world of *kukan*, even a small and physically weak person can prevail."⁸⁴

~Dr. Masaaki Hatsumi

⁸³ (Dillon 1988, 137)

⁸⁴ (Cole and Hatsumi 2003, 254)

Ninjutsu then transforms and evolves into an ethereal and ephemeral. At the highest level, it becomes invisible and mystical.

I think that this semester was a mixture of both, and appeared in the films, and is starting to make its way in the experimental models. The body traversing spaces—its own space, the opponents' spaces, and the surrounding space has been a key exponent of this study. It is a strange paradox to capture an art of invisibility, and make it visible. Concurrent to this project, I have also started a small training-group (*shibu*) that practices on campus; it is a very small group, but nevertheless it is always fun and rewarding. I have used the findings in this paper to illustrate *ninjutsu* as teaching points. I hope that these points also help illustrate the essence of the body, space and movement that perhaps can help architects.

The *nin* in both *ninja* and *ninjutsu* means endurance and perseverance. This is one of the key concepts in the practice of *ninjutsu*. For example, some of the highest ranked, most skillful, and most respected practitioners of *ninjutsu* have stopped their quest for self-improvement; unfortunately, they have stagnated so much they no longer hold their prestigious positions. The important message is to keep going. For the first few months that I started training with Fraser *sensei*, he reminded us, "Enlightenment is in your feet...The most important step is the next one...and the next one... and the next one..."

Journal Entry 10: December 20 2009-Januanry 10, 2010

In the beginning of this period, I still have no idea where I wanted to take this project. The options were many, and I just could not decide how to relate ninjutsu to architecture. The anxiety is building, and I am wondering what to do. Ironically, nightmares of my project stuck in limbo haunt me. I borrowed some books on Lebbeus Woods with his intricate piping work that show a multiplicity of borderlines. I have a strong desire to build something, or design something with the intention of building.

I exhaled and stepped back from my ego.

Where is this project heading? What is it lending to? What did I do last semester?

I have come to the decision to translate my topic of tactical space and search for examples in the everyday condition.

Now I just have to think up a way of how to capture space anonymously with the same camera (medium).

Wearing the airsoft mask will probably get me arrested. I watched a video recently where a girl orders at a McDonald's drive-through with a robot helmet on (Optimus Prime from Transformers) and gets her license plate written down and the cops called on her.

I tried tying the camera to my head. I also tried putting a netting or beanie in an attempt to conceal it, but it is very noticeable.

What would be a ninja way? Perhaps this would help me capture everyday space in its pure unaltered forms.

While wearing a black tee-shirt, I hid the camera under my armpit. I also tried hiding it in a black fanny pack slung over one shoulder; the footage of this is not as good, but it does conceal the camera a lot more.

Journal Entry 11: January 10-31, 2010

Generally my filming process in the everyday was based on feeling. I would observe a space, and if I would see something in the making, I would turn on the camera and walk through the space. Many decisions on filming were spontaneous. Honestly, in the beginning, I looked for the most crowded and dense condition. I just wanted to see how a multiplicity of people would interact and navigate through space via negotiation. One of the videos, the one of hidden door, was an unexpected epiphany. While filming in Ala Moana, I realized that we were walking behind two unrelated people and were using them as shields from oncoming people. This concept was translated from the first semester, and found in a variation in the everyday. After this realization, I found more variations of this concept. This would be the process as to how to relate last semester's work with this one.

While filming constantly, almost 2-3 times a week of social situations illustrating tactical space, I also ran into some unexpected filming that I do not know where to categorize. They were very interesting, but do not relate to last semester.



Figure 94: Frozen Street Performance

Source: images by author

The first example is a McDonalds street performance that advertises their new frosty drink. The street performers will walk around the downtown area, acting normal until their leader (dressed up as a construction worker) will blow the whistle. The performers will then freeze in place, with whatever everyday action they were caught in. Their frozen positions crystallize space, and affect the crowd. The crowd, sometimes are unaware trying to figure out the situation; they realize, upon close inspection, the ice formations on the performers' bodies and the frosty McDonalds Drink in each performer's hand that a show is in place. Also, McDonald's workers, all wearing blue shirts, pass around a free drink coupon around the chaos to further reinforce the appropriateness of the spectacle.

After this example, my friend and I tried some "performance" type videoing. I would intentionally do social faux pas and film it. In one example, I filmed going up the escalator, and then turning around, feigning like we forgot something, going back down the escalator (in the wrong direction).



Figure 95: Changing Direction on an Escalator

Source: images by author

In another video session, I went the wrong direction on an escalator. Unfortunately, the facial expressions of the Japanese tourists are not shown, but they actually gasped and were shocked and probably even appalled.



Figure 96: Going up the Wrong Way on an Escalator

Source: images by author



Figure 97: Facing the Wrong Way in an Elevator

Source: images by author

In another example, I enter the elevator and face towards the rest of the crowd. They did not seem to mind, even though I was staring at them. However, at one point, the family notices my slung camera and even points to it. One of the girls says something to the effect of “Now I feel so uncomfortable.”

I remember when I was growing up, video games was a dorky counter culture; if one was a hardcore gamer, generally one was poked fun at. While it was somewhat popular, it remained on the sidelines. Today one cannot even escape the presence and influence of video games and “dork” culture. Technology is the new pop culture. Dorks, geeks and nerds are now the forerunners of this movement. Films like Iron Man and Dark Knight even show heroes with the latest gadgets and gizmos and clearly mark this technologically obsessed era.

Running somewhat parallel to my study, and this journal entry, there is a funny video collection by a group called Mega64. Their objective is to blend the world of video

games with reality. They achieve this by using game play elements and quirks, and re-enacting them in real life, in front of real people in the everyday.

It is a real treat, as they commit fully without dropping character. Sometimes they only speak from the range of lines from the game's program. In others they do movements only found in the game. For example, in one game, Metal Gear Solid 4: Guns of the Patriots, a lone warrior, Old Snake, needs to infiltrate the enemies' base and stop their new weapon of mass destruction. "Old Snake" from Mega64 dive rolls, hides under bus stop seats, crawl slowly in broad daylight, and hiding behind lamp posts in outfits that match the characters in the games, all in front of unsuspecting crowds. The outcome is hilarious, as most people simply have not played the video game.



Figure 98: Left to Right, "Old Snake" sneaking in a staircase, "Old Snake" hiding under a bench, "Old Snake" dive rolling in front of a bystander

Source: <http://www.youtube.com/watch?v=P2ZFA4me4iw>

The other important character is Raiden, who is generally seen only doing acrobatics in the game. As such, the Mega64 "Raiden" only does cartwheels and odd leaps in front of groups of people. In one funny part, "Raiden" does cartwheels across a crosswalk amidst pedestrians.



Figure 99: Left to Right, "Raiden" cartwheeling in front of a group of people, "Raiden" cartwheeling in a crosswalk, "Raiden" leaping before accidentally bumping the guy on the phone

Source: <http://www.youtube.com/watch?v=P2ZFA4me4iw>

Journal Entry 12: February 14-March 13, 2010

Civic space is a socially constructed space that is dependent on the relationship between people or species. It is based on order, etiquette, and conformity of peers. It seems that in most cases, civic space also has directionality for ease of movement of its inhabitants.

Civic space revolves around negotiation and etiquette. For example, people give right-of-way to disabled persons and elderly, or people delivering or carrying large packages; usually this involves constructing and crystallizing spaces so that they can pass easily through.

Civic is related to the affairs of people usually in a city; perhaps then, it can be said that each city has its own cultured space. For example, in Tokyo, Japan, escalator space has its own constructed etiquette. People not in a rush, line up on the left-hand side; this creates an open speedway for people on a time sensitive schedule. Interestingly enough, the etiquette reverses (yet with the same concept) in Osaka, Japan.⁸⁵ In comparison, Oahu escalator civic space is generally a first-come, first-serve space where people just wait in line. There could be many factors in this. Tokyo's area is 2,167 square kilometers with a population of 12.36 million (as of 2003); compounding this fact is it is a very dense city at 13,416 persons per square kilometer.⁸⁶ Honolulu's area is roughly 220 square kilometers with a population of 374,676; its population density is roughly 1,674.4 persons per square kilometer.⁸⁷ Another factor is the means of transportation: the majority of people ride on subways and trains in Tokyo, whereas the majority of people on Oahu travel by car.

In a 2006 escalator research, Japan is in third place for number of escalators per country (trailing behind China and Europe); comparatively, the USA is in sixth place with



Figure 100: Escalator etiquette in Tokyo, Japan

Source:

http://photos.smugmug.com/photos/31056374_1_fpZIU-M.jpg

⁸⁵ (Asian American in Tokyo 2008)

⁸⁶ <http://www.chijihon.metro.tokyo.jp/english/PROFILE/OVERVIEW/overview2.htm>

⁸⁷ <http://www.city-data.com/city/Honolulu-Hawaii.html>

roughly half of Japan's amount. This research also illustrates the fact that 40% of world's escalators are used as transit service, another 40% servicing commercial purposes, with the last 20% or so used as moving walks; roughly half are used at airport or transit terminals with the other half being used in hotels, leisure facilities, office spaces and residential buildings.⁸⁸ Japan's landmass is roughly 377,825 sq km; comparatively the USA is roughly 9,629,091 sq km, and China is roughly 9,596,960 sq km.⁸⁹

The elevator is a place that challenges personal space. It is a hyper dense space. Interestingly enough there are studies of unwritten elevator etiquette. Some rules include not use the elevator for just one floor, especially during peak traffic times (exceptions are for elderly, disabled or injured; people with carts, strollers, or large packages), allowing others to exit first before entering, examining the crowdedness before entering, control panel manners, proxemics (spacing between others) once the doors close, and exiting protocols such as announcing arrival at one's floor (so that others may make room).⁹⁰

One of the cardinal rules for boarding an elevator is to allow the people to exit first. This is a simple right of way based on time-prioritization (first come, first serve or first in, first out). This is both a spatial and temporal based rule. This is further translated to both tactical and civic spacing. Tactically, it is important not to stand directly in front of the elevator doors, as there is no way to tell what is coming out—a large crowd, movers carrying out furniture, etc; standing directly in front of the doors could be potentially dangerous as a behind-schedule person could dart out as soon as the doors open, or movers carrying out heavy items may walk backwards out of the elevator (spatial fitting purposes) and because of their attention on other things can cause a collision.

Civically, standing in front of the doors (especially if the elevator is full) can lead to stagnation in space; there is a pause in the movements of both the entering and exiting parties. I have encountered this many times at elevators at my work place and doctor's office. At first I thought this may only happen in low traffic areas, but I also encountered this at malls and other crowded areas. Perhaps this is more acceptable in Hawaii because of the lower density and it only affects a couple of people.

I rarely encountered this in Tokyo. Perhaps the tactical and civic spacing for waiting to enter subway trains (which are quite similar to elevator doors) in Tokyo may offer a solution. In Tokyo, Japan I noticed that general location of the train doors (where the train stops) are marked on the platform. The people wait in a double-file line along this marker, until the train arrives; when the train slows and the doors start to align, an ordered choreography in space begins—the line of waiting people further bifurcates,

⁸⁸ (AAP: Alternate Advertising Possibilities 2007)

⁸⁹ (Mongabay 2008)

⁹⁰ (ElevatorRules.com n.d.)

creating walls that enclose a channel for the exiters of the train. This not only marks the space so that others instantly know the purpose of the configuration, but reserves a prioritized order in space. I am certain that this occurs in Tokyo because of the density and is maintained through its very own use (social learning). This spatial reservation of right-of-way is very important and prevents tangled space.



Figure 101: Construction of Civic Channel in Tokyo Subway

Source: http://www.youtube.com/watch?v=i-3f48a_G3k&feature=related

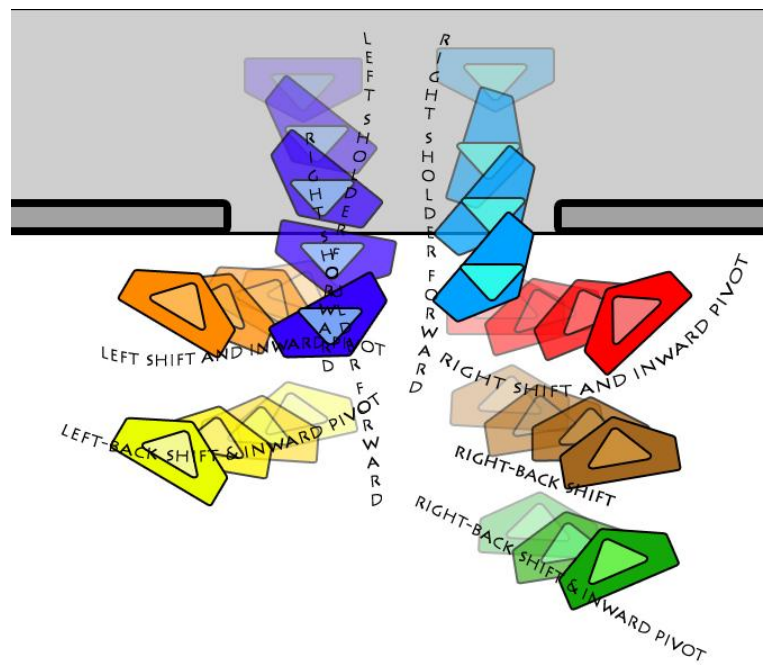


Figure 102: Construction of Civic Channel in Tokyo Subway

Source: image by author

Poor civic spacing for waiting in front of an elevator can create a snowball effect. For example, a person standing in front of the elevator doors could become entangled in the space if more people arrive on the scene. These people may enclose off the space and box-in the civic-spatially challenged; if a less than amicable situation opens up, the outsiders may have to make space for the blocker to move so that the exiters can first clear the elevator, and consequently the enterers may go on with their daily lives. In a denser situation, perhaps even the outsiders near the door may also become entrapped by newly approaching outsiders exponentially exacerbating the situation. Also the people furthest away from the epicenter, will not know what is going on and will wait in space; only if a line of communication (verbal or kinesthetic) is established will people be able to properly choreograph a solution.

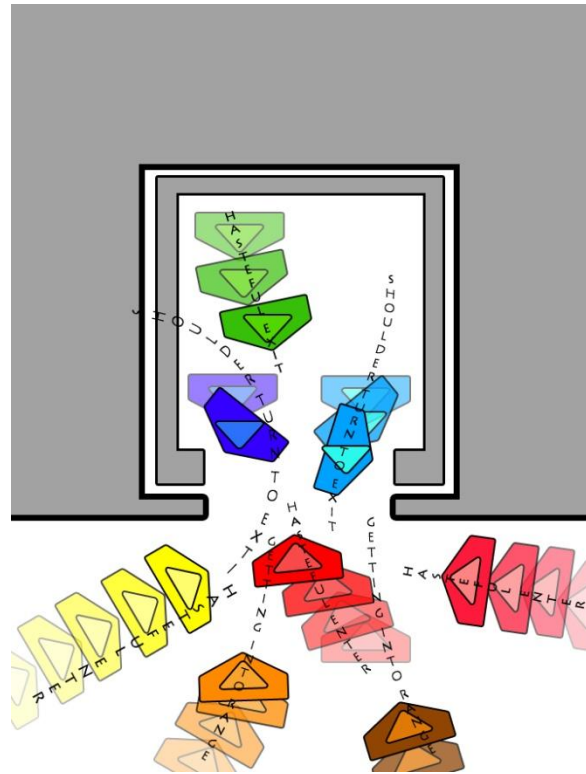


Figure 103: Elevator Entanglement

Source: image by author

I encountered a similar situation while driving around to park on a Friday night in Ward Shopping Center's parking lot. The white car in front of me, drove really slow and halfway passed a car going out. The driver realized this too late, but decided to reverse to take the stall. I was already locked in space as car congestion built up behind me. The car going out had trouble, as the space provided was too little; this was compounded by oncoming traffic in the opposite lane. The driver in the white car adamantly held his position. Eventually, after about 10 minutes, the white car was able to take the parking stall; however, this extremely bogged down traffic with 3 floors filled with stopped cars (also this does not include the traffic slowdown coming down from the upper floors). This decision was made out of desire to fulfill his ego. In terms of tactical spacing, this was probably the best decision for the driver in the white car as parking was extremely limited and it was a very close stall; civically it was a horrible decision as it stalled at least 6 half-level parking floors each filled with approximately 6 vehicles with 1-4 people for 10 minutes (roughly 360-1440 total minutes). I was extremely angry and I am sure that the people in the immediate cars behind me also felt the same way; the people further down the line were probably angrily wondering what was going on. This is a prime example of stagnation in space in a social setting because of a single, simple civic faux pas.

Journal Entry 13: March 23-April 10, 2010

In ninjutsu it is said that the relationship between the hand and feet is *kyojitsu*. The rationale is that the feet set up the actual, objective spacing; they generate all of the “power” of any movement. In this regard they control the points of leverage, the proper spacing, and situate the body to a place/location. The hands are somewhat window dressing. They distract, they lead, and they spark out intention. I also must say that can connect. Truly though, everything is in the legs and feet. This is why some people call it *ashijutsu* (foot art/science). This is an important point. Perhaps the ninja plan diagrams should be footwork. This illustrates the true space and how the feet set up for the next movement.

Also when I was thinking about it, the eyes are a very important aspect as well. *Metsubushi* (eye blinders/distracters) was one of the main concepts in the first part of the paper. This is also related to *kyojitsu*. The eyes are important because phenomenologically and physiologically speaking they allow us to see the future. It is the only device we have that, while we are moving/walking, we can use to observe a rock on the sidewalk to avoid to prevent a trip and a fall. If the tactile, olfactory, and taste senses the immediate and the now, then the eyes see a bit further. The ears do the same, but not as much. The eyes in a way can be a problem, as we try to search too far into the future, but generally they are one of our greatest assets.

To model this, I used a *tengu* (long nosed demon) and two *oni* (ogre) Japanese masks to model the ninjutsu footwork plan diagrams. The ninja were long associated with the *tengu*, who were mystical *yamabushi* (mountain warriors) that could fly and do all sorts of trickery and magic. The long phallic nose of the *tengu* also exemplifies a strong intention of ferociousness, while also being quite ironically funny.

Masks in general are associated with acting, which is further associated with the ninja—who role-played to fulfill their espionage and information gathering spy craft. These masks evoke a sense of playfulness, while also being quite serious and possibly scary. I chose masks that illustrated this. There is an old Japanese proverb of training: cry in the dojo, laugh on the battlefield. I believe there is nothing scarier than an opponent with the confidence to laugh even when on the borders of life and death. There is a sense of mystery in this with a multiple meaning of exterior and even interior and the relationship between both.

Journal Entry 14: April 11-May 1, 2010

For the introduction of the video, I chose the song *Wooden Ship* by Uttara Kuru. I have always loved this song, ever since I heard it in 2005. It has a *shakuhachi* (bamboo flute) that plays against an acoustic guitar. My ego always wanted to use this song in something—a presentation or video. There was no guesswork for that. However, I needed for this song be an appropriate choice. I put it as the introduction song as my first choice. In the video, I describe some of the history of the ninja and give definition of space as a product of Japanese and Western culture. Ironically, in parts of the song, the shakuhachi and acoustic guitar take turns moving into the background and foreground; the bits of Western space comes in when the acoustic guitar is more prominent and the same goes for Japanese space and the shakuhachi. They take turns playing, with both definitions juxtaposed. It was this realization that I changed my title from “Architecture + Ninjutsu” to “Architecture Vs. Ninjutsu”. It fit better with concept of ninjutsu and the juxtaposition factor. There is a sort of ebb and flow and negotiation between the two instruments as well. This brought to mind that the ninja’s art is one of flowing negotiation between fight/flight. I added this to the title as well.

The next song I chose was *Obokuri Eemui* by Asasazki Ikue. The song has a much melancholy in it. An older lady sings about an ordinary life passing by with piano playing. Ironically, the life she sings about is a traditional, folk life that is rare to find in Japan; the sense of everyday is thus juxtaposed with awe and wonder. The lyrics are as follows:⁹¹

arayashikiku no dei	(in search of a new land)
harasaku baku no dei	(let's build a new house)
hare fushigyurasa neiyuku	(by neatly gathering hay)
surajifushiro yondo	(to thatch the roof)
hare fushigyurasa neiyuku	(by neatly gathering hay)
fushigyurasa neiyuku	(neatly gathering hay)
surajifusero yondo	(to thatch the roof)
kirishigaki ku no dei	(at the stone walls)
kuganeya be tatei tei	(let's celebrate the golden house)
hare momo tobyuru wakya	(that was built)
ya uriba yuwa o yondo	(by a hundred carpenters)
hare momo to byuru wakya	(that was built)
momo to byuru wakya	(was built)
ya uriba yuwa o yondo	(by a hundred carpenters)
hateigachi ya naryuri	(August draws near)
tobibani ya neranu	(but I have nothing to wear)
hare utou katabani	(I want to dress up)

⁹¹ (o-happyday-872 2006)

ya karachitabore	(brothers, lend me a sleeve)
hitotsu aru bani ya	(I want to dress the children and those I love)
kanasha se ni kusuitei	(with the single kimono I own)
hare wanu ya okuyama	(I will wear vines)
nu kazuradasuki	(that I picked deep within the mountains)

* Note: In August, the major holiday is the Obon festival, from August 13-16.

ojyuugoya no teiki ya	(the full moon shines)
kami gyurasa teryuri	(far and wide like the gods)
hare kana ga jyo ni tataba kumo tei taborei	(when my lover comes to visit, I wish the clouds would hide it a little)

The song was chosen for the final part of the video with the juxtaposition of Grandmaster Hatsumi and the Children playing in space.

Another important song that I chose was for the section on Entangling with a Rope and Entangled in a String of Shopping Carts. I chose the song by the Yoshida Brothers. This song is an instrumental one, featuring the exemplary shamisen (it is a traditional three stringed, guitar-like instrument). The song has a lot of individual plucking sounds. Whenever I heard this song, I felt like getting entangled in all the individual string plucks—spinning round and round in a knotted ball, completely spellbound. I felt that this was a similar feeling to this.

At this point in time, I feel that these are the three most important pieces to this video: the beginning, the middle and the end of the video. The middle portion is probably the most humorous, animated, and conceptually analogous between the everyday and ninjutsu. If I run out of time, these three will be in the video no matter what.

Part 3

Conclusion

A Rigorous Exercise in Translating Spatial Concepts

This research project has been a study of spatial negotiation—how a body navigates in the gaps of other bodies. It seems that both means of negotiatory navigation uses the body’s natural capacities to feel through each unique and changing situation. The concepts categorizing this study, originally from the practice in ninjutsu, are translated into equivalent everyday conditions.

Three of the concepts, Tactical Spacing, Hidden Door and Enveloping are means that people use to negotiate space. The fourth concept of Truth and Falsehood is bit mysterious and more advanced. I assume that people may use this means to navigate space, but have not found any yet in my documentation of the everyday. Instead, I found evidence of Truth and Falsehood occurring in the everyday situations; generally the people being videotaped are unaware of the concept, and thus do not employ it. It could also be that trickery and deception are modes of thinking usually associated with evil or bad beings—Satan, Loki, and historically the ninja. This is especially evident when truth, righteousness, and sincerity are considered the pinnacle of morality. This further reifies the fact that the art of the ninja is a unique one that immediately identifies that one cannot exist without the other, and perhaps it is universal justice to understand and employ both. Thus it seems to be a rare and difficult concept to document and find in the everyday.

In Japan, ninjutsu seems to be taught conceptually. For example, a *te-ma* (or conceptual theme) is chosen for the training session; this concept frames the movements practiced for the session. The *te-ma* is perhaps akin to a model, which is then manipulated and transformed into an infinite amount of variations.

A basic concept is that of *omote-gyaku* (outward reversal or twist), which usually refers to a wrist-lock throw; however, this can also refer to anything that turns the body outwardly (changes his orientation and shifts his body out of normal/natural position so it makes it difficult to impossible to counter attack)—this could mean *omote-gyaku* of the neck and head, or shoulders or perhaps even legs/knees and ankles.

The multitude of variations of the *te-ma* provides important vantage points—these different perspectives in turn provide a comprehensive definition of the concept. This type of angling is also found conceptually in ninjutsu. For example, the basic



Figure 104: Superimposition of Hidden Door and Tactical Spacing Concepts

Source: images by author

omote-gyaku to the opponent's right hand can be applied by taking many different angles (within 360 degrees) relative to the opponent. By moving to different places, one realizes that the omote-gyaku has to change slightly to be effective. This is coupled by the fact changing the factor of distancing. With angling and distancing, one needs to then superimpose the concept of Tenchijin (three levels of higher, lower or same level) in order for a three dimensional model of space begins to appear.

From this exploration of spatial concepts, in an interrelated study of ninjutsu and architecture, I believe that the basic movements in ninjutsu serve to control the space. For example, by using the concept of omote-gyaku, the opponent's body is turned outwardly; this can be used for positioning as the opponent is placed as a barrier between oneself and another opponent. Ura-gyaku (inward reversal or twist) is the opposite of omote-gyaku. Perhaps it can also be said that there can be an ura-omote-gyaku where one takes the wrist-lock form of omote-gyaku, but moves so that the opponent's body moves inwardly. There are infinite variations by just mixing these two basic concepts and changing the spacing.

I would like to note, that the concept of omote-gyaku and ura-gyaku are two of the eight foundational movements in ninjutsu; their simplicity helps illustrate the fact that ninjutsu is conceptually conceived. It has not been mentioned previously, because currently I feel it is more of a technical means or tool to accomplish a goal—for survival, to position properly, or to suppress the opponent. The four key concepts mentioned previously in the paper, I feel are tactical—they speak more about spatial positioning to insure an advantage

Space is also a bridge of interaction. Perhaps space is the in-between condition—a threshold between at least two polarities. For example, Tenchijin (Heaven, Earth and Man) could also signify that man exists in the gap between the universe and earth. Ken/hari ma is the basic measure of space in Japanese architecture; this space between two points (generally columns) is the



Figure 105: Superimposition of Hidden Door, Truth/Falsehood and Entangling

Source: images by author

module that even the tatami mats are sized upon.⁹² The concepts of Tactical Spacing, Togakure (Hidden Door), Hoko (Enveloping), and Kyojitsu (Truth and Falsehood) are of spatial relationships. These are contextual and situational to at least 2 or more people and a spatial type.

Tactical spacing is the act of positioning one's body in a place that offers the greatest amounts of advantageous outcomes. This is determined by the changing of distance between bodies, the angling between bodies (also includes the directionality and intentionality of bodies), and the timing, how the spatial gaps change and flow.

Similarly, tactical spacing in the everyday is a process of negotiation between giving and taking space. The gaps in the crowd shift and change—the quickest path is not necessarily the most direct nor the easiest. Sometimes it is better to wait for an opening, sometimes it is better to contort and expand one's own body to fit between other bodies, and sometimes the only possible path is to reroute and loop around the crowd. This process of negotiation is also determined by the given space and its qualities and features.

The concept of Togakure or Hidden Door is the act of using something as a barrier to hide behind. When danger is no longer a threat, the dynamic nature of a (trap) door is utilized between the opening and closing of spaces. It is the threshold condition of dynamism between sets of two polarities: inner/outer, safe/dangerous, and closed/open. This is a shade of tactical spacing.

Hoko or the act of enveloping is a concept in ninjutsu where instead of fighting an opponent head on, one surrounds the opponent to place him in spatial captivity in order to suppress his will and ability to fight. This is also another shade of tactical spacing.

Lastly, the concept of Kyojitsu or Truth and Falsehood, is perhaps the most subjective concept of tactical spacing. It fully relies upon directing the opponent's directionality and hiding in his unawareness. It is a juxtaposition of both truth and falsehood, but can also mean juxtaposition between other concepts such as dark and light, invisible and visible, and perhaps even subjective and objective space. It is a play of perception that occurs within the space. Kyojitsu is a stratagem—"an artifice or trick in war for deceiving and outwitting the enemy" or "a cleverly contrived trick or scheme for gaining an end."⁹³

These concepts are not separate, but are very much related. Utilizing correct distancing, angling, and timing creates a safe position (space) for theatricality to blossom; disappearing and reappearing is the specialty of the ninja. Following this, hiding behind (Togakure, hidden door) a false façade, the opponent is ensnared (Hoko, enveloping) within an illusory perception of reality and the truth emerges into the space at a timing that catches the opponent off guard (Kyojitsu) and he is thus easily defeated.

⁹² (Nitschke 1993) insert page number

⁹³ (Merriam-Webster 2010)

For the superimposition process, I used the three videos and displayed them separately, giving each their own space. I then began to enlarge each one (to full screen) simultaneously centering them. The video shows the aspect of hiding behind a tree, while the deceptive disguise of an old man runs parallel to the tying up of the opponent to link the three concepts.

Final Thoughts on Space

Space is the potentiality for activity, movement, and subsequently life. Generally, life is akin to vibrancy and motion, whereas death is coupled with stillness. Space makes room for life to happen. As such, space is not fixed nor stagnant, but amorphous, and ever-changing. Space is a flow. Space is a progressive process.



Figure 106: Hatsumi Sensei Playing and Children from Trapped to Free

Source of Hatsumi Sensei images: http://www.youtube.com/watch?v=2I4t3iQi_Kk

Source of Children images: images by author

I believe that space is equivalent to action, to motion, and thus heralds spontaneity. Depending on the given space (quality, quantity and context), a range of options and paths emerge; in this sense, space becomes a canvas for play. Hatsumi Sensei says often that when we train in ninjutsu, we have to be able to play like children; children are carefree, curious, explorative, and creative—they experiment with no fear of the outcome. There is a great sense of tragic beauty in this that can only come from an adult's perspective. In addition to capturing the previous concepts of space on film in

everyday places; I have also found many instances where children play in everyday places, and still use good tactical spacing. In that regard, perhaps tactical space (or self-preservation) is a natural kinesthetic mechanism that clandestinely operates in our subconscious that still permeates our everyday lives.

This project provides a much more subjective definition of space through the dynamic experience of man. While I believe that this project has broadened and deepened my understanding of space, there is still a need to investigate the space constructed by social norms. This concept of civic space (with its overlays of order, etiquette, and conformity) influence for better or worse, the use of tactical space in a society's citizens. Different cultures have different civic spacing for different scenarios such as etiquette while entering, while riding, and while exiting; civic spacing is a place specific codifying of space in order to smoothen out egress type movements. The citizens themselves more or less police these rules by reenacting them; these are passed down as a tradition through social learning. This dialogue between natural (tactical) spacing and cultured (civic) spacing must be more fully investigated in order to get a fuller perspective on space and how it is constructed or created.

Negotiating Between Being an Architect and Ninja

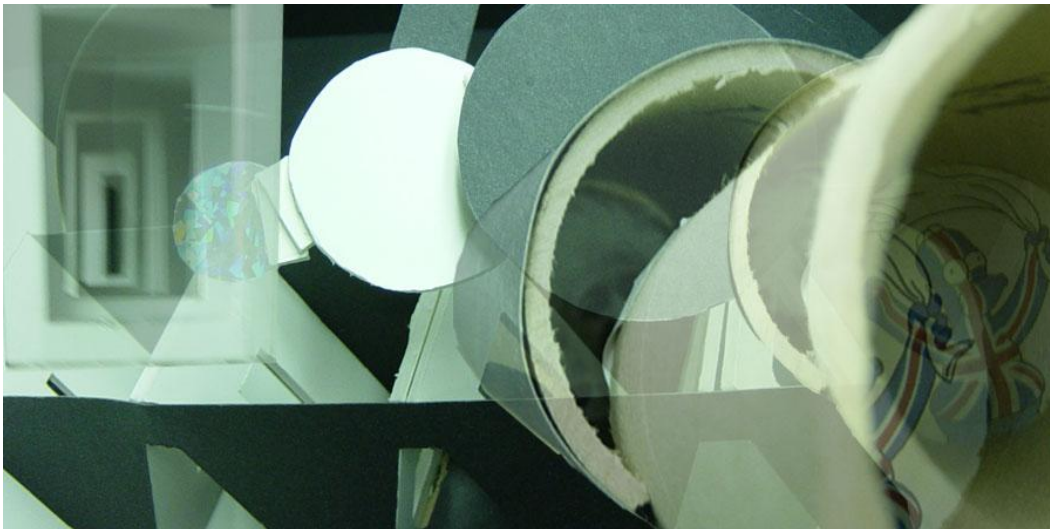


Figure 107: 1st Year, 2nd Semester Studio Project of Intersecting Thresholds

Source: images by author

For one project in first year, second semester of architecture school, I had to make a model of the threshold conditions we went out into the world and photographed. One of the threshold conditions I observed was a female as a “chickee buffer” where she stood between two straight males so that they did not feel too uncomfortably close. Others where between light and dark, private and public, opened and closed spaces.

Another was an umbrella that demarcated protected and unprotected, my space and others' space. The intent of the concept model was to link all the concepts and make them interrelated—when focusing on one piece, orientating it for its purpose, it would affect the other concept parts. The main concept linked the gradients between male/female, light/dark, private/public, intelligence/stupidity, civilized/instinctual and opened/closed. The design was a similar to a trussed bridge. The diagonal elements were actually rectangular frames whose opening went from larger to smaller. They were angled in such a way that the rhythm of light would alternate. The exercise of this conceptual model stuck with me throughout my career at architecture school. It showed different shades and variations of the concept of duality (yin/yang). Unfortunately, I did not document it well and the model eventually was damaged beyond recognition.

This project really affected my thinking about organizing concepts. In my opinion so far, it seems that an overarching concept, unifies the branching concepts. The branching concepts in turn, each show different variations and perspectives of the main concept. When juxtaposed, we see a multitude of shades of the same main concept, and we get a fuller, better defined understanding.

I chose to keep practicing ninjutsu because it is taught so conceptually. I love the depth and breadth of the art in terms of its interrelated concepts. It is so intriguing that a single concept, like a model, is twisted and manipulated, producing a myriad of variations; even more so is when it appears in different spaces and contexts. In other martial arts, the form is generally as far as practice goes. Other martial arts have a limited, fixed number of a pre-set series of movements; straying from these forms is heresy. In ninjutsu, a flow or string of shadows of the original concept produce a much greater understanding; it is never boring, it is always fresh, and nurtures curiosity and creativity. The thinking is multi-dimensional and multi-layered and is similar to the realm of architecture. This project is an attempt to repeat something the process of that 1st year, 2nd semester model.

I do not ever see it getting boring, because each training session is a spontaneous and thus unique one. Hatsumi Sensei, apparently in all his years of teaching, has never showed the same thing twice; it is beautifully tragic that all his movements are so fleeting and impermanent.

Sometimes when I play video games I think architecturally. I check if the level design is appropriate for the modes of play, and I also look for the layers of space to move about. For example, in the futuristic war game, Killzone 2, the stage of Corinth Crossing is perhaps one of the interesting stages. The main concept is huge bridge in ruins, floating above shanty towns. The bridge itself is made up of at least 3-4 levels with various amounts of obstacles, stairs, and scaffolding to use as cover or bridges. The level is massive, and is large enough to support 30 or more players.

As we are the topic of Killzone 2, even my playing style is similar to ninjutsu. If I have the ability to, I will seek out paths to fight indirectly. I will travel empty back meandering alleyways and routes to flank the opponents. I try at all times to catch the

opponent's off guard. The game is somewhat realistic, but slightly balanced to increase fun. Two to three shots of the gun is enough to put somebody down. To survive enough to retaliate means that one needs to negotiate with the opponent, and the environment (cover and spacing).



Figure 108: Multi-Level Corinth Crossing

Source: http://www.tzps3.com/killzone2_map_corinth_crossing.jpg



Figure 109: 1st Person POV of Corinth Crossing

Source: http://www.youtube.com/watch?v=jwJK_LF-610&hd=1

I think the architect has to think in many modes. He has to be a structural engineer, a sculptor, a graphic designer, a sociologist/psychologist, a businessman, a manager/negotiator, a researcher, a theorist, a philosopher, an educator, an anthropologist and now a computer wizard. We cannot forget also that an architect is also a human being. The ninja of the old also had a large interdisciplinary list: an actor, a warrior, a sage, an astrologist, a pharmacist/doctor, a geographer, a linguist, an alchemist, a spy, and family man. I do not see any conflict of leading these two lives. I see them as negotiating with each other, and forming a symbiotic relationship where one

informs the other. It does not seem strange, but intriguing that these two interdisciplinary arts seem to rely upon space—the connecting gap between all.

Ninjutsu Related to the Everyday

Ninjutsu and the everyday are related. Perhaps it is more accurate to say though, that ninjutsu is a conscious/subconscious intensification of the everyday.

“Ninja aspired to merge their spirit and techniques into one, and become ‘uncommon’ common people...It is quite easy to become a superman; Ninjutsu makes one more aware of just how difficult it is to become a ‘normal’ human being.”⁹⁴

As we seen in the previous part, one of the ninja’s beliefs was to blend in between the two polemic ends to seek a proper balance. The ninja was a master of blending in any environment, including the social realm.

Hensojutsu (art of disguise) is an important aspect of ninjutsu, which is also related to *kyojitsu* (falsehood and truth). The ninja used *hensojutsu* as a method of indirectness for collecting information or for passing through areas. *Hensojutsu* is a variation on the concept of hidden door (hiding behind something as a shield and/or using it as a trap door). A disguise (social camouflage) could be used to blend in with the general populace to escape pursuers or avoid detection.

“Essential to the ninja’s espionage work was his ability to assume false identities and move undetected through his area of operation. More than merely putting on a costume, ninjutsu’s disguise system involved thoroughly impersonating the character adopted. Personality traits, areas of knowledge, and body dynamics of the identity assumed were ingrained in the ninja’s way of thinking and reacting. He or she literally became the new personality, whether taking the role of a monk, craftsmen, or wandering entertainer.”⁹⁵

Related to *hensojutsu* is a concept in ninjutsu called *kokoro no gamae*, which means the posture of the heart. *Kokoro no gamae* is an overlay on the concept of body posture or attitude. It means that on the exterior, one does not display a “fighting” posture or attitude; instead one hides one’s intention behind this façade, but keeps the *kamae* within his heart still on the ready for anything. The reason for this is to stay anonymous and not to draw much attention to oneself. For example, if one got attacked on the street and visually showed his martial ability, it could lead to bad publicity. For one, the opponent or opponents will now know that he is somewhat skilled, and could escalate the situation with more dire repercussions (pull out weapons, signal for more

⁹⁴ (Hatsumi, *The Way of the Ninja* 2004, 24)

⁹⁵ (Hatsumi, *Ninjutsu: History and Tradition* 1981, 16)

allies to come). Two, the crowd (audience) could view the martial artist as being too skilled, reversing the story saying that he brutally maimed his attackers.

This concept of kokoro no gamae is not the answer-all solution; there are times where one needs to be fierce and unmerciful. For example, if protecting loved ones, surrounded by an armed gang with very ill-intent, perhaps when one encounters the first attacker an extremely vicious and violent counter is necessary; this may be enough to scare the other attackers off completely, ending the need for further violence. Strangely, in this case, by using a peak of violence, one avoids the greater evil of further and possibly more extreme violence.

In a sense, ninjutsu is sometimes shaped by the rules, codes and procedures that a society creates—they too, for other reasons, bound by these cultures in order to complete their tasks with anonymity. In the everyday, we sometimes are bound to socio-cultural policies. For example, we should only walk when the pedestrian light signals us to in vehicular congested and dominated traffic areas. The ninja however, needed to know these societal idiosyncrasies by heart, because the consequences would generally be dire. For example, in the film *Inglorious Bastards*, a team of Americans infiltrate a Nazi area; they almost pass through with their German language and culture skills, however one made the mistake of counting like an American (pointer finger to pinky finger rather than vice versa) and their cover is blown.

Ninjutsu and the everyday are both arts of spatial negotiation; however, ninjutsu is an intensification of the everyday. For one, in ninjutsu, generally the people involved intend to hurt, maim or destroy others. Obviously, this is not the case in the everyday. In the everyday, people have the intention to get to their destination, and complete their tasks or daily routines. Relatively, the fight versus flight spectrum is less severe in the everyday than in ninjutsu; however, there is a similar spatial negotiation that occurs in both realms.

Secondly, the range of postures in ninjutsu is more exaggerated or pronounced. This is a factor of the first reason. In the everyday footage, we only see one posture—shizen no kamae, the natural vertical, rectangular posture; this posture is generally only manipulated in directionality. This is reflected in plan diagrams. In the everyday plan diagrams, I used a simple geometric shape, a bilateral symmetrical, pentagonal shape as the body, and an isosceles triangle to indicate the directionality/intentionality. In the ninjutsu ones, we see the body expanding and contracting much more dynamically and drastically; the feet placement diagrams with the face/mask (to give a sense of the body's balance) illustrates this well; sometimes the bodies are more in a posture that stretches out horizontally. This brings up another point.

Thirdly, because of its greater range of body forms, ninjutsu also produces larger spaces in a shorter time. The production of space can be more instantaneous—the change of space between can be much more drastic. For example, generally one would not encounter a person leaping out of the way of an oncoming person—unless the person perhaps was sprinting down a crowded sidewalk or something else radical. Also

in ninjutsu the spaces can also be much more intimate, meaning bodies are completely touching each other and pushing each other out of their respective spaces. This does not occur in the everyday footage; this could be because it is Hawaii and the demographics do not call for such extreme density; however, this could easily be found in places as Tokyo. The everyday tends to be more muted and inconspicuous and in a more normalized and regulated state.

On the other hand, I would also like to add that in its highest forms, Grandmaster Hatsumi demonstrates something similar to the conditions in the everyday—a negotiation that somehow warps reality. Many people, when attacking Grandmaster Hatsumi, feel that they would actually hit him or felt that they did; however, Grandmaster Hatsumi understands distancing, angling and timing so well, that perhaps there was only a margin of an iota of an inch of being hit before disappearing. Grandmaster Hatsumi portrays the same inconspicuousness, disinterest, and natural ability as the people captured on my everyday video; however, there is no doubt in my mind that his is a more deeply intensified, conscious/unconscious practice.

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