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TRADITIONAL OKINAWAN SHOREI RYU KARATE

IRON RAIL GYMNASTICS ACADEMY

POWER & SNAP IN HON SHIN DO SHOREI RYU KARATE DO

A Research Paper

by

Mallary A. Silva-Grondin, M.A.

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Submitted in partial fulfillment of the

requirements for the rank of

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United States Academy of the Martial Arts

Traditional Okinawan Shorei-Ryu

Iron Rail Gymnastics Academy

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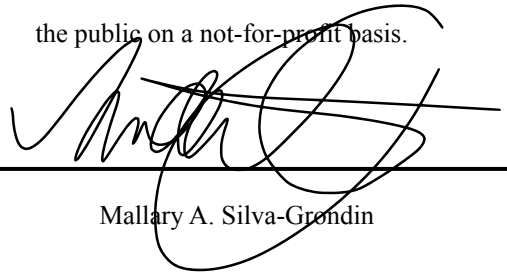
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TABLE OF CONTENTS

Permission to Copy ..... **i**

Dedication ..... **v**

Acknowledgments ..... **vi**

Introduction **1**

A Transparent Bias *2*

Primary Source Emphasis *2*

Organization *3*

Audience & Author Notes *4*

The History of Okinawan Hon Shin Do Shorei Ryu Karate Do **6**

Western Origins *7*

O'Sensei: Robert Trias 7

Florida Expansion *8*

Hanshi Johnny Pachivas 8

USAMA Origins *9*

Hanshi Leo Kozloski 9

Master Bruce Saver 10

Due North *12*

Renshi Eric Cranston 12

Master Edward Harding 13

The Fruition of Hon Shin Do *15*

Stylistic Characteristics of Hon Shin Do Shorei Ryu **17**

What's in a Name? *17*

Hon Shin Do Shorei Ryu Characteristics *19*

Power **26**

The Science Behind the Art *26*

Defining Power 26

Power & Force 27

Calculating Power: Newton's Second Law of Motion 27

Visualizing Power Through the Eyes of Science 28

Where Science Meets the Art of Hon Shin Do Shorei Ryu *29*

Applying Newton's Third Law of Motion 29

Torque: A Twisting Component 31

Stable Datum 32

Applying Newton's First Law of Motion (Inertia) 34

Snap **36**

The Science Behind the Art *36*

Defining Snap 36

Visualizing Newton's Law of Acceleration 38

Where Science Meets the Art of Hon Shin Do Shorei Ryu *40*

The Role of Kime **44**

The Science Behind the Art *44*

Defining Kime 44

Visualizing Kime Through the Eyes of Science 45

Where Science Meets the Art of Hon Shin Do Shorei Ryu *47*

Conclusion **52**

Reflections on Power & Snap in My Current Journey *52*

Stable Datum: Balance & Posture 52

Flexibility 55

Speed 56
Inner Power: Finding My Kiai 58
Summation *61*

Bibliography 63

Primary Sources *63*
Books 63
Interviews (Unpublished) 63
USAMA Materials (Unpublished) 63
Secondary Sources *64*
Books 64
Journals & Magazine Articles 64
Online Articles (Websites) 64
Videos 66

Appendices 67

Appendix I: Lineage Images *67*
Appendix II: Formulas & Laws of Motion *72*
Appendix III: Kinsman Images *74*

DEDICATION

For Hanshi Leo Kozloski who is the foundation and heart of the Hon Shin Do Shorei Ryu style and family.

ACKNOWLEDGMENTS

I am tremendously grateful to the instructors at the United States Academy of the Martial Arts (USAMA) for the warm welcome upon my initial return to the dojo in 2014 after over a decade away from training. Master Edward Harding, Sensei Deena Bridger and Sempai Jennifer Tambling, you have all demonstrated the utmost support during my transition back into the martial arts by staying well after the conclusion of class for demonstrations and question and answering sessions. Sensei Emmanuel Thelamour who trains with me constantly, even if it is one o'clock on the morning. Thank you for allowing for an organic and creative discovery of our style. It is truly a privilege learning from each and every one of you. Your unconditional support in all of my endeavors through the years is truly cherished.

I thank the students both past and present at USAMA for their endless amounts of encouragement and support. We as instructors learn from you as much, if not more, than you learn from us. It is beyond inspiring to watch each of you as you grow, not only into martial artists, but also into the respectful and talented people that you are.

Lastly, I thank my family, specifically my truest partner, Rita. You have sacrificed so much for me as I chase yet another white whale on my journey. You have served as my personal trainer, nutritionist, chef, therapist, nurse and probably most importantly, my cheerleader. Without your encouragement and unconditional love I never would have found the courage to walk back into the dojo to pick up where I left off on my martial arts journey at age sixteen. Thank you will never suffice for the gifts you have given me but

thank you for being my wizard behind the curtain who guided me to the realization that I had the courage all along.

INTRODUCTION

"Technique leads to speed and speed leads to power."

This quote from Renshi[1] Eric Cranston (referred to as "Renshi" for the remainder of this study) echoes within the United States Academy of the Martial Arts (USAMA) dojo[2] walls on at least a monthly basis. To obtain optimum power, one must first focus on technique, which will then lead to executing that technique faster which subsequently leads to an increase in power. This quote captures the concept of power at a high level, yet power is executed in many forms and is comprised of various components. This paper specifically examines power and a particular type of power that results from "snapping" techniques." Thrusting/crashing" techniques are also addressed for the purpose of contrast. For example a mae kage geri (front snap kick) compared to a mae kekomi geri (a front thrust kick). These important factors of power that Renshi addresses are the groundwork for every great martial artist (and also sets a cadence and framework for a karateka's[3] training; solidify the technique then strive for speed). Renshi's USAMA doctrine offers a simple foundational introduction for the following examination.

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[1] "Renshi" is a title bestowed upon a Karate Master that must be either a 5th or 6th Dan black belt and at least 35 years of age or older. This title is given to an individual with significant contributions to the style. The definition of Renshi varies by martial arts system, for the purpose of this paper the definition was pulled from the "U.S. Academy of the Martial Arts: Shorei Ryu 4th Kyu Mirazaki Obi - Purple Belt Standards" rank sheet.

[2] Eric Cranston, "U.S. Academy of the Martial Arts: 8th Kyu Yellow Belt Standards," *United States Academy of the Martial Arts*, (1995). "Dojo" is the Japanese term for karate school.

[3] Ibid. "Karateka" is a student of karate. "See ayto" is another term used for karate student.

A Transparent Bias

Okinawan Hon Shin Do Shorei Ryu style is a traditional karate style with influences from China and Japan (more specifically, Okinawa). As this particular style of karate is becoming exceedingly rare, and the scope of this project surrenders to the great challenge of examining the nuances of this subject matter in all martial arts styles, there will be a strict focus and admitted bias towards the Hon Shin Do Shorei Ryu style especially when pertaining to the application of power and snap. However, sources from distinguished marital artists outside of this style are incorporated due to their expertise and to make for a slightly more robust study. With this transparent bias, a history of this style is explored to set the milieu to this paper's subject matter for those not familiar with Hon Shin Do Shorei Ryu.

Primary Source Emphasis

My academic background provokes my emphasis on the importance of primary sources. I firmly believe they make for a better learning experience and a better read. Leveraging the Masters of the Hon Shin Do Shorei Ryu style for this paper was non-negotiable for me, as they are the best sources due to their expertise and experience within the craft. I am beyond grateful to my primary sources for this project, specifically Renshi and Master Ed who took so much of their personal time to *thoroughly* answer my questions. Their insights and expertise are truly the core of this study.

ORGANIZATION

The sections that follow the stylistic history, the main "meat" of this paper, are organized in mostly a repeatable pattern. In each main chapter, the "science behind the art" sections address the scientific context including the biomechanical and physiological aspects of power and snap (i.e. movement) in the martial arts. Psychological aspects are incorporated in the more reflective sections of the paper, which as any martial artist knows, is the toughest part of one's training. Those of a scientific mind may label this as a kinesiological approach.[4] As a result, the nature of this content is rather academic or "thick" as it is deeply founded in the principles of physics, however Karate is "a science and an art" so the scientific context is not the sole layer of this paper.[5]

Trickled within these scientific explanations are some practical application examples of the designated concept (e.g. power, snap) in addition to actual examples that typically stem from the Hon Shin Do Shorei Ryu style, adding the extra nuance of my own journey as well.[6] Additionally, other perspectives from notable martial artists, such as Bruce Lee, are also embraced as their knowledge is that of legend. To recap, I've attempted to weave a martial arts exploration within the scientific context in an attempt to tie the science and art together.

---

[4] "Kinesiology," Wikipedia, https://en.wikipedia.org/wiki/Kinesiology (December 28, 2017). Kinesiology is defined as "the study of human and nonhuman animal-body movements, performance, and function by applying the sciences of biomechanics, anatomy, physiology, psychology, and neuroscience."

[5] Robert A. Trias, *The Hand is My Sword: A Karate Handbook,* (Japan: Charles E. Tuttle Company, Inc, 1973), 36.

[6] Typically these examples will be in the "Where the Science Meets the Art of Hon Shin Do Shorei Ryu sections.

Audience & Author Notes

I was reminded when writing about Hanshi Leo Kozloski[7] that we are an *Academy* and are named as such with intention. It is with great honor and pleasure that I apply my academic method of writing to this study of power and snap. Though this paper began as a rank requirement, it evolved into so much more. My learning style is to thoroughly research the topic at hand and through the writing process truly reflect on my findings and bring meaning to the information gathered. Embarking on the complex concepts of this paper, I knew quickly I would be unable to approach this study any other way.

As a writer by profession I also understand the importance of a good editor. This proved to be a bit of a challenge. With the original intent of only having Master Ed read this material, knowing very well his expertise of the martial arts, the Hon Shin Do Shorei Ryu style, and most importantly the Japanese terminology, this paper was originally *much* shorter as assumptions of my audience's prior knowledge could be made confidently.[8] I could not in good conscience leave this work unedited, but with such specific and somewhat foreign subject matter, this content would be difficult to comprehend to a non-martial artist. So I began to offer more stylistic and historical context along with terminology definitions to appeal to a broadening audience.

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[7] Christian Way, "U.S. Academy of the Martial Arts: Shorei Ryu 4th Kyu Murazki Obi - Purple Belt Standards," (December 17, 1998). Hanshi is a 9th or 10th degree black belt, 60 years of age or older. Often this title is synonymous in other styles as "Grandmaster." Hanshi Leo is the grandmaster of the Hon Shin Do Shorei Ryu style.

[8] Growing up in the dojo, I typically use and know the Japanese term for certain words and basic movements over the English translation. For the purpose of accessibility I have attempted to define each Japanese term in its first instance either in text (if applicable) or within a footnote.

I also realized one might *not* need to be a martial artist to find this topic interesting. I have many supporters for both my writing and my martial arts journey that are outside of the dojo and as a result of this peak in interest, I expanded the audience again adding even more contextual information before diving into the complex concepts of this paper. This leads to an important audience note for anyone who holds rank in our Hon Shin Do Shorei Ryu style – you are more than welcome to skip to the "Stylistic Characteristics of Hon Shin Do Shorei Ryu" section to more quickly navigate to the main topic of the paper (after completing this introduction). For all other readers, I do recommend reading the next section, "The History of Okinawan Hon Shin Do Shorei Ryu" to obtain your bearings, especially for the "who," within our style of martial arts before diving in.

THE HISTORY OF OKINAWAN HON SHIN DO SHOREI RYU KARATE DO

"Karate-do may be referred to as the conflict within yourself, or a life-long marathon which can be won only through self-discipline, hard training, and your own creative efforts." - Shoshin Nagamine[9]



The history of the Hon Shin Do Shorei Ryu style is traced through the lineage of two specific dojos, the USAMA in Massachusetts and the United States Christian Academy of the Martial Arts (USCAMA) in Georgia. What unite these dojos are their instructors and the practice of Hon Shin Do Shorei Ryu. This is not to discount any of the other USAMA locations. The purpose is to draw as direct a lineage as possible to my own dojo and to the emergence of Hon Shin Do.[10] Starting where almost all modern-karate in the *west* derives, Hanshi Robert A. Trias (who will be referred to as O'Sensei[11] for the remainder of this paper) is the appropriate place to start.[12]

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[9] Shoshin Nagamine, *The Essence of Okinawan Karate-Do*, (Tokyo: Tuttle Publishing, 2011), 47.

[10] Eric A. Cranston, interviewed by Mallary Silva-Grondin at Dover, New Hampshire (2017). Hon Shin Do's meaning can be interpreted one of two ways; 1) to "the way of the true heart" or 2) "the old way" or "right way." The origins of this style are explored later in this section. These definitions are taken from the interview with Renshi.

[11] "O'Sensei" is a term used, again, across many martial arts styles. The universally acknowledged custom is to use this title when addressing the originating grandmaster of one's style.

[12] There are records, which enable exploration to as far back as the 1400s for Shorei-Ryu, however since our style evolved in America we begin the style's context from its journey to the United States. The following subsections of this main history section are an abridged version of a "Robust Dojo History," which is another study that is in progress. A deep dive into the narratives of the instructors' histories and accomplishments are examined in that piece. This abridged version is included for the purpose of setting a historical and stylistic context before addressing the main subject matter.

O'SENSEI: ROBERT TRIAS

O'Sensei is our beginning; he is the sole vehicle who ushered the eastern arts to the continental United States (U.S.).[13] The Hon Shin Do Shorei Ryu narrative begins with him. Unarguably, which is rare in the case of any martial art system, O'Sensei is acknowledged as one of the most influential figures in western karate due to his history, numerous publications, and role in crafting competitive Karate in America and around the world. Author Wendell E. Wilson offers a concise summary of just how influential O'Sensei was:

> He assembled his own system of karate, Shuri-ryu, through a synthesis of Chinese, Okinawan and Japanese systems, opened the first American karate dojo in 1946, headed what became the largest international karate federation in history, and trained many of America's top karate competitors. He was by turns fatherly, arrogant, outgoing and secretive, and had associated himself at one time or another with almost every important karate master in Japan.[14]

O'Sensei's legacy is simple, he is the "Father of American Karate." It is largely recognized that the roots of the Shorei-Ryu style are founded in the Shuri-Te, Naha-Te, and Hsing- I systems (further explored in the "Stylistic Characteristics of Hon Shin Do Shorei Ryu" section). O'Sensei's influences specifically regarding Shorei-Ryu stem from eastern masters such as Master Hsing (Hsing-I system) and Choki Motobu (Shuri-Te and

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[13] See Appendix I, Figure 1. for a portrait of O'Sensei.

[14] Wendell E. Wilson, "Robert A. Trias (1923-1989)," *Essays on the Martial Arts*, 2010, http://www.minrec.org/wilson/pdfs/Trias%20Biography.pdf, (July 8, 2017), 1.

Tomari- Te systems).[15] Though disputed by some, USAMA acknowledges that, "Shorei-ryu was first brought to the United States in 1946 by Robert Trias, who opened the first karate school in this country then."[16] This is where Hon Shin Do Shorei Ryu's story begins.

Florida Expansion

Hanshi Johnny Pachivas

There are countless successful students that emerged from under O'Sensei. For the purpose of maintaining focus on the Hon Shin Do Shorei Ryu style, Hanshi Johnny Pachivas is next in line within our lineage.[17] Like O'Sensei, Hanshi Pachivas's experience was spread across many different styles in addition to other combat sports, "Pachivas began his formal training in the wrestling arts in 1938, he has been inducted into every major martial arts hall of fame worldwide."[18] As O'Sensei is known as the "Father of American Karate," Hanshi Pachivas is known as the "Father of Florida Karate."[19] Many of Hanshi Pachivas's Floridian students gained national attention

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[15] Kyoshi Donna Judge, "About Trias," Suncoast Karate Dojo, http://www.suncoastkarate.com/ (December 28, 2017). O'Sensei studied with many other masters which gave him experience in ji-jistu, judo, and more. Also see Appendix I, Figures 2, 3, & 5 for Martial Arts Systems' Lineage Trees.

[16] Scott Wiseman, "Shorei-Ryu Karate: Descendant of Naha-Te," *Black Belt Magazine*, December 1982, http://kondonoshokai.com/kns/pub/bbmdec82.html, (July 8, 2017), 36.

[17] See Appendix I, Figure 4 for the direct Hon Shin Do Shorei Ryu lineage tree.

[18] "The Founder: Grandmaster Johnny Pachivas," Pachivas Pankraton, http://www.gmau.org/immortalcombat/pankrationfounder.htm, (December 28 2017).

[19] Kyoshi Donna Judge, "About Pachivas," Suncoast Karate Dojo, http://www.suncoastkarate.com/ (December 28, 2017).

through tournament victories. Hanshi Pachivas met O'Sensei in 1963 when their "special relationship" commenced. He became the highest ranked instructor under O'Sensei's Shuri-Ryu system. O'Sensei also bestowed to him the title of Hanshi. He was feared for his "speed and power," attributes Hon Shin Do Shorei Ryu students are encouraged to develop and refine and those that our own Masters leave us all in awe over.[20]

USAMA Origins

Hanshi Leo Kozloski

Next on the Hon Shin Do Shorei Ryu lineage is the core and foundation of the USAMA and USCAMA dojos Hanshi Leo Kozloski (who will be referred to simply as "Hanshi" for the remainder of this study). Consider Hanshi the Father of the USAMA lineage, as he is the highest-ranking instructor in the Hon Shin Do Shorei Ryu style. Hanshi, like his predecessors, gained experience in numerous martial arts systems, starting as a Judoka[21] in 1965, and subsequently studied Goju-Ryu, Aikido, Shotokan, Kempo, Jujitsu, and Kendo. Eventually he began his Shorei-Ryu training under Hanshi Pachivas in Florida.

The legend is that prior to Hanshi's teaching career at Florida's Hollywood Y.M.C.A. in 1975, Hanshi Pachivas handed him his Shodan obi after a class and instructed Hanshi to begin his teaching career in the art – a very infrequent act. This led to the inauguration of the first United States Academy of the Martial Arts. As mentioned

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[20] Ibid.

[21] A "Judoka" is a student of Judo.

prior, Hanshi emphasized the intentional use of the word *Academy* in the school's name to stress the teaching and creative aspects of the martial arts as well as always remaining teachable himself, which many of his top students recognize as part of his legacy.[22] In addition to this pedagogical purpose, Hanshi was victorious in numerous tournaments (including the Southeastern Karate Championships), he created S.T.R.I.K.E. (Self-Defense Tactics Reached in Knowledge), which is a women's self defense program, served as a body guard, and was an instructor to police officers. Even with all of these noteworthy accomplishments, he has remained utterly humble.[23] These themes of woman empowerment and teachability have remained an integral part of the USAMA culture since the commencement of the first USAMA dojo to present day.

Master Bruce Saver

Another USAMA dojo that emerged was under one of Hanshi's top students, Master Bruce Saver.[24] Master Bruce is accredited as one of the students who helped to grow Hanshi's teaching philosophy across five states. According to Renshi, one of Master Bruce's top students, Master Bruce's legacy is founded in his patience and creativity, "Something I loved about Bruce as a sensei, eventually, was his patience. I make reference to patience in his willingness to care enough about his students to lead them

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[22] Renshi, Master Ed, and Sensei Emmanuel, all in separate conversations, have emphasized how "teachable" Hanshi remains despite his ranking and experience in the art.

[23] These credentials were originally gathered on a page dedicated to Hanshi on the United States Christian Academy of the Martial Arts's website. Since the crafting of this paper almost four years ago, the website is no longer available, and thus neither is the content. However, the credentials were confirmed by Hanshi's student Emmanuel Thelamour to be accurate.

[24] See Appendix I, Figure 6 for a group photo of Hanshi, Renshi, and Master Bruce at Renshi's black belt promotion.

gradually into competency."[25] USAMA is known for how many black belts the school does not have, as Renshi says, which is something incredibly unique to the school and the style.[26] Promotions are not used as motivators but as a method of recognition once certain milestones are reached – this appears to be entrenched from Master Bruce's philosophy. In regard to Master Bruce's creativity, Renshi reminisces:

> Some of Master Bruce's workouts featured basketballs, tennis balls, shoelaces, pennies, matches, packets of sugar, swimming pools, weightlifting equipment, gymnastics equipment, blindfolds, and a strobe light. For Bruce, routine was the enemy. He taught me not to think in such a linear fashion.[27]

It is evident the impact that Master Bruce's MacGyver-like instruction had on Renshi, especially when it came to Renshi's own teaching style. At the age of twenty Bruce had Renshi take on his first teaching gig, with a class of four to six year olds. Within a couple of months students were lined up waiting to join Renshi's class, which gave way to a class of thirty students between the ages of seven and eleven. He began to realize his natural instinct for teaching and attributes this act of service to making him a better martial artist. It was with Renshi, and his passion for service and teaching, that the beloved Shorei-Ryu style made it's way to New England. We will return to Master Bruce and Renshi when we examine the origins of Hon Shin Do.[28]

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[25] Cranston, interviewed by Mallary Silva-Grondin at Dover, New Hampshire (2017).

[26] Ibid. Many schools take anywhere from 2-5 years for a student to obtain a first-degree black belt. This is considered fast by USAMA's standards. It takes closer to 10-12 years to obtain this milestone.

[27] Ibid.

[28] Ibid.

RENSHI ERIC CRANSTON

Renshi is a whirlwind of talent in his student's and peer's eyes, "I had never seen a martial artist with such amazing abilities paired with such humbleness as in Renshi."[29] He began studying under Master Bruce in 1978. He primarily studied Shorei-Ryu though dabbled in kickboxing and other systems for the pure purpose of enhancing his performance in Okinawan Shorei-Ryu:

> While I have always remained true to Shorei Ryu as my primary discipline, I also didn't hesitate to branch out and sample Aikido, Aiki-Ju-Jutsu, Tang-Soo-Do, kickboxing, boxing, Yang style Tai Chi, gymnastics, and powerlifting. I was never looking for another master, but rather selecting from a broader menu that reflected a full-orbed cross-section of martial and athletic endeavors. I still live and think in this manner, largely due to Hanshi's example of remaining teachable and acknowledging that every martial path has something to offer.[30]

Renshi is primarily known for his speed (yet his ability to harness and execute immense power is also the utmost intimidating) and for his incredible horse stance, a staple to the Hon Shin Do Shorei Ryu style (a characteristic traced back to O'Sensei).[31] Like his predecessors, he was victorious is many tournaments and competitions - a legacy he carried forward with his own students.

Renshi came to New England in January of 1989 to attend Graduate School and with the sound advise of his wife Jennifer, he started the Wenham Chapter of the

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[29] A quote extracted from a casual conversation with Master Ed Harding.

[30] Cranston, interviewed by Mallary Silva-Grondin at Dover, New Hampshire (2017).

[31] See Appendix I, Figure 7 for an impressive image of Renshi in a horse stance with soaked logs.

USAMA. Renshi's dojo began at the Hamilton Community House late 1989 and moved to Iron Rail Gymnastics Academy in 1990. The dojo has been affixed to Iron Rail ever since despite Renshi's departure back to Florida in 1995. This dojo's perseverance in the late nineties was in part due to one of Renshi's students Sensei Christian Way, but in the early 2000s (to now) is credited to another one of Renshi's students, the loyal and persistent Master Edward Harding.

Master Edward Harding [32]

Master Edward (Ed) Harding is currently the lead instructor at USAMA holding a fourth degree black belt in the Hon Shin Do Shorei Ryu style. He began studying in 1995 under Renshi and it was under the instruction of Renshi that he won the 1998 state championship along with various other titles. He took over as Chief Instructor (from Sensei Chris) of the USAMA dojo at Iron Rail in 2001.

Sensei Harding is one of the most diversified martial artists to lead the dojo as his martial arts career began at the ripe age of eight. He began this career by studying Byrnes Tang Soo Do but also studied Kendo, Shudokan, Shintoyoshin Jiu Jitsu, hand-to-hand combat, and the bo reflecting a similar diversified martial arts experience akin to Hanshi and Renshi. He originally began Tang Soo Do to help defend himself against bullies at school, as Ed was fairly small for his age, he was an easy target. Though he

[32] As Master Ed is my current instructor, we have many a conversation about his journey and I don't always run to a pen and paper to recount our conversations. The following is a summary of an oral account of Ed's history through various conversations over the years. In the event that he finds inaccuracies in the story, this portion of the paper will be revised to rectify any issues found.

practiced Tang Soo Do for years, he didn't necessary feel overly committed or engaged with the venture.

He attributes his true interest and engagement in the Martial Arts to his best friend Peter and Peter's father, adoringly known as "Bubbles." Bubbles had a military background and was "nasty" when it came to hand-to-hand combat. The practical and devastating nature of the skill and knowledge Bubbles brought to Ed's world is what "hooked" him on a whole new martial arts journey. Ed remembers many things Bubbles brought to his training, including planking while watching tv (before planking was a trend), his love for the bo, and his ability to overwhelm his opponent with a forward driving pressure.

Bubbles and Peter were Ed's gateway to Renshi and the USAMA dojo. Peter had seen Renshi at a tournament and was immediately drawn to Renshi's unbelievable abilities both with kata (forms/routines) and in the ring. Peter kept trying to convince Ed to meet Renshi but as Ed had left the traditional dojo world at that point and he felt content with the training Peter and Bubbles offered him - a decision he would come to regret. Finally, Peter wore down Ed and connected him with Renshi; this is an important fixture in USAMA history. A new chapter for Ed commenced with a whole new level of inspiration which drives Master Ed even to this day. This time he was not just hooked because of Renshi's skill but because of his essence and character. When asked what made him commit to the USAMA dojo, with such a diverse background, his reply was "I had never seen a martial artist with such amazing abilities paired with such humbleness

as in Renshi."[33] Ironically Ed later found out that Bubbles actually trained in our sister style of Shorin Ryu. It was almost as if Ed was destined for this style.

The Fruition of Hon Shin Do

Shorei-Ryu is a recognized system in the world of karate. Though the name is sometimes contended amongst the academics of the martial arts world the style holds familiarity. However *Hon Shin Do* is completely unique to the lineage that has just been outlined, starting with Hanshi. The relationship, philosophies, and teachings of Hanshi, Master Bruce, and Renshi are not only the foundation of the USAMA dojo in Wenham Massachusetts but to the style itself. These three served as the chief architects of what would become the Hon Shin Do Shorei Ryu style. Though rank requirements, kata, kumite, and other practices within the style still derive from the traditional Shorei-Ryu style (as outlined in "The Pinnacle of Karate" written by O'Sensei), the masters craved more and wished to navigate in a slightly different direction.

What many even within the style do not know is that the concept of Hon Shin Do emerged long before the 2000s:

> Hon-Shin-Do, by the way, was a creation that Bruce and I cooked up in the mid 1980s. Disenchanted with an overly commercialized Shuri/shorie Ryu, featuring an upper echelon, which demanded financial tribute in endlessly creative ways, Leo, Bruce and I wished to start a new style. I was tagged with naming it, but was somewhat conflicted. I felt a loyalty to my current system, not its heavy-handed leadership, but the forms and traditions I had come to love. After serious deliberation, what I came up with was: Hon – original or true, Shin – from the heart and/or soul, Do – the way.[34]

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[34] Cranston, interviewed by Mallary Silva-Grondin at Dover, New Hampshire (2017).

After Renshi returned to South in 1995 (to the dismay of his Northern students), he spent time in Florida, North Carolina, and finally settled in Georgia in 2001 where Hanshi already had the United States Christian Academy of the Martial Arts (USCAMA) underway. The USCAMA dojo was the first to incorporate the Hon Shin Do name.

STYLISTIC CHARACTERISTICS OF HON SHIN DO SHOREI RYU

WHAT'S IN A NAME?

As mentioned in O'Sensei's history, the Shorei Ryu style was originally a confluence of Japanese and Chinese martial systems. O'Sensei pinpoints karate's origins to the Buddhist monk Bodhidharma who ushered a "system of exercise" from India to the Shaolin Temple in China to help the Shaolin monks physically and mentally prepare for the hardship of Dharma. "This is the origin of the *shorinji-ryu* system, the foundation of Chinese *kempo*."[35] This system was later absorbed by the native okinawan-te style due to Chinese military personnel stationed in Okinawa at the time. This blend of Chinese Kempo and Okinawan self-defense established the foundation of major karate styles including, "*shorei*."[36]

One point of contention that must be addressed before diving into this part of our style's characteristics pertains to the style's name, "Shorei Ryu." One argument states that traditional Okinawan Shorei Ryu system founded by Higashinna Kanryo, chiefly influenced by the original Naha-Te and Shuri-Te parent systems;[37]

> Shorei-ryu was developed, or named, about 100 years ago around the mid-1800s by Kanryo Higashionna. Higashionna studied some of the Naha-te techniques of Okinawa and then moved to China. There in the Foochow Province he studied for

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[35] Trias, *The Hand is My Sword: A Karate Handbook,* 15.

[36] Ibid, 15-16.

[37] Nagamine, *The Essence of Okinawan Karate-Do*, 21. The majority of Okinawan dojo websites attribute the naming of these systems to corresponding locations in the Ryūkyū kingdom/islands. These appears to be a commonly accepted history, though passed mostly through oral tradition. Tomari-te is the third original system/location however there is lack of evidence of this system's influence directly on Shorei-Ryu (if any).

> some 20 years under Liu Liu Ko. But it was not until Higashionna came back to Okinawa that he began to develop the Shorei-ryu system.[38]

Those who support this argument often state the style that O'Sensei brought back to the U.S. in 1945, is not the same style as Higashionna's and that today this traditional Shorei Ryu style is reflected in the two main styles of Goju Ryu and Uechi Ryu. O'Sensei originally coined "Shorei Ryu" which he later changed in 1978 to the now more recognized "Shuri Ryu" though some of his students kept the original Shorei Ryu name when opening their own dojos – our style falls into this category. [39] Renshi addresses the incorporation of the Shorei Ryu name:

> Like Leo, Bruce, and I, Evan felt strong loyalty to the Shuri Ryu forms and traditions…Evan suggested that we slightly alter the kanji so that we would be engaged in *Shorei Ryu*, which would suggest a slightly higher proportion of influence from the Chinese aspects of our style, which I believe we were doing anyway.

Less concretely, (due to lack of evidence) there is only speculation to why O'Sensei changed the name in 1978:

> For much of his life Trias referred to his style as Shorei-ryu or as Shorei-Goju-ryu, of the Naha-te lineage. However, he also liked to characterize the style rather inaccurately as a combination of Shuri-te and Hsing-i. Perhaps this is because Choki Motobu, whom Trias considered to be one of his most important sources, was essentially of the Shuri-te and Tomari-te tradition… So, in fact, Trias's style incorporated elements from all three Okinawan lineages (Shuri-te, Naha-te, and Tomari-te) with Chinese Hsing-i, and some Japanese Shotokan (the Heian and Taikyoku katas) thrown in for good measure. Although it was somewhat of a misnomer, Trias changed the name of his style to Shuri-ryu around 1978, with the backing of Makato Gima, for the purpose of "preserving the famous Shuri name." The real purpose was probably to make his style sound a little more coherent and traditional (rather than the modern amalgamation that it really is), as well as to

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[38] Wiseman, "Shorei-Ryu Karate: Descendant of Naha-Te."

[39] Wilson, "Robert A. Trias (1923-1989)."

> give it a distinctive label which was unique to him as its founder and grandmaster.[40]

If you are still confused I do not blame you! As a student of history, tracing which side of the argument was "truth" became maddening as biases are glaring on all sides. As this paper is not intended to prove or disprove the argument (and frankly there is not enough documented evidence to do so), I suggest simplifying the issue, using Shakespeare as inspiration, "A rose by any other name would smell as sweet." The name is irrelevant because in essence our style undeniably has influences of Goju Ryu (a successor to the original traditional Shorei Ryu) because of our grandmasters' experience within the traditional style:[41]

1. O'Sensei studied with numerous Goju Ryu masters including founder Chojun Myagi.
2. Hanshi Pachivas obtained 10th Dan ranking in Goju Ryu.
3. Hanshi Leo also trained in Goju Ryu.

For the purpose of temporarily putting the argument to rest and simplifying our stance on this matter for the sake of this study, the USAMA and USCAMA do label our style, justifiably so, as Shorei Ryu. Once Hon Shin Do materialized our style's name evolved to Hon Shin Do Shorei Ryu to highlight the emphasis on the teaching methods of our dojos while also remaining loyal to the original Shorei Ryu forms and framework.

Hon Shin Do Shorei Ryu Characteristics

Certain style-specific-characteristics of Shorei Ryu are discussed in the following section. These are not the *only* characteristics of the Shorei Ryu style. The following

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[40] Ibid.

[41] See Appendix I, Figure 5 for a rough lineage of O'Sensei's instructors/influencers.

information is meant to provide a high-level overview of the style while addressing some of its many defining characteristics that will be applicable when examining power and snap in the later sections of this study.

O'Sensei's style was truly a hybrid system of numerous Okinawan styles and Chinese Kempo. He enlisted in the military at age seventeen and worked in the Pacific during his time in the Navy. This is where he first encountered both the Chinese and Japanese-style martial arts that would influence the creation of Shorei-Ryu. While in the Solomon Islands Trias learned the Chinese martial art Hsing I under Master T'ung Gee Hsing. The Hsing I system is considered an internal soft martial art, which holds its roots in Kung-fu and Chinese boxing. There is a particular emphasis on circular movements in this style. A year before T'ung began training O'Sensei, T'ung studied under the famous Choki Motobu who was a master in the external hard style Okinawan Shuri-te style. "T'ung was so impressed with Motobu's Kosho Shorei Kempo fighting style that he learned it as thoroughly as he could and incorporated into it his own Hsing-i."[42] These are the roots of O'Sensei's Shorei-Ryu style, which is a confluence of this soft Hsing-i style, which incorporated harder Shuri-te and Naha-te aspects as it evolved.

An example of a soft style characteristic are the five animal forms which are broken down into a series of fifteen. The dragon (Nagayubi), tiger (Tora), leopard (Haeken), snake (Hebi) and crane (Tsuru) forms derive from Chinese Kung Fu and are a prime example of the softer nuances of the Shorei-Ryu style with their flexible stances

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[42] Wendell E. Wilson, "The Roots of Shuri-ryu: T'ung Gee Hsing," Essays on the Martial Arts, 2010., http://www.minrec.org/wilson/pdfs/Persons -Tung Gee Hsingi.pdf (July 8, 2017).

and circular hand movements. Both these animalistic and circular movements are found in katas from the Hsing I system, for example, “The katas Gopeisho, Danensho and Tegatana were of Hsing-I origin.”[43] Gopei Sho and Danensho are both apart of the Hon Shin Do Shore Ryu curriculum. Examples of the harder Japanese characteristics are more evident in the Shuri-Te and Naha-Te system artifacts. Speedy and powerful snap kicks and strikes are often seen in any of the kumite exercises, specifically the ippon series as well as the basics. A large portion of the beginning kata curriculum within our style is based in Shuri-Te system including (but not restricted to) the Wansu, Anaku, the Naihanchi series, and Bassa Dai. Sanchin is an artifact acknowledged by most, as an artifact of Naha-Te with cross-fertilization of the three parent Ryukyu systems, though there is no absolute origin (debate still exists regarding the origin).[44]

The single most noticeable, and reputable, characteristic of Shorei-Ryu lay in firm and low stance work. This characteristic is embodied in the renowned kiba dachi (horse stance). The horse stance is one of the single most practiced stances in the USAMA dojo, it even must be held for an allotted amount of time to fulfill certain rank requirements. Scott Weiseman’s summary of the importance of this stance in the Shorei-Ryu style perfectly captures its application in the USAMA dojo:

> The shorei-ryu system has its greatest emphasis on its foundation: the horse stance. Hours of practice are devoted to standing in the horse stance and the lunge position in the dojo. The horse stance must be low to the ground and the shorei karateka must become accustomed to this low center of gravity. It is always much harder to knock someone down the lower he is to the ground. Further, a low stance is usually much stronger than a higher one. For the appropriate progress to

[43] Wilson, ”Robert A. Trias (1923-1989),” 3.

[44] See Appendix I, Figure 2 for the three parent systems.

> be made in the shorei style the foundation must be made stronger and more solid.[45]

The Nihanchi series katas are practiced in large part to develop and master this one stance. Which leads to one of the next leading characteristics of Shorei-Ryu, kata.

The emphasis on kata at the USAMA dojo is attributed to Renshi and likely comes from his instructors before him. In the USAMA Shorei-Ryu style kata is meant to be practiced with one's opponent in mind, therefore enabling the student to explain the bunkai (interpretation) behind the kata. In essence, when performing kata you are performing as if you are in combat. Kata is the application of a series of foundational basics, which must be practiced persistently for years to truly obtain the precision, speed and power required to demonstrate a mastery over the kata and the style itself. The motto, is resurrected again for kata, "train for technique and it will lead to speed and speed to power." It is suggested that when applying this methodology to kata the consequences are invaluable. Practicing kata will assist a karateka in all aspects of their training such as (but not restricted to), speed, power, footwork, stances, bunkai, flexibility and balance. In the dojo we often refer to "beauty, balance, breathing" and "strength, speed, and stamina" when referring to the fundamentals of quality kata practice. There are also spiritual benefits to kata; it is implied by some masters that the practicing of kata can establish a better sense of self by unifying the mind, body and spirit.

There are certain katas specific to the Shorei style such as Anaku, and the Shorei itieration of Sanchin, however there is one kata in particular that cannot be found in any

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[45] Wiseman, "Shorei-Ryu Karate: Descendant of Naha-Te."

other system and that is kata Te Ashi Sho. Te Ashi Sho was the brainchild of Renshi and Master Bruce. Te Ashi Sho roughly translates to the first hand and foot form. When Master Cranston was the Chief Instructor of the Iron Rail USAMA dojo from 1989-1995, Te Ashi Sho was the first kata a karateka learned. Before the Taikyoku series was added (back) in the later 90s, the first hand and foot form was required for the 8th kyu rank of yellow belt. The kata complies the majority of the beginner basics such as zen kutsu dachi (front stance), kiba dachi, isake (attention stance), mae kage geri (front snap kick), mae kekomi geri (front thrust kick), ushiro geri (back kick), gedan barai (sweeping low block), chudan ukes (inside middle blocks), sieken zukis (front punches), empi chudan (middle elbow strike) and front/side grabs (hitakuru). The main kata combination is block, block, punch, kick grab, punch kick grab. The compilation of these basic movements cannot be found in any other dojo. Te Ashi Sho is one piece of the Hon Shin Do-specific legacy that Renshi and Master Bruce incorporated in our style's curriculum, that every karateka performs.

Quite a few of the USAMA Masters and some instructors are titleholders in competitive sparring. With the evident success of their Hon Shin Do Shorei Ryu fighting style the question is often posed, "…what makes the Shorei-Ryu fighting style so effective?" No two fighters spar identically, however, there are some factors in the style that have led to the successful fighting career of many of its instructors. The masters who are considered "successful" fighters all demonstrate the following:

1. Keeping the pressure on the opponent at all times; never let the opponent "breathe."

2. The hands must never drop, even to gain momentum (though the slight lowering of the hands to "bait" ones opponent may be seen).
3. Deep stance work, maintaining a low center of gravity.
4. Intentional movement of the body in both linear and circular directions. The body never moves backwards. Utilizing 45º angles, versus the typical linear 90º and 0º, when defending and attacking. Also channeling one's energy through the opponent whether straight forward, while rising or sinking, twisting or vibrating.
5. The "explosion" factor, the ability to generate power in movement and striking without the telltale signs (giving your game away with movement of the foot, rotation of the body, etc.).

It is common to see, during a promotion or tournament, one of the instructors maneuvering *confidently* around their opponents with the utmost control simply "peppering" their opponents with combinations of strikes and kicks. Subsequently, the opponent is unable to find an opening and often unable to even counter due to the overwhelming pressure on them. The speed of the master in terms of execution and recoil of the technique leaves the opponent stunned from the power/impact (i.e. energy) of the techniques they have received. This explosive, fast, powerful, and precise movement begins from a rooted stance where the energy is channeled through one's feet, through their knees and hips, to the shoulders and lats, and ultimately to the hands and/or feet. In an interview with Renshi, he addresses how this concept is mastered:

> …this crispness of technique starts from a stance properly rooted, and flows from there through to the point of impact on the extremity (hand, foot, etc.). I say this as a way to emphasize that mastery of this sort is not a mere matter of punching or kicking harder or faster. It is the entire body acting as the sum of its parts in concert to execute a complex movement, and yet make it look simple. The markers of this mastery are definitely noticeable to the trained eye:
>
> - Techniques that are fully extended but not over-extended
> - Recoil that follows the same basic path as the extension
> - A stance that remains secure and balanced even when pivoting is required

- Rigid or semi-rigid core; i.e. no sway back arch
- Proper vertical alignment of hips to shoulders
- Completion of a technique with no superfluous or residual movement

Sparring is just one of the examples where the USAMA's theory of "power" and "snap" are applied. To master both power and snap is to increase one's repertoire both inside and outside of the ring. This must be trained repetitively through basics, kata, and kumite. To further explore these applications we must start by defining "power" and "snap" in the Hon Shin Do Shorei Ryu context.

POWER

"Let us consider our subject as one entailing power, speed, and form, the foundations of karate technique."[46] *- O'Sensei*



THE SCIENCE BEHIND THE ART

DEFINING POWER

An applicable and fairly generic definition of power from the Oxford dictionary is "Physical strength and force exerted by something or someone." The following sections leverage science to address the breakdown of a martial artist's ability to exert this force. Like anything scientific, there is much discourse regarding the various established explanations of power, therefore it is easy to "fall down the rabbit-hole" of equations and research. The simplest way to understand the concept of power, in the practical sense, is to receive any strike from any of the Masters – kidding (not really, we get to that in the practical application examples). For the purpose of this section, power, as defined in science is "The rate of doing work."[47]

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[46] Trias, *The Hand is My Sword: A Karate Handbook,* 19.

[47] From the Oxford Dictionary's physics definition. Also see Appendix II Figure 1.

Power & Force

Power is expressed in the equation P(*t*)= W/ *t* where W represents work and *t* indicates time. Another understanding of "work" is that it "is equivalent to an amount of energy consumed per unit time." In physics, work is an applied force (F) over distance (d), therefore the previously mentioned equation evolves to P(*t*)= F x d / *t*. In the Martial Arts sphere, "force" and "velocity" often echo in the explanations of power. When incorporating velocity (v) into the physics equation (literally), power is understood as a force multiplied by velocity or P(*t*)= F x v. Some argue that velocity, body mechanics, physiology, speed, intent, and more are all components of power – which is all true. However, it easy to start spiraling into various equations when trying to incorporate each factor in. There is a simple equation that incorporates many of these components and that is the equation for force.

Calculating Power: Newton's Second Law of Motion

"Force" is often used colloquially or synonymously for power in the sports science world. More importantly, force is how power is measured (the unit of measurement is a newton). Therefore we temporarily situate ourselves here within the rabbit hole of equations to deconstruct these components and to come up for some practical air. Another supporting factor in choosing this equation is O'Sensei uses this equation when teaching the "Essential Principles" of karate, "Power results from a force exerted upon an object. Force may be simply stated as the product of mass (such as a fist

and the body weight behind it) and acceleration (change of velocity), of $f = m \times a$."[48] Newton's Second Law more formally explains this concept, "The net force on an object is equal to the mass of the object multiplied by the acceleration of the object."[49] Ergo, the more considerable the mass or the acceleration, the greater the force. To obtain *optimum* power an increase in both elements is required.[50]

Visualizing Power Through the Eyes of Science

An experiment which offers visual context of power is one conducted on National Geographic's show "Fight Science."[51] The "Kick Test" episode examined four kicks from four different styles of martial arts including Karate, Tae Kwon Do, Muay Thai, and Capoeira, to determine which one was the most powerful. The study itself is significantly flawed for many reasons. One reason being each of the four kickers are throwing a different type of kick, and different kicks offer different levels of power based on 1) the muscles being used and 2) how much momentum is gained (though these are not the only factors). For example, the Karate kicker used a front thrust kick which does not contain significant momentum as less distance is traveled especially in comparison to a

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[48] Sir Issac Newton, *The Mathematical Principles of Natural Philosophy,* (New York: Daniel Adee, 1846). All of Netwon's Laws of Motion were originally published in 1687 in his work *Philosophiæ Naturalis Principia Mathematica* (Mathematical Principles of Natural Philosophy). See Appendix II Figure 2 & 3 for force and acceleration equations.

[49] Ibid.

[50] The other components that are often referred to or argued about such as velocity, speed, intent, body mechanics, are actually covered by this formula. Velocity is used in the calculation for acceleration (keep on mind velocity is simply directional speed) and intent and/or body mechanics are assumed by mass (e.g. how much are you putting on that strike).

51 Suellington Nunes, "Fight Science Kick Test (Capoeira, Karate, Muaythai & Taekwondo)," Filmed [2006],YouTube video, 07:22. posted [Nov 9, 2010], https://youtu.be/Gw4EoWi5QSM.

roundhouse kick. A front thrust kick also does not always depend on many of the larger muscle groups. However, a roundhouse kick does better utilize some of those larger muscles like the glutes. With flaws like these we do not leverage the results of the experiment for meaning or value. The value in this experiment is the method and measurement of power. The Sports Physiologist and Bio Mechanical Engineer conducting the experiment examine how each of these martial artists develop power while examining certain factors such as balance. They calculate each kicker's power by *multiplying the mass and acceleration* (i.e. the same equation in the previous section) of the target, which in this case in the heavy bag.[52] The video also offers an anatomic look at the muscles and movement of certain kickers to demonstrate how both mass and speed are used to increase the force of each kick (see Fight Science Kick Test (Capoeira, Karate, Muaythai & Taekwondo) 05:18-05:42). This video helps support that the science of how power is calculated is consistent while also offering a visual stimulus to what a martial artist looks like when generating various types of power. We now turn to our own style to see how to increase a karateka's powers using the laws of motion.

Where Science Meets the Art of Hon Shin Do Shorei Ryu

Applying Newton's Third Law of Motion

"Every action has an equal and opposite reaction" is a concept often taught in the dojo, even to the children.[53] However, true comprehension of this concept is

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[52] Ibid, 01:49.

[53] Newton, *The Mathematical Principles of Natural Philosophy*. See Appendix II, Figure 4 for the equation for Newton's Third Law.

demonstrated in how martial artists "tap" into increasing their power. The application of this law of motion is first often taught in the context of the chamber position (a set position) for a sieken zuki (front punch), "Chambering the fist at the hip or at the level of the waist places the elbow on a plane above the fist. This allows the shoulder to push through the elbow and the elbow to push through the fist. The pectoral muscles are not isolated and more of the body's mass can be brought into play, thereby increasing the power of the thrust."[54] Therefore simply starting a front punch from a chamber position increases one's mass, thus increasing the power of the strike by employing Newton's Third Law. This is one of the most basic lessons taught to kids and adults alike in the USAMA dojo.

O'Sensei also clearly explains the role of power, and Newton's Third Law, in the context of our karatedo in his book *The Hand is My Sword.* When discussing force O'Sensei states the practical execution of this concept, "This suggests one way in which the power of a body mass behind the fist, starting from the hips, through the shoulders and arm, finally to the fist, is a much greater force than that generated by merely 'throwing a punch.'"[55] This age old lesson is one taught in the USAMA dojo to this day. When you hear Sensei say "you're throwing all arm…there's nothing on that" that is Master Ed indicating that we are not engaging our entire body to exert force (i.e. not increasing our mass), thus immense potential power remains untapped.

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[54] Phillip Lee Mattox, "Kinesiology for the Martial Arts: A Study in Movement and Power Management," *World Tang Su Do Association*, International Martial Arts of Waterloo, 2012, http://imawaterloo.com/IMAW/Student_Only_files/Kinesiology for the Martial Arts PDF.pdf (July 8, 2017).

[55] Trias, *The Hand is My Sword: A Karate Handbook,* 19.

Torque: A Twisting Component

Torque, again as defined in physics, is a "moment of force" and "is the tendency of a force to rotate an object about an axis, fulcrum, or pivot…just as a force is a push or a pull, a torque can be thought of as a twist to an object."[56] Angular velocity is the fancy scientific word for angular speed (a.k.a rotational speed); key word *speed*. To place this in the much more consumable context, if a technique is initiated with torque, that technique's speed is multiplied which generates power. In this case a twisting technique is leading to more speed, and thus more power:

> It is the utilization of rotating force to position the muscles to allow for ease of movement, extension, body flow and increased power. This twisting force aids in the development of in place body momentum by actively engaging various body parts at different levels and time intervals. For example, while you are punching, the foot rotates before the hips. The hips in turn rotate with the shoulders. The fist rotates simultaneously with the hips and shoulders, but is slightly ahead of the elbow. Thus, torque comes not only at different levels and time intervals, but at various speeds as well.[57]

Mattox is echoing what Renshi described earlier when discussing mastery of movement and the "entire body acting as the sum of its parts in concert to execute a complex movement," in this case with an example of a twisting movement which is not relying on a key factor that many of the untrained use, momentum. The more advanced students learn to generate power without relying on momentum. Twisting is one approach to this method. Bruce Lee further addresses the practical use of torque, "Power in hitting comes

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[56] "Torque," *Wikipedia,* https://en.wikipedia.org/wiki/Torque, (December 29, 2017).

[57] Mattox, "Kinesiology for the Martial Arts: A Study in Movement and Power Management," 20.

from a quick twist of the waist…"[58] Imagine being able to "dump" any amount of shocking energy into an opponent at any given time. To harness this type of movement and deliver it with consistent intent is true mastery. This is just one example of a type of movement out of many (e.g. sinking, rising, pendulum, vibrating) that offer the ability to increase power generation at various speeds and distances. Despite the type of movement chosen there is a common denominator to all martial arts techniques that is an absolute necessity to generating power, which we explore next.

Stable Datum

Though typically used in fields of statistics or geodesy, stable datum is a term that made its maiden voyage into USAMA Wenham in 2017, and the captain that ushered it in, Master Edward Harding. Engineers define stable datum as the point(s) in which all other datum is positioned or aligned. Some religions, such as scientology, consider stable datum order within chaos. All martial artists do require a data point at which to align all other components of a technique. In addition, as many practitioners sense, training and self defense can certainly be chaotic, so having that point to refer to to bring order back from disarray could prove beneficial, yet this is more of a spiritual interpretation and what I am exploring is the physical exertion of power. So in the physical sense, what is a martial artist's stable datum?

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[58] Bruce Lee, *Tao of Jeet Kune Do, (*Valencia, CA: Black Belt Communications LLC, 1975), 94.

Generating power by consciously contributing mass or increasing the directional speed of a technique to increase the force is only one part of the bigger "power" concept. There is one crucial component to delivering optimum power that is where the science and art meet, your stance or what Master Ed calls "your stable datum." In other words, your stance is the order within the chaos. Without a rooted stance that can maneuver with purpose, a martial artist's center of gravity can be compromised before a technique is even executed:

> In combat it's crucial that you maintain complete control of your balance at all times. In order to do this you can utilize only about 50 to 60 percent of your mass in the performance of any given technique. If you attempt to use any more than that you'll hyperextend your technique and lose your balance. So, the force you generate is equal to *the mass that's involved in the execution of the technique,* multiplied by its acceleration.[59]

This is one factor that numerous martial arts experts agree upon. Phillip Mattox explains, "Just as a strong building must be built on a firm foundation, you will only achieve power, stability, agility and flexibility with good stances." [60] Even the legendary Bruce Lee addresses the importance of quality stances, "Balance, too, is vital to good form… you will not have sustained power unless your balance and perfect timing give you enough leverage."[61] One of the characteristics of the Shorei Ryu Hon Shin Do style is

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[59] Phillip Star, *Martial Mechanics: Maximum Results with Minimum Effort in the Practice of the Martial Arts, (*Berkeley, CA: Blue Snake Books, 2008), 10. Also see Appendix II, Figure 3 for how acceleration is calculated.

[60] Mattox, "Kinesiology for the Martial Arts: A Study in Movement and Power Management," 5.

[61] Lee, *Tao of Jeet Kune Do*, 54

low stances, and lucky for those who practice Shorei Ryu Hon Shin Do, physics is on our side with the reasoning behind the low stance work.

Applying Newton's First Law of Motion (Inertia)

The "an object at rest stays in rest and an object in motion stays in motion unless acted upon by an external force" line is fairly well known and may be the most familiar of Newton's Laws. What is not commonly known is how this law relates to the martial arts, or more specifically one's stable datum.

> Inertia is the body's resistance to change in movement. It is proportional to mass, thus the mass of an object is the measure of its inertia. Mass should not be confused with weight. The weight of a person (or an object) is the measure of force with which the earth pulls on the body's mass. The more mass a body has, the greater the earth's attraction on it, the more it will weigh. Weight is a force; whereas, mass is not. It has no direction. Mass is the resistance to change (i.e., inertia).
>
> Lowering your stance increases your mass while not increasing your weight. This increases your inertia and makes your opponent use more force to move you. This also gives you a more stable base from which to launch your techniques.[62]

In Hon Shin Do Shorei Ryu we practice our stances low often for strength and conditioning training. We Sempai (assistant instructors) often repeat "if you train it low, it will be that much stronger in a fighting stance (which will likely be higher)." Yet an additional benefit to a low stance, as Mattox points out, is it increases the ability to stay rooted making it more difficult for an opponent to compromise one's balance. I employ this concept often during randori (a form of free style grappling stemming from Judo), especially when my opponent is larger then me in both height and weight, I simply drop my stance lower to prevent them from throwing my balance completely. What Mattox

[62] Mattox, "Kinesiology for the Martial Arts: A Study in Movement and Power Management," 12.

more importantly points out (though he emphasizes less) in the context of power, is having that “stable” foundation in a stance to execute a technique from, which subsequently leads to a more powerful strike. Without a stable datum, your power will simply not meet optimal levels regardless of the method in which you attempt to generate it. Which brings us to the next part of the examination, snap.

SNAP

"The shocking force of this kind of blow will penetrate deeply into the interior of the opponent, causing severe internal damage." – Phillip Starr [63]



THE SCIENCE BEHIND THE ART

DEFINING SNAP

The title of the paper could understandably suggest there is some kind of equivalence or combination opportunity between power and snap. Snap is simply a type of movement that generates a certain kind of power, and often in karate depending on the technique, optimum power. Though "snap" is one of those terms at the center of arguments between martial artists regarding its meaning, the following is distinct explanation of the concept, "Good snap does require some significant strength, not only to accelerate the technique to very high speed almost instantaneously, but also to *stop* the technique almost instantaneously…Snap is a demonstration of power precisely controlled, which is what makes it so impressive to watch."[64]

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[63] Phillip Starr, *Martial Mechanics: Maximum Results with Minimum Effort in the Practice of the Martial Arts,* (Berkeley, CA: Blue Snake Books, 2008), 17.

[64] "Power and Snap," Interview by Mallary A. Silva-Grondin. *KarateForums*, 2014. Wendell E. Wilson, "Snap," *Essays on the Martial Arts,* 2010, http://www.minrec.org/wilson/pdfs/Kata Snap.pdf. (July 9, 2017).

Snap, the word itself, is one Bruce Lee often refers to in his book *Tao of Jeet Kune Do* as does O'Sensei in many of his publications. There are a few synonymous terms used at USAMA to differentiate between two different types of techniques that generate power, some call it snapping versus thrusting, others "whipping" versus "crashing." Another way to differentiate the two is emphasizing that a snapping technique "explodes" while a thrusting technique drives in a certain direction. Lee differentiates between these two techniques, "Hitting does not mean pushing. True hitting can be likened to the snap of a whip -- all the energy is slowly concentrated and then suddenly released with a tremendous out pouring of power."[65] O'Sensei also offers a concise explanation of a snapping technique, which he defines as "…the sudden tensing of the body muscles at the moment of impact, followed by an instantaneous relaxation for the devastating whiplash effect which is the hallmark of a karate blow. Anyone who has ever played crack-the-whip on ice or roller skates is aware of the rapid acceleration under such conditions."[66] Both explanations suggest a level of precision that is required for the proper execution of a snapping technique, echoing the sentiments of Wilson's quote in the previous paragraph. Control and precision are the key to achieving snap.

When defining what snap is, it is a description of a type of technique as well as a verb. The Oxford Dictionary defines the adjective as "Done or taken on the spur of the moment, unexpectedly, or without notice." This definition agreeably defines the essence of snap, which in a word is "explosive." Another applicable definition comes in the form

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[65] Lee, *Tao of Jeet Kune Do*, 94.

[66] Trias, *The Hand is My Sword: A Karate Handbook,* 19.

of an adverb, “Move or alter with a brisk movement and typically a sharp sound.” This elicits the mental highlight reel of World Karate Federation (WKF) kata videos where you can literally hear the cracking sound of a ghi of Rika Usami or Antonio Diaz.

Visualizing Newton’s Law of Acceleration

“Whipping” and “snapping” seem to be closely associated terms in the martial arts, which will be illustrated in the following practical examples. When addressing snap in the context of optimum power generation, Lovret explains, “The secret is using a rolling, relaxed snap, as if you were cracking a whip.”[67] This illustrative statement of “cracking a whip” is certainly one Master Ed has used in the dojo many times. We return to Newton’s Second law, the Law of Acceleration, to explain why this relax to tense state is important, “This is why we need to keep our limbs relaxed when we kick or punch. Tension creates a force that slows us down.”[68] Ergo to increase the acceleration (and thus the force) that last-minute tension is a crucial component. Scott Langley describes a great experiment that illustrates this exact concept (one you do not need to be a martial artist to attempt):

> Please try this: Make a fist and then hold your index finger up, straight. Now, as quick as you can bring the finger back down to the fist. Now return the finger back to the same place, but with your other hand pull the finger back as far as it will go and then release. Hopefully there will be a difference. With the first exercise the finger is being forced forward by the tension of the muscles. With the second exercise, it is the other hand that is forcing the finger back and when it is released it snaps back. However, because the muscles in the moving finger are

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[67] Fredrick J. Lovret, *The Way and the Power: Secrets of Japanese Strategy*, (Boulder, CO: Paladin Press, 1987), 52.

[68] Mattox, “Kinesiology for the Martial Arts: A Study in Movement and Power Management,” 13.

> relaxed, it moves twice the distance of the previous exercise in less time. This "snap" of the finger can demonstrate how we should snap all our techniques.[69]

Langley's emphasis on relaxation in the context of snap is crucial to understanding snap's true benefits.

Rika Usami was mentioned in the introduction of the "Snap" portion of this paper for good reason, she is one of the best examples of executing effective snap techniques in kata. Jesse Enkamp breaks down an analysis of Rika's "snap" and attributes her ability to do so to three principles, speed, timing, and balance. According to Enkamp, "Together, these three principles will give you POWER. Which is then expressed through the whip concept."[70] Tying Enkamp's analyses of the three principles of snap to Langley's emphasis on relaxation (which relates to the timing principle), when watching Rika perform she is perfectly balanced in her stances but is also relaxed in her movements right up until the execution of each technique, which concludes again with relaxation. Her speed is unrivaled and no doubt contributes to her impressive snapping techniques (see Kata BASSAI DAI by Rika Usam).[71] She perfectly represents the beauty of kata through quality snapping techniques.

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[69] Scott Langley, "The Snap of Karate," The Shotokan Way, http://www.theshotokanway.com/snapofkarate.html, (July 9, 2017).

[70] Jesse Enkamp, "How to "Snap" Your Karate Techniques Like Rika Usami," Karate by Jesse, http://www.karatebyjesse.com/rika-usami-karate-technique-secret/, (July 9, 2017).

[71] Jesse Enkamp, "Kata BASSAI DAI by Rika Usami," Filmed [2012], YouTube video, 01:44, posted [March 15, 2012], https://youtu.be/8_ULjKkGmn0. Especially for those not familiar with Rika, the following is a video of her performing the kata Bassai Dai (a kata we also perform in Shorei Ryu Hon Shin Do, but with slightly different nuances). Notice her balance, her speed, and her relaxation and how that impacts her timing of a technique.

Taking two early level basics that are taught in Hon Shin Do Shorei Ryi, mae kage geri (front snap kick) versus mae kekomi geri (front thurst kick), let's illustrate how snap ties into power generation. Though both are front kicks, a front snap kick relies on a front kick that snaps back after the point of impact, relying heavily on the calves and quads and snapping back of the hips (and is often taught in the beginning as a raising motion, though advanced students later learn how to drive the energy forward off a front snap kick). A front thrust kick is more of a forward crash into the target that relies heavily on the forward drive of the hips and glutes.[72] Being on the receiving end of both of these kicks many times during my martial arts career (typically receiving from Master Ed) the experience of both kicks are quite different. I am typically shocked or stunned when receiving Master Ed's front snap kick, so much so that I have been stopped dead in my tracks and have even keeled over from the wind being knocked out of me. When receiving his thrust kick, I am usually driven backwards, and though still painful it does not necessarily have shock value it more just creates space for him for a follow up technique. These varying experiences are attributed to the type of power he is generating off both kicks.

Many assume the thrusting kick holds more power due to engagement of the glutes, which is one of the largest muscles so the blow is devastating. Assuming the martial artist has not trained one kick over the other significantly, there is some truth to

[72] This is not stay a front thrust kick cannot or does not have a snap element. This is an elementary introduction to help illustrate the snap concept by contrasting the two kicks.

this analysis when only taking anatomy into account. However, Bruce Lee offers additional insight, "Look into snapping a kick from the knee to get more power, or snapping a kick from the hip and knee to get more speed."[73] What Lee is suggesting is that the "snapping" motion from the knee while engaging the mass of your body (hips, etc.) increases the speed and the mass of the kick which therefore increases the power of the kick. In short, incorporating that "snap", according to Lee, directly results in more power. Based on the experience of receiving this type of kick, a snap kick is more devastating than the thrust kick. My "receiving" experience aligns with this analysis.

There are additional variables to determining which of these techniques is more "powerful" including the experience of the martial artist, the training of each kick, muscle conditioning, and more. Lee's insight on snap also highlights the difference between a beginner student and an intermediate to advanced student. Many beginner students are throwing "all leg" on their front snap kicks – i.e. they are not yet engaging the base foot, glutes, and hips like a more advanced student. Therefore there is much "less" on the front snap kick due to lack of efficiency and utilization of the biomechanics which is why often the thrusting kick is known as the more powerful kick. However, both basics are obviously beneficial to have in your arsenal as they should be used in different instances (more on this later).

The science supports the argument that these two kicks do in fact differ. A target receiving a front thrust kick is often uprooted (i.e. it moves) due to the "push" power behind it. This is a visible result. Therefore a snapping front kick, which does not usually

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[73] Lee, *Tao of Jeet Kune Do*, 81.

move its target, is often incorrectly assumed to be the less powerful kick. However this technique's result is damage on the *internal* level (also known as applied force). Dan Djurdjevic explains:

> It is a simple matter of physics that the more "push" there is to a technique (i.e. the more you displace your opponent), the less you've injured him or her. Compare a hard shove that throws your opponent across the room with a sharp snapping kick to the groin and you'll see what I mean…Most karateka have, in my view, rejected the old snapping kicks and punches of old karate which produce what is called a "hydrostatic shock" (you're 80% water). Instead they have gone for methods that are more akin to boxing. The latter is easier to understand, looks visually more impressive, and is easier to learn, so it's no surprise… It's like comparing a hit from a heavy pillow to the flick from a wet towel.[74]

That is not to say that a snapping kick holds equal or more power than the thrusting kick; the emphasis here is difference in the result of the technique, so depending on the situation, you may wish to employ a different result. We turn to Renshi for an account that highlights when to "thrust" and when to "snap" taking momentum and distance as the key variables in the decision of when to leverage each technique:

> First of all, momentum is a product of velocity and mass, and depending upon the situation, momentum is not necessarily a bad thing. It is (or can be) an integral component of power upon impact. However, reliance upon it is not wise in many situations. For example, if the occasion for launching the strike or kick requires an extremely short duration between the realization of the need to do so and the actual landing of said technique, it is unwise to place any reliance on momentum. The problem with momentum is that it takes a moment and some distance to develop to a degree that makes its impact optimal. In plain-spoken language, "If you must act quickly, just explode." If you have a fraction of additional time, and some distance to use to your advantage, THEN bring momentum into play. Just as an example of a good time to use momentum, I go back to 1984. In a kickboxing bout I had just landed a really hard overhand right on my opponent which knocked him straight back into the ropes. In order to avoid the follow up I was about to throw, he slipped off to my left but being dazed he staggered into the

[74] Dan Djurdjevic, "Visible Force vs. Applied Force," The Way of Least Resistance, http://www.wayofleastresistance.net/2008/06/visible-power-vs-real-power.html, (July 9, 2017).

> ropes on my left side. I turned to face him but being about 6 feet away, I had a significant distance gap to close. But, to my advantage, he was dazed and did not seem interested in moving off of the ropes. So I leapt forward throwing a long-distance front thrust kick into his abdomen. The kick had significant momentum due to the distance it had to travel. I also put every ounce of strength and speed I could muster while moving forward. The impact of this kick actually pushed his hind parts through the ropes and he was unable to continue. To summarize, if you have sufficient distance AND time to utilize momentum, do so. If not, don't.[75]

It should be noted that the prime advantage to a snapping technique over a thrusting technique is it could be the deciding factor between stopping someone in their tracks due to that shock value or simply just aggravating the assailant:

> Of the four types of impact, only two are capable of producing shock: the *focused impact* and the *snap-back impact*. This is because the force that is generated by these forms of impact is in contact with the target for only a fraction of a second. The force generated by the other two types of impact, *piercing impact* and *smashing impact*, are in contact with the target for a much longer time.[76]

Taking all of these examples into consideration, the physics, Rika's Kata, Renshi's first hand execution of both kicks, the types of impact, and my own experience on being stunned by snapping techniques such as a mae kage geri, it is illustrated here the true benefits of snapping power for both beauty and annihilation.

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[75] Cranston, interviewed by Mallary Silva-Grondin at Dover, New Hampshire (2017).

[76] Starr, *Martial Mechanics: Maximum Results with Minimum Effort in the Practice of the Martial Arts,* 46.

THE ROLE OF KIME

"The purpose of kime is pure and simple: power." – Fredrick J. Lovret [77]



THE SCIENCE BEHIND THE ART

DEFINING KIME

I sat down to author this section after conducting some kime drills that I learned from Master Ed this very week (September 25, 2017). Coincidentally, I had already set some time aside to write the kime portion of this study this weekend before Sensei revealed his lesson plan. Needless to say, kime has been on the forefront of my mind for most of this week between the dojo's curriculum and my writing assignment. But what is kime? This is another term affixed to numerous interpretations in the Martial Arts world. To keep on theme of being Shorei Ryu Hon Shin Do-centric, the Academy's definition will be used for understanding the concept of Kime, which is defined by the USAMA as "focus of power." Another comparable explanation that further elaborates our Academy's definition comes from Jesse Enkamp, "Kime is that split second moment of impact at the end of your techniques."[78] Leveraging an example that even an untrained eye can

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[77] Lovret, *The Way and the Power: Secrets of Japanese Strategy,* 56.

[78] Jesse Enkamp, "How to Get "Kime" in your Karate Techniques," Filmed [2017], YouTube video, 02:21, posted [July 19, 2017], https://youtu.be/ceTQkGxyyN0, 0:00:48-0:00:55.

recognize, when watching a traditional martial artist throw a sieken zuki (a front punch), once the arm and fist are extended and locked out, there appears to be a slight pause, literally a split second, where the technique abruptly stops. This is the moment that Enkamp is highlighting, this is kime. Frederick J. Lovret confirms, "…you focus your entire effort on one small point to ensure maximum destruction. That momentary concentration is called *kime*."[79]

To break down the concept of kime even further on a scientific level, Enkamp explains: "…looking at a strict sports science perspective, kime is nothing but a short isometric neuromuscular contraction, given from an isotonic contraction. In other words, to put it more simply – you move and then you stop.[80]" What results from this sequence of movements is a significant transference (or some say "dump") of energy into the target. Yet *how* that energy is transferred becomes of significance as illustrated in the next section.

Visualizing Kime Through the Eyes of Science

A study in visualizing this energy transfer was conducted by the Rochester Institute of Technology. Professor Ted Kinsman used a high-speed digital camera to capture both a martial artist and himself (an untrained individual) striking military grade gelatin, used due to its composition alike to human tissue. Professor Kinsman created a new type of polarizing imaging to capture the force of each strike a millisecond after impact. The images and video (4845 frames per second) illustrate the force of the strike

[79] Ibid, 56.

[80] Ibid, 0:01:40-0:01:56.

in the form of waves and color (see Appendix III for the images) and how the force travels through the object over time.[81] Velocity in relation to force is what Kinsman was looking for, "…these are a visual representation of the velocity of impact" yet what this study offers to a martial artist is the contrast of the resulting energy from a strike which illustrates the variable of kime.

When examining the images and video of the trained versus untrained strike, the trained strike (see Appendix III, Figures 1 and 2) resulted in narrower and more controlled waves that emulate a pulsing force through the object over time. The transference of this *controlled* energy is now visually evident as the energy leaves the strike and continues through the object while losing power as it travels. The untrained striking image (see Appendix III, Figure 3), though more visually stimulating with various colors and swirling and wider waves, illustrates a diffusion of energy, which loses most of its power immediately after the strike as the energy disperses, which differs from that continued power that traveled from the trained strike. It was concluded that the narrower waves of the trained strike would have caused more damage to the tissue, "… the greater velocity creates both greater pain and damage while striking."

What the trained eye knows is the martial artist's strikes in the experiment had some "snap" or at least a moment of pause/recoil after that split second of contact while the untrained strike had more of that "crashing" finish based off the visualization of the

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[81] Aric Keyes, "The Science of Striking," Kime Karate, https://www.kime-karate.com/the-science-of-striking/, (October 24, 2017) and Ted Kinsman, "Intro to Polarized Light: using polarizers to look at materials in a different light," Rochester Institute of Technology. Department of Photographic Sciences, February 2017, https://cias.rit.edu/media/uploads/faculty-f-projects/1724/documents/337/intro-to-polarized-light.pdf, (October 24, 2017).

energy flow.[82] This concept also illustrates why receiving the snapping kick from Master Ed felt as devastating as it did, now seeing an example of how the energy hit and traveled through me internally. That controlled "dump" of energy was concentrated to a small internal area, this is what offered the "shock" or "stun" factor. This study also perfectly illustrates the resulting power of a strike with optimal kime, while the waves provide a wonderful visual metaphor to the key premise of kime, control.

Where Science Meets the Art of Hon Shin Do Shorei Ryu

Optimal kime is one of the most difficult things to truly achieve and achieve well in the Martial Arts, as it requires immense precision of timing and control. One drill used at USAMA for training kime is tossing a tennis ball against a wall, then upon catching it grabbing the ball with intention and explosion (a bit a snap if you will) while sticking the stance of choice with a sudden stop at the end of the technique. Naturally, Sensei made this look easy but in execution this was a very challenging exercise and one I certainly wanted to incorporate into my training regimen and did so this morning before sitting down to write. Ironically, when examining Enkamp's Kime video the same exact drill was demonstrated. The minds of great masters think alike, which allows me to point to a video reference for the readers of this paper to see *exactly* what Master Ed taught us (see How to Get "Kime" in your Karate Techniques.).[83]

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[82]Just to to, there are other factors here that contributed to the results, such correct fist alignment and the area of the fist which made contact to the target. For the martial artists reading this, these factors will also be glaring when examining the photos.

[83] Enkamp, "How to Get "Kime" in your Karate Techniques."

As martial artists, we spend a lifetime training our kime through basics (kicks, strikes, blocks, and stances), kata (forms/routines), and drills like the tennis ball drill. From a trained eye, the most proficient martial artists and the ones we aspire to be have a certain characteristic of movement in common, they have the utmost control while delivering the most devastating dose of energy to an opponent or target. Kime often translates visually in crisp, concise movements. Some suggest that kime audibly translates through the sharp snapping sound of a ghi (karate uniform), and in some cases this is accurate, especially when viewing kata at either the WFK level or watching our very own Master Ed and Renshi perform kata.[84] These are all tangible pieces evidence of kime, but should be noted that they are not kime itself.[85] One point of confusion in defining kime is also its result and purpose. As Professor Kinsman has helped to illustrate the result of good kime (and alluded to its purpose briefly), it is time to address the practical side of kime, which is its purpose– delivering optimal power through technique. Though many interpretations of kime are visually and audibly stimulating, the practicality of kime is why we train it. The best way to emphasize the importance and purpose of good kime can be examined in another training exercise.

After the tennis ball drill, Master Ed proceeded to break out tonfas and bo staffs.[86] When tasked to use the tonfa to strike against a bo, many of us felt out of our element.

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[84] See the video of Rika's kata, with sound, to hear the sound of her uniform when she moves. Jesse Enkmap, "Kata BASSAI DAI by Rika Usami," Filmed [2012], YouTube video, 01:44. Posted [March 15, 2012], https://youtu.be/8_ULjKkGmn0.

[85] Jesse Enkamp, "What is Kime?," *Karate by Jesse*, http://www.karatebyjesse.com/kime-putting-the-nail-in-the-coffin/, (July 9, 2017).

[86] Tonfas are similar to what we recognize as police batons, the difference is Tonfas tend to be flat while the batons tend to be rounded. Tonfas are one of the traditional weapons in the art of Kobudo, which an Okinawan weapons system.

That power that many of us are used to feeling when striking or kicking went right out the window as our kime was completely off. It seemed that the addition of an object in hand unraveled our control – and *control* is what kime is all about. We were not used to the reverb that results after the clashing of weapons. This caused a bit of disorientation in terms of where to follow through with the technique and when to pull it back. After a few minutes of "letting it fly" to allow our bodies to adapt to the foreign objects in our hands it was evident we had forgotten much of our foundation. The stances were off, we forgot about our hips, in essence, it was all arm. After some feedback from Sensei we ended up starting to put the pieces of our foundational puzzle back together yet were still holding back. We started to tap into focusing on not over rotating the technique while trying to snap that technique back at the precise moment where the power is transferred, it started to feel better and the sound of the tonfa against the bo sounded stronger, yet it was still missing something.

Then Sensei had me hold the bo while he struck the bo with the tonfa. As I held the bow he demonstrated what we were currently executing – which was at that point in the exercise was an "ok" strike but it was only somewhat strong because we were relying on gravity and the downward momentum of our body. He demonstrated what happens when over rotating the technique and what happens if the technique pulls back too early. In both instances, as I held the bo, though I felt the impact of his strikes from his natural strength and momentum, I did not find it "devastating." The next technique he threw was with the utmost precision, shifting from his feet, to his knees, to his hips, and channeling the energy through his arm and to the the tonfa which ultimately made contact with the

bo, he then snapped the tonfa back a split second after the exact moment of impact. The result was an annihilation of the bo. My hand that held the bow felt shock, his energy created a vibrating, stinging sensation to the point where I almost dropped the bow. Keep in mind this entire experience was executed within maybe a second if not less. The words of Bruce Lee came to mind, "Timing a blow is the secret of powerful hitting."[87] What Lee is suggesting is harnessing kime directly correlates to great power.

What was the lesson here? The not so subtle demonstration quickly connected the dots for me. Imagine if that was an attacker and your life was on the line. Good kime is the point of difference between delivering a blow that may or may not stop your attacker and the *certain* annihilation of your attacker. Master Ed delivered a devastating amount of energy to his target as opposed to receiving the rebounded energy from the contact like what was happening to us earlier in the drill. To further send the message of the importance of kime, Renshi addresses this same lesson but in the context of a wonderful kime training partner, the makiwara:

> I found it to be the most mundane, brutal, honest, and effective training partner. Built for snapping techniques, I used it mainly for reverse punch, vertical punch, and Okinawan style roundhouse kicks. I was a brown belt for about four years, and during that time my practice with the makiwara really began to take shape. I fully expected it to challenge and improve the structural alignment and power of the strikes I practiced, but to my surprise it improved (to the same degree) my pivoting and the required waxing and waning of relaxation and rigidity. With the tool, I believe I transitioned from knowing I could hurt someone with my strikes to knowing I could *stop* someone with my *strike* (note the singular).

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[87] Lee, *Tao of Jeet Kune Do*, 62.

What Renshi is describing, specifically with the "relaxation and rigidity" part of his statement, is the harnessing and training of his kime, which translates visually as a "snapping" technique. The control and focus of power of any technique can deliver amazing power to any target. Lee also emphasizes the importance of that focus of power "All punches should end with a snap several inches behind the target; punch through the opponent instead of at him."[88] It is now more than ever, my desire to train this to the point of mastery like my masters before me. This is a significant point of difference between a karateka and a master, and between defeat and survival. In short, it is all about kime. Kime is *the* necessary ingredient to executing power through snap.

[88] Lee, *Tao of Jeet Kune Do*, 90.

CONCLUSION

"A senior student of the art can generate unbelievable power by properly focusing his mind and body." – Frederick J. Lovret[89]

Reflections on Power & Snap in My Current Journey

Lovret's quote perfectly and simply outlines the goal of many martial artists, including myself; to be able to generate great power, or in the words of Renshi, to stop an opponent with "*one* strike." The alignment of my mind and body are essential when trying to obtain this goal. I watch my Masters in awe, and have since I was six years old. Many of them have shaped me into the person I am today, therefore I put a lot of stake in their perspective. I want to make them proud by demonstrating the pristine crispness and extraordinary power that are the result of their investment in me over these many years. To even remotely tap into "their level" there are some specific components that I reflected on during the course of my research that will help me achieve the beautiful and effective techniques of my masters before me, whether it be for kumite, kata, or "in defense of my life, my family, or my country."[90]

Stable Datum: Balance & Posture

When I first returned to the dojo in 2014, after over a decade out of the dojo, I quickly realized how not "rooted" I really was, both spiritually and physically. Muscle memory, in this instance, was not working my favor. Eleven years prior I was an

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[89] Lovret, *The Way and the Power: Secrets of Japanese Strategy,* 59.

[90] This is the closing statement to the Shorei Ryu system's school creed. We commence each class by bowing in and saying the school creed.

adolescent girl weighing between 110-115lbs and was heavy into my training. I was a three sport athlete, I was limber and swift. Coming back as a *woman*, weighing in between 166-178lbs, my body had never felt more foreign to me. The spring floor of the dojo, which I used to love because it gave me that much more air for my tobi mawari mikazuki geri (jump spinning crescent kick), now was revealing my imbalance and poor body mechanics of my adult alignment - i.e., my balance was completely off and therefore my stable datum did not exist and many of my techniques were suffering. However, my mind commanded my body to execute the way it used to. Yet over ten years out of practice, the neural connections to my central nervous system were beyond rusty. So though my mind knew what to do, my body no longer knew how to execute these commands. This created a massive detachment between my mind and body. Bruce Lee highlights the importance of this biological interconnectivity:

> Muscles have no power to guide themselves, but the manner in which they act, and consequently the effectiveness of our performance, depends absolutely on how the nervous system guides them. Thus, a badly executed move is the result of impulses sent to the wrong muscles by the nervous system, or sent a fraction of a second too soon or too late, or sent in improper sequence or in poorly apportioned intensity.[91]

Looking back on 2014, it is clear my reintroduction to my martial arts journey was "chaotic" on a biological level.

I've spent the better part of the last four years of training to develop better body mechanics and "developing the connections in the nervous system."[92] My footing on

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[91] Lee, *Tao of Jeet Kune Do*, 44.

[92] Ibid.

solid service has become increasingly more sturdy and intentional. I am better able to grip the floor with my toes and have even gained some independent control of certain toes (previously I had none). My knees, which have experienced some injury in the past few years, have still improved. The kokutsu dachi (layout stance) still proves the most troubling for correct knee alignment on the back leg, but it is something I am working on (with the help of the trusty bo staff). There is some improvement on the dojo floor, though often the kickback from the spring does give me a run for my money, especially when landing from a jumping technique, something I suspect can be corrected by harnessing the Law of Inertia. However there is one factor which has been most troublesome for me, even since I was a youthful karateka, and that is my posture.

"All of our experiences of our lifetime can be viewed through the window to our posture. If the eyes are the gates to the soul, then the posture is the map of the journey."[93]

- Phillip Mattox

I have scoliosis. In its resting state, my back is not aligned properly and it causes significant pain. Ironically it is that very factor on why Renshi recommended I transition from gymnastics to karate back in 1993. The inflexibility of my back, which he observed early on (roughly age six) was causing immense frustration for me while participating in gymnastics. However, I had speed, strength, and flexibility elsewhere, so he knew I'd thrive in the martial arts with that foundation - and I did from age eight to seventeen.

[93] Mattox, "Kinesiology for the Martial Arts: A Study in Movement and Power Management." 3.

This back driven-frustration has been resurrected in my adult journey, as my posture (my leaning forward specifically) not only challenges me from executing one of the stylistic characteristics of Hon Shin Do Shorei Ryu, standing erectly, it compromises my stable datum. I have improved, especially this past year while trying to drill in upright posture, specifically while practicing basics and kata. Yet when I fatigue, my instinct is still to lean forward, slouching my shoulders with my head out too far. I would love to see a rewiring of my biological connections so that standing straight is my new default.

This will require the continual "burning in" (and strengthening) of a posture that does not come natural to me, very well knowing it will take time for this to develop. Years even. I look forward to when I will stand tall instinctively. Even more-so I look forward to the increase in stability and thus power in my techniques that is inevitable as confirmed by the law of physics. Thank you Newton.

Flexibility

I focused significantly on flexibility during my 2017 training regimen. The flexibility improvements from this year I owe to the guidance of Sensei Emmanuel. As mentioned, in my youth I transitioned from gymnastics to martial arts and was therefore one of the more flexible students because of the wonderful foundation gymnastics had laid for me. However, the sedentary lifestyle of my early twenties caught up with me and my flexibility was lost to my youth. Even in my later twenties as I re-engaged in an active lifestyle, I was going at everything "hard" whether it be through Insanity™ workouts,

lifting weights, or my karate practice. There was no balance. I believe mentally I was punishing myself for the years of inactivity, trying ferociously to "catch back up."

As Sensei Emmanuel often states, "As martial artists we are so hard on our bodies, we must invest time in the recovery." This was a missing piece to my puzzle. In 2017 yoga was heavily incorporated into my regimen. I learned to accept the discomfort in certain positions such as pigeon, boat, and downward dog. Emmanuel's philosophy of balance (matching our hard training with recovery stretching) proved beyond useful. After a couple of months of yoga study my stances were becoming deeper and my injuries/strain less frequent. If nothing else, stretching is a preventative measure, which most of us know. However, now I have learned to enjoy it in the moment, and even look forward to it; the decompression and the reflection have become meditative during my practice. There are of course other benefits as well, such as higher kicks and better balance, especially regarding basics and kata. My conclusion therefore, is that yoga has a wonderful impact on one's stable datum (whether spiritual or physical). Especially now, as I write this in the dead of Winter (where today it is -7º), I will tackle 2018 with yoga built into my daily regimen and continue the strive for depth and balance while minimally preventing further injury or strain.

Speed

> *The athlete who is building muscles through weight training should be very sure to work adequately on speed and flexibility at the same time. In combat, without*

the prior attributes, a strong man will be like the bull with its colossal strength futilely pursuing the matador or like a low-geared truck chasing a rabbit.[94]

- Bruce Lee

Coming back into the dojo in 2014 I felt like the "low-geared truck." I was stronger than I had every been, but much like my flexibility, my speed, which was a huge asset at ages sixteen and seventeen, had suffered tremendously. This was most evident when sparring. This is another area I focused intently on in 2017. One major achievement for 2017 was losing a significant amount of weight the first half of the year, which meant my techniques could "fly" more quickly as I was carrying less weight when trying to execute a technique (especially visible with kicking techniques). My defensive speed (some may call reactionary), has always been decent, though there is always room for improvement. This translates to my defense when sparring. I typically block or parry more than I take with my peers. When sparring the Masters however, that's a different story. I'd love to step this up and be able to "better roll" with the black belts. This also requires offensive improvements. This is where large room for improvement lay. I can block all day and only let a few slip by, but putting the pressure on my opponent is an art I have far from mastered.

With my offensive speed, I tend to launch my techniques more "like a shot gun than a machine gun," as Master Ed would say. This is especially noticeable with my kicking techniques. I need to work on that recoil, that snap, and my kime. Once I can achieve this, I will of course deliver more devastating power in a single blow (because as

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[94] Lee, *Tao of Jeet Kune Do*, 46.

we all know, speed leads to power) but I will also be able to deliver more techniques to my opponent in a shorter amount of time. This could translate to the "peppering" techniques that Renshi and Master Ed often annihilate us with when sparring. Basics, sparring, and some speed and agility training will help me train this up for the coming year.

Inner Power: Finding My Kiai

"The feeling comes that one can go on without constantly planning and revamping plans, and be equal to whatever comes, by the very freedom of trusting oneself to react without worrying about reaching and ending in a mental block."[95]

- O'Sensei

The area of inner strength is possibly the greatest and most consequential area of improvement that I plan focusing on intently in the coming years. Even if all of the aforementioned areas fall short, this is the one that will make or break me as a martial artist and as a person. I often find what the gaps are in my abilities, and punish myself brutally, in the mental sense. I equate my lengthy time away from the dojo as one of the worst decisions of my life. I would be so much further in my training and that much more capable if I had never stopped. As a result, when I find myself frustrated because I cannot execute a technique the way I wish, I return to my thoughts of regret. Listening to my own Masters' stories this past year (2017), and hearing that they too have regrets lead me to accept that I cannot change my time away but only further focus on the now and give my training all I have. I also realized it is ok to make mistakes and to have regrets as long

[95] Trias, *The Hand is My Sword: A Karate Handbook,* 23.

as those regrets do not hold me captive. I also realized I am currently the only active student in the dojo that has trained at USAMA Wenham as both a child and adult, and that this experience offers a unique perspective, one I am finally starting to take some pride in.

Upon finding my acceptance of this matter, I had a novel thought that ushered me outside my own journey. Perhaps focusing on what is wrong or insufficient is a common epidemic with many martial artists. Many of us seek perfection on this journey, knowing very well it will never be achieved. Perhaps that is why we are all a bit mad in the end as to some, this endeavor would appear to be quite literally an insane pursuit. My conclusion is that I believe truly that I am not alone in this. Casually training in other dojos over the years also allowed me to observe that the expectations and the standards at USAMA are extremely high and therefore, I am not going to pick up on everything right away, it will take decades to even come close to meeting those standards. All of these realizations further relieved me of this great burden I have been carrying - 2017 was the year of acceptance.

Now that acceptance was found “beating myself up” is a bad habit that must be broken. The elixir for this, I believe, is finding my inner strength which undoubtedly requires more confidence in me. I must find trust within myself, including my own instincts and abilities. These “mental blockers” (as O’Sensei calls it) must be removed and in that clearing I believe I will find freedom within my own inner strength, at which point I will be capable of anything. If not completely obvious at this point, this challenge before me is one hundred percent mental. The belief that I can and will be the martial

artist I have always dreamed of being will usher me into that next chapter of my training. I turn to the great Bruce Lee for an illustrative description of how attitude can impact outcome:

> The attitude "That you can win if you want to badly enough" means that the will to win is constant and no amount of punishment, no amount of effort, or no condition it too "tough" to take in order to win. Such an attitude can be developed only if winning is closely tied to the practitioner's ideal's and dreams. Experience shows that an athlete who forces himself to the limit, can keep going as long as necessary. It means that ordinary effort will not tap or release the tremendous store of reserve power latent in the human body. Extraordinary effort, highly emotionalized conditions, or a true determination to win at all costs will release this extra energy. Therefore an athlete is actually as tired as he feels, and if he is determined to win he can keep on almost indefinitely in order to achieve his objective.[96]

"Winning" for me is performing at a level I am proud of, confident in, and that my instructors before me are also proud of. This is where the lesson of stable datum goes even farther than the physical, harnessing the negative chaos within my own mind, that is the point at which all other components (whether it be balance, speed, or flexibility) will align.

"The kiai is a physical exemplification of a hidden internal power that takes years to achieve."

- O'Sensei

An artifact of a successful pursuit of inner strength will be my kiai (yell from stomach). I do not currently feel attached to my kiai and am quite honestly inconsistent in

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[96] Lee, *Striking Thoughts,* 69.

how and when I execute it. A kiai, if executed correctly, can "assemble all physical power and strength into one particular point" according to O'Sensei.[97] In short, a good kiai will help me exert more external power by tapping into my inner power. Another great purpose of kiai is one based off a quick lesson Hanshi taught us during the October 4, 2014 Brown and Black Belt promotion ceremony at the USAMA in Wenham. It can quite literally strike shock into your opponent making them freeze for even just a second. This is the opportunity that inner power offers - literally striking fear into the soul of your opponent. Though this will be highly experimental, I look froward to finding my inner strength and my kiai in the coming years.

SUMMATION

There is so much evidence to how the martial arts has changed how I live my daily life: what I eat (or rather "fuel" these days), how I breathe, how I walk, how I leave work late at night surveying my surroundings, how I shut the lights off before bed (hint, with my toes), engaging my core when in the car, shifting my squats during other non-martial arts workouts to kiba dachis, and so much more (all of which my family has grown accustom). Even more so, especially during my journey in 2017, how Hon Shin Do Shorei Ryu has influenced my spirit is a priceless gift.

Something I have never been particularly good at, and have still far from mastered, is *enjoying* the journey. Typically I am driving steadfast towards a goal (whether it be for family, career, rank, or other personal aspirations). I always have a

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[97] Trias, *The Hand is My Sword: A Karate Handbook,* 22.

"white whale" that I am chasing. That was not my experience this past year. During the research and writing of this paper I can honestly say I was present and thoroughly enjoyed the learning experience that resulted from it so much so I needed to literally stop myself with a hard deadline to actually complete the assignment. I am Master of History, so the soft sciences I have always been confident in; but now to understand, from such a hard scientific perspective, what I am doing during certain techniques and how I can apply the laws of motion to improve was beyond rewarding. It has changed how I do my basics and kata already (more recoil to strive for that snap/power for example). I hope the outcome of my efforts offer an amiable survey of the science and art behind power and snap in my beloved Karatedo style of Hon Shin Do Shorei Ryu. Minimally, I hope it serves as a small artifact of my passion and engagement, which O'Sensei describes as "devotion" when speaking of other students of the past, in what I now consider, truly, a way of life:

> Although the development of the science of karate over the centuries has been long and arduous, and has at times even been in danger of being lost to mankind, it has nevertheless persisted to the present day due to the devotion of its many students and masters, often in the face of great hardships.[98]

My greatest reflection from all of this, is I am realizing now after all I have learned in almost thirteen years in the martial arts, is that my journey is really just beginning and will never truly end. I plan on bearing every failure and celebrating every triumph as they come, within each moment, presently, on my Hon Shin Do Shorei Ryu adventure.

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[98] Trias, *The Hand is My Sword: A Karate Handbook,* 16.

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AUTHOR'S NOTE: The Internet offers a world of knowledge at our fingertips. With this luxury comes a responsibility to also think critically as to sift through quality information and inaccurate information. The following online resources were selected based on the essence of their content and the credentials of the authors. That is not to say that they are without their flaws. If the instructors overseeing this paper feel at anytime that these sources are less than, or rescind the credibility of this study, they will swiftly be removed.

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APPENDICES

APPENDIX I: LINEAGE IMAGES



Figure 1: O'Sensei, Robert A. Trias

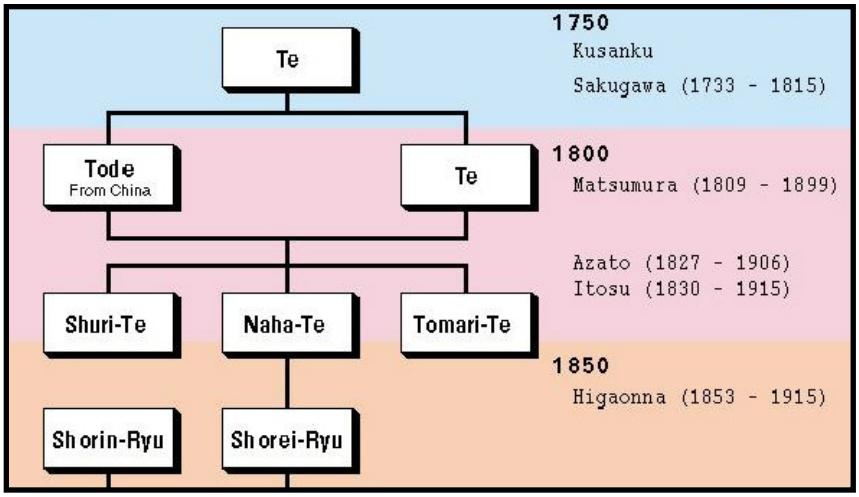


Figure 2: Martial Arts Systems' Lineages A

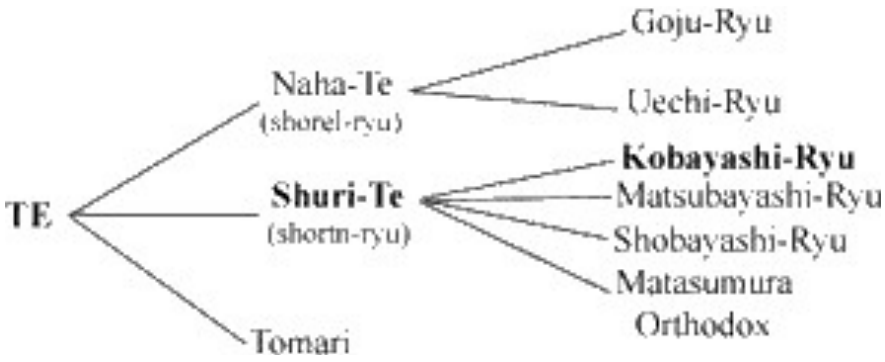


Figure 3: Martial Arts Systems' Lineages B

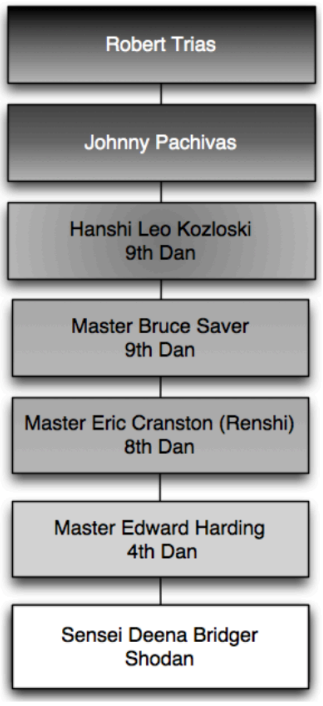


Figure 4: Hon Shin Do Shorei Ryu Direct Lineage

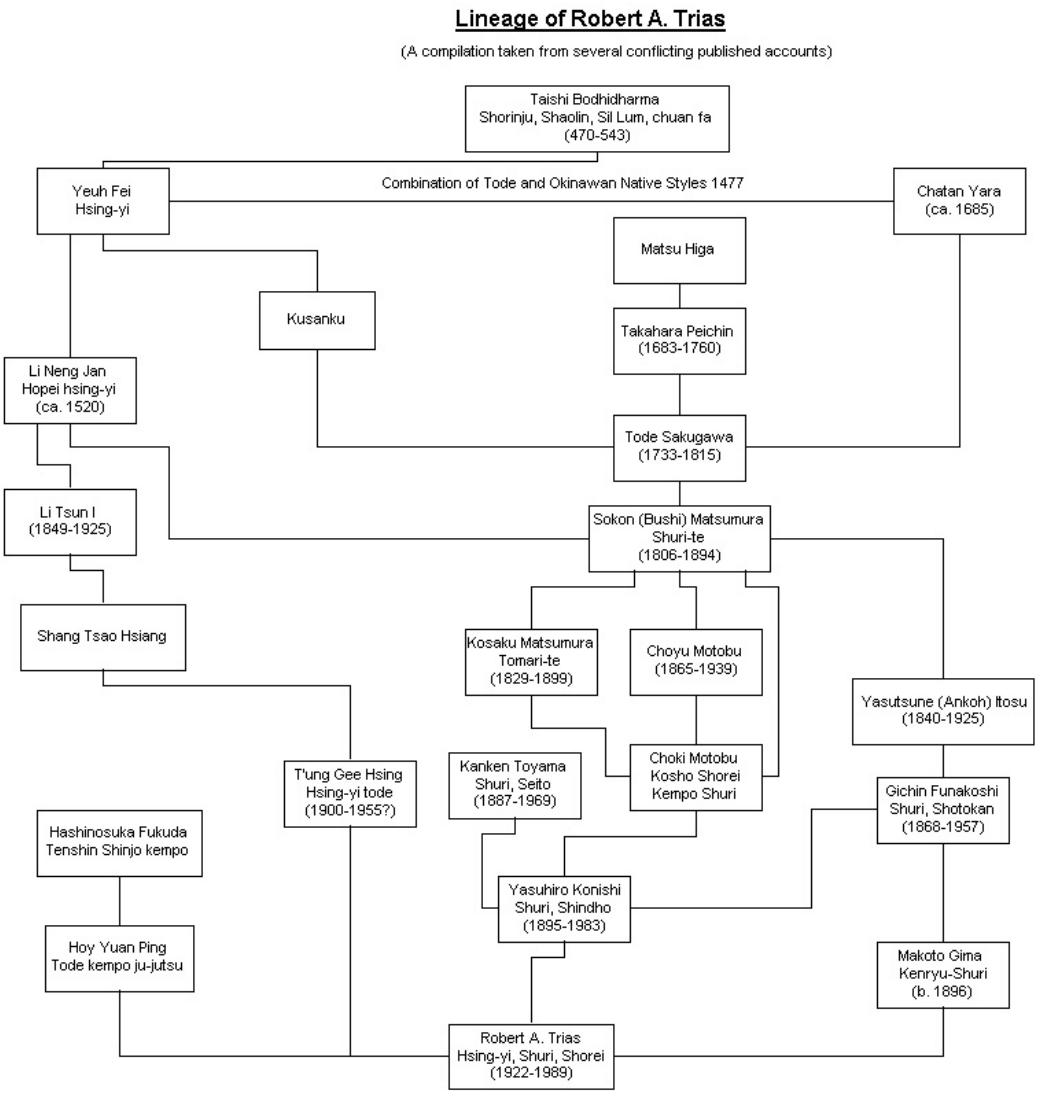


Figure 5: Martial Arts Systems' Lineages C



Figure 6: From left to right: Hanshi, Renshi, and Master Bruce

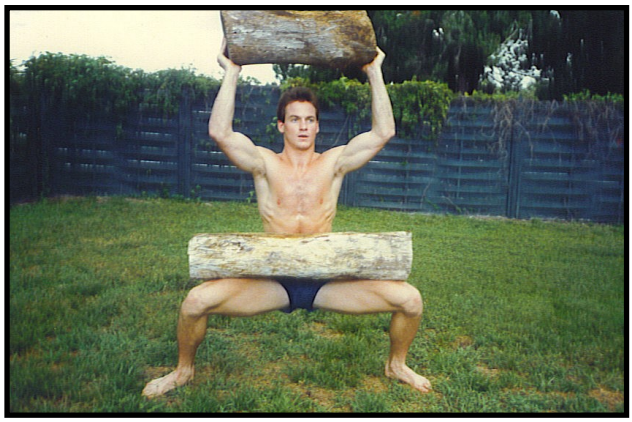


Figure 7: Renshi's Kiba Dachi (Horse Stance) with Soaked Logs



Figure 8: From left to right: Renshi, Master Ed, and Hanshi

$$\text{power} = \frac{\text{work}}{\text{time}}$$

Figure 1: Power Defined

$$F_{\text{net external}} = ma$$

Net force on object = mass of object x acceleration

Figure 2: Newton's Second Law of Motion Equation

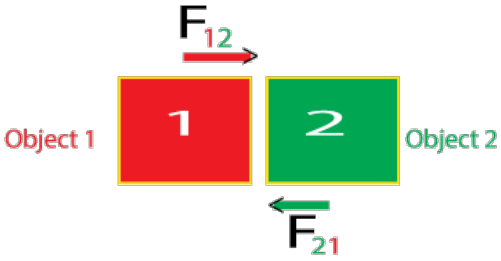
$$\text{Acceleration} = \frac{change\ in\ velocity}{time\ taken}$$

$$\text{Acceleration} = \frac{final\ velocity - initial\ velocity}{time\ taken}$$

$$a = \frac{Vf - Vi}{t}$$

Figure 3: Acceleration Equation

F = Net force applied on the object



Therefore, $F_{12} = F_{21}$

Figure 4: Newton's Third Law of Motion Equation

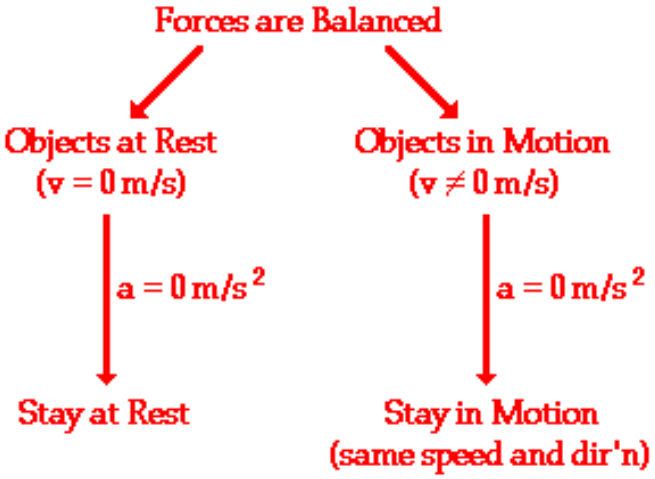


Figure 5: Newton's First Law of Motion

APPENDIX III: KINSMAN IMAGES

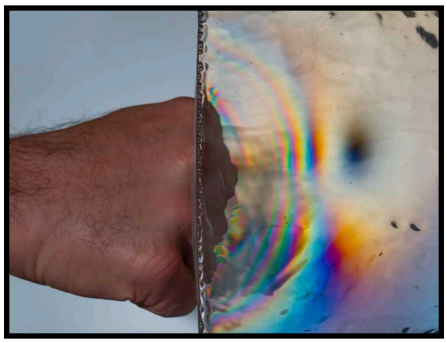


Figure 1: Martial Artist's Sieken Zuki (Front Punch)

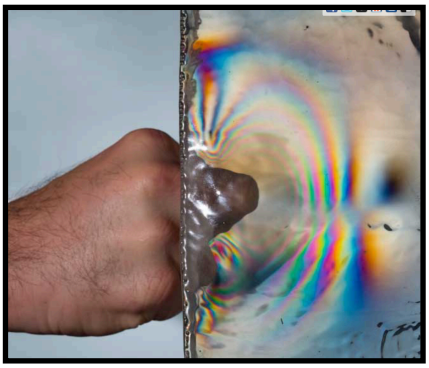


Figure 2: Martial Artist's Nagayubi Ippon (Dragon Fist/Strike)

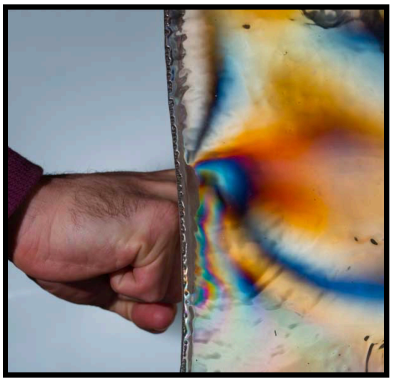


Figure 3:Untrained Front Punch