

Car Guys and Martial Artists: Knowledge Classification and Validity in Non-Occupational Communities of Practice

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Nomenclature

- Aikido** – A traditional Japanese martial art that focuses on locks, breaks, rolls, and throws. *Gi* are customarily worn.
- Capoeira** – An afro-Brazilian martial art disguised as a dance. Originally created by slaves to hide the martial art, this martial art is acrobatic and involves handstands, sweeping kicks, musical instruments, and cartwheels.
- Communities of practice** – Communities that center around a domain of knowledge, care about that knowledge, and have a shared set of practices within that domain of knowledge (Wenger et. al. 2002, pp. 26-29).
- Conditioning** – A practice within martial arts that involves repeating movements to create tiny injuries that heal to make the body stronger over time. Examples include hitting sand, hitting water, hitting trees, and conditioning drills such as Three Star Blocks.
- Gi** – A three-piece uniform worn by practitioners of some martial arts. The top is wrapped around in a specific way and held in place with a belt which is also tied in a specific way. *Gi* are usually white but can also be blue or black.
- Jeet Kune Do** – A Chinese martial art founded by Bruce Lee.
- Jiu Jitsu** – A Japanese martial art that involves grappling and throws. Brazilian Jiu Jitsu is a sub-style of Jiu Jitsu and a precursor to Mixed Martial Arts (MMA).
- Judo** – A Japanese martial art that focuses on throws and locks; involves less rolling than Aikido. *Gi* are customarily worn. Currently an Olympic sport; Judo can be taught either as a traditional or a sport martial art.
- Kalarippayattu** – An Indian martial art that is acrobatic; some people say it is the precursor to Chinese martial arts.
- Kali** – A type of Filipino martial art; Filipino martial arts also include Arnis and Escrima. Escrima are double-handed weapons; each hand holds a stick 26-28 inches long.
- Karate** – A Japanese martial art that has many sub-styles; this martial art focuses on blocks, strikes, kicks, locks, and more. Sub-styles include Isshinryu Karate, Shotokan Karate, Kyokushin Karate, and others.
- Kata** – Japanese term that describes a prescribed set of movements that is generally part of a traditional martial arts curriculum; also called forms.
- Krav Maga** – A modern mixed martial art developed by Imi Sde-Or (Lichtenfeld) in the 1930s in response to anti-Semitic attacks in his home country and was later further developed within the Israeli Defense Forces (Sde-Or 2012). This martial art is notoriously brutal and uses direct, simple techniques to destroy an opponent.

Kung Fu – A general term for Chinese martial arts. These generally focus on blocks, strikes, kicks, locks, and more. Sub-styles include Wing Chun, Xing Yi, Long Fist, Luo Han, Hung Gar, and many more.

Legitimate peripheral participation – A learning theory in which newcomers learn from other members of a community through contextualized interactions in communities of practice (Lave and Wenger 1991).

Locks – A martial technique in which the receiver’s body is put into a position that is painful and/or difficult to get out of. Also called *qin na* (seize and control) in Chinese martial arts. Examples include wrist locks, arm locks, etc.

Lowriders – A community of classic car enthusiasts that use aftermarket parts and special techniques to customize and modify classic cars; especially popular in Mexican-American communities.

Martial arts – A set of mental and physical practices passed on from teachers to students that involve self-defense, discipline, honor, respect, and humility. Martial arts can include open-handed techniques, weaponry, strikes, kicks, grappling, and much more.

Mixed Martial Arts (MMA) – A modern sport martial art that uses aspects of various martial arts to defeat opponents. MMA is generally seen as variant by traditional martial artists.

Mopar – Refers cars built by Chrysler, Plymouth, Dodge, Jeep, Ram, DeSoto, Willys-Overland, Maxwell, and more manufacturers generally owned by Chrysler. “Mopar” also refers to a parts manufacturer that produces parts for cars designed by Fiat Chrysler Automobiles (FCA).

Muay Thai – A Thai martial art that involves blocks, strikes, and low kicks.

Sensei – Teacher, in Japanese martial arts.

Sifu – Teacher, in Chinese martial arts.

Tae Kwon Do – Also spelled Taekwondo and abbreviated as TKD. When first brought to the United States, it was referred to as Korean Karate. TKD is a Korean martial art that relies heavily on kicks. Can be either sport-focused or traditional and includes some kickboxing styles.

Wing Chun – A Chinese martial art that was famously created by a woman. This martial art uses vertical circles for blocks and strikes, specializing in quick movements. Famous practitioners include Ip Man and Bruce Lee.

Wushu – An exaggerated form of Chinese martial arts that is used for theatrical purposes; not generally seen as tactically accurate. Also spelled *wuxia*. Can also refer to Chinese martial arts in general, which makes this a confusing term.

Xing Yi – A Chinese martial art that uses explosive power for blocks and strikes.

Foreword

As I used feminist standpoint theory in this thesis, it is important to situate myself, especially since my affinity for and familiarity with both of these communities is what inspired this thesis. When I was in high school, I spent four years as the only girl in the automotive engineering and design program. I passed my NOCTI exam, which makes me eligible to become an ASE-certified automotive technician. I have also worked at Allpar, which is an automotive news website specializing in Mopars. My work with Allpar included photography, editing articles on automotive history, and attending classic car shows. While at Allpar, I also attended meetings of the Restored Rusty Relics club, which is a multi-automaker antique and classic car club in Northern New Jersey that tries to restore rather than modify cars.

I started studying Northern Shaolin Kung Fu in November 2001, a month after my little brother was born. I have practiced at least twice a week nearly every week since then. I participated in a tournament in 2007 where I received a gold medal for doing Liem Bu Chuan. Once I went to college, I joined the RPI Kung Fu Club and have been an officer at the club since January 2015. I stepped down as President in December 2018 and took on the role of “The Unseen and All-Knowing,” which is an advisory role. As a member of the Kung Fu club, I have become marginally familiar with Xing Yi Chuan, Hung Ga, Luo Han, Fujien White Crane, and some other Chinese martial arts styles. In addition, I have become familiar with various other traditional martial arts through training and interacting with people from each of these disciplines. My first teacher was Sifu Matthew Jacobs, then Sifu Eddie Bates, and then Sifu Bill Luciano. I currently study under both Sifu Eddie and Sifu Bill; both are incredible teachers that I am lucky to learn from.

This thesis feels like the culmination of everything I've done in my life. I have a foot in both communities that I analyzed for this project. It wasn't until this thesis that I tried to piece these two aspects of my life together; collecting data and actually writing this thesis has been somewhat challenging because so much of the knowledge produced by these communities is embodied and felt, and there's an intangible sense of family in both. The access issues in both communities didn't help matters.

The inspiration for this thesis comes from two places. First, I've noticed that many great martial artists have been passing away recently; as a young martial artist, I feel compelled to understand how knowledge works within traditional martial arts as a pathway for understanding how to eventually pass along the art. Martial arts is a resource that has gone unrecognized for too long, especially by those who study the social life of knowledge. Strides towards the recognition of martial arts studies have been made, notably in the form of the *Martial Arts Studies* journal; this thesis is simply my way of contributing to those strides. The second inspiration is more fun; Bob Lincoln's hour-long lecture about oxygen sensors was one of the inspirations because it's fascinating to see a bunch of laypeople listen so closely and intently to an engineer about a part that takes five minutes to replace.

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Perhaps most importantly, I would like to pass along thanks to those I interviewed throughout the duration of this project. Many of the martial arts interviewees have already been

mentioned; I must also thank Sensei Irvin Faust for his insights into Aikido and Sensei Diane Ortenzio-Cooling for her insights into Isshinryu Karate. I thank Bob Magee of Bergen County Technical Schools, Bob Lincoln of Allpar, Marv of the Adirondack Model A Club, and the Restored Rusty Relics club for their essential input into this project. I also appreciate those who have let me use images and videos of their craft in my thesis and the matching PowerPoint, including Bob Magee, Luke Blanco, Sheri Ingram, and Alexander Buoye. Appreciation also goes to the organizers and instructors at the events I attended as part of participant observation for this thesis, especially Dr. Matt Bernius, who was extremely helpful in my quest for information.

Abstract

This study compares the classic car and traditional martial arts communities to explore how these communities benefit from or are harmed by the internet, and how knowledge lives within these communities. Both communities are non-occupational; they involve subjective, affective, and discipline-focused methods for cultivating knowledge and expertise rather than scientific methods. These communities are also focused on self-improvement rather than profit. The methods used in this study include participant observation, interviews, and analysis of primary and secondary documents. This study contributes to the literature on communities of practice by exploring how non-occupational communities of practice evolve and verify new knowledge rather than studying the attainment of a community of practice.

This study argues that while these communities are increasingly using the internet to communicate and organize, expertise that new members gain from the internet is not truly ‘valid;’ because expertise in these communities is often based on legitimate peripheral participation, impersonal and disembodied sources of knowledge are seen as less valid. This study puts forth an analysis of four different kinds of knowledge within communities of practice, including traditional knowledge, new knowledge, anti-knowledge, and non-knowledge. The three most interesting discussions from this are the verification of new knowledge and the concept of anti-knowledge, which is rejected by community consensus on the basis of being variant knowledge or fake knowledge.

1. Introduction

At the end of every practice, Sifu Eddie gives a quick lecture to the kids' class at Peter Kwok's Kung Fu Academy. He talks about the importance of discipline, respect, trust, and humility by relating these values to other aspects of the kids' lives, such as homework, brushing their teeth, or playing a musical instrument. He asserts that *gongfu* (kung fu) means "time and effort" and that every time someone dedicates their time and effort to improving their abilities, they are doing kung fu. Similarly, Sifu Bill of Pai Family Fist intersperses history lessons from various Chinese martial arts and personal anecdotes throughout his classes. He has talked about how Xing Yi Chuan was invented by a woman, why systems with similar names have different characteristics, the disambiguation and relative decline of Luo Han, the unique characteristics and training qualities of past and present martial artists, and about the development of different forms in the early 20th century.

In 2011, I attended a Mopar-focused classic car show in Carlisle, Pennsylvania in which an electrical engineer, Bob Lincoln, spoke to a small but dedicated crowd about diagnostics and repair for sensors used in Chrysler, Dodge, and Plymouth cars in the 1980s and 1990s, featuring a fascinating discussion of oxygen sensors. This lecture on oxygen sensors went on for half an hour and included everything from the oxygen sensor's makeup to why it works to how to replace a broken one. The crowd included laypersons and engineers (both non-automotive and automotive), all yearning for more knowledge about this specific sensor. After the lecture, the group conducted an equally long question-and-answer session in which the crowd prodded Lincoln with burning questions that allowed him to further share his knowledge. This is a relatively common type of event at this classic car club.

These lectures and discussions about personal improvement, history, and the mechanical workings of a single part all have something in common – they all take place within community gatherings that are dedicated to sharing, transferring, and deepening knowledge about a niche subject. Members in both communities are dedicated to garnering expertise and sharing that expertise with others in the community. These communities are heterogenous in that their members have varying techniques in developing their expertise and that members have expertise in different sub-interests within the community. In the case of car enthusiasts, a community of practice could consist of automotive engineers, mechanical engineers, mechanics/automotive technicians, and/or laypeople that each have their own favorite automaker or automobile body type. In the case of traditional martial arts, a community of practice could consist of practitioners, masters, instructors, students, many of whom “come from” different styles.

The analytic frames used in the present study include communities of practice and feminist standpoint theory. Communities of practice and legitimate peripheral participation fit within social worlds theory (Lave & Wenger 1991). These frameworks are used because the present study takes the community as the unit of analysis while still allowing for difference in the ways in which individuals cultivate expertise and the differential experiences of women in these communities. Because the present study analyzes how communities of practice change over time, it is necessary to obtain oral histories from senior members of these communities to compare experiences and teaching practices. It is also necessary to study the history of both communities to understand where differences come from and possible pressure points to instigate more passionate responses from interviewees. Feminist standpoint theory is a set of methodological characteristics that include starting from the lives of women, doing research for the benefit of women, and situating the researcher (Harding 1987).

While there has been extensive research on how to attain communities of practice in commercial settings (Zaffini 2018), there has been less scholarship on how to attain communities of practice in non-occupational communities (that is, communities that are driven by passion more than profit, such as hobbyists). There has been little no research on how communities of practice change over time once they have been attained. The present study fills this research gap by using both personal and community histories to compare the knowledge practices of two different communities of practice. The scope of the present study is within the United States, with limited discussion of aspects of these communities that take place elsewhere, such as how martial arts is reflective of national and international tensions.

These groups differ in their ways they pass along knowledge. One of the most important duties of instructors of traditional martial arts is the passing of one's system down to their pupils. This is done after many years, perhaps decades, of close one-to-one personal training time between master and pupil, where a strong bond of trust and respect is built. This form of expertise-building, described by Lave and Wenger (2001) as legitimate peripheral participation, bears similarities to apprenticeship, whereas the expertise-building aspect within the automotive community is based both on this legitimate peripheral participation format as well as on formal schooling in engineering, automotive technician training, or by informal attempts to fix one's own car. Because these different communities have different methods of building expertise, their reactions to outside forces such as the Internet lend insight into the spectrum of reactions and reorganizations a community may go through in order to prolong their existence.

The present study aims to understand how non-occupational communities of practice change over time, specifically in response to the internet. To get closer to understanding this research problem, the present study asks how community members feel about and use the

internet, in what ways these communities have changed over time, and about the experiences of women in these communities. The present study argues that in order to adapt to new social arenas presented by new technologies, communities of practice change their conception of what constitutes “valid knowledge.” They do so by classifying knowledge into one of four categories.

2. Background*

While classic cars and traditional martial arts may have different people in their communities and address different matters, avid fans of both constitute *communities of practice*. Communities of practice can have many different characteristics, but the three common characteristics among all communities of practice are a domain of knowledge, a community that cares about that knowledge, and a shared set of practices within this domain of knowledge (Wenger et, al. 2002, 26-29). Senior members of communities share knowledge and customs with new members, and communities can include people with expert knowledge as well as people with lay knowledge. In the anecdotes in the introduction, experts such as Bob Lincoln or the Sifu Eddie are experts and those listening included both laypersons and other experts. Relevant background literature to the present study includes literature on the communities that care about cars or traditional martial arts, forms of expertise, feminist standpoint theory, and communities of practice and legitimate peripheral participation, and scholarship with similar characteristics to the present study.

2.1. The Communities Themselves

Scholars in Science and Technology Studies have written very little about the populations used as case studies for the present study. This is especially true when it comes to traditional martial arts; when scholars have mentioned traditional martial arts, they have often mentioned Mixed Martial Arts (MMA), which has different instruction styles and philosophies from traditional martial arts. Martial arts studies is a new academic field with relatively little

* Portions of this chapter previously appeared as: Zatz, Zoe. "Social Worlds Theory vs Feminist Standpoint Theory." Zoe H. Zatz. 2017. Accessed March 13, 2019. <https://zoe.zatz.us/index.php/graduate-work/research-methods-in-sts/social-worlds-theory-vs-feminist-standpoint-theory/>.

recognition for now. The classic car community is included in the present study because it is interesting to see what engineers do after they retire; many of the members of the observed classic car club are retired engineers of some sort, whether they are an automotive engineer or some other type of engineer.

While STS scholarship largely glosses over the traditional martial arts community as a group ready for analysis, cars and those who interact with them have been subjects of academic work. This work includes analyses of national affinities for cars, such as the prevalence of classic American cars in Cuba (Smith et. al. 2013) or the use of cars as resistance to colonial powers in Ghana (Hart 2016). Automobiles spark interest in several different groups, from lowriders to NASCAR enthusiasts to classic car enthusiasts. The term “lowriders” refers to both the modified vehicles and the people who modify them, who are mostly but not exclusively Mexican-Americans in the Southwestern United States (Chappell 2014, 2). Lowriders alter aspects of their vehicles – usually classic American cars such as the Chevrolet Bel Air – to fit their aesthetic or functional needs. One of the most common modifications is adding hydraulic suspensions so the driver can make the car “pop a wheelie” or bounce; aftermarket wheels with spokes (Chappell 2014, 3) are also common. Lowriders actively contest the “ascribed criminality of lowriders as part of a general stigmatizing of Mexican Americans“ (30), maintaining that in their modification practices, their care is focused on the vehicles themselves rather than on illegal behavior. In this social circle, as in classic car circles, the social significance of one’s participation in the community is directly based on their car; some people are identified not by their names but by their cars. Lowriders have their own technical expertise that may not be recognized by the other communities of practice within the automotive community.

Traditional martial arts have been largely ignored by STS scholarship and academic scholarship in general. Notable exceptions to this are in philosophy and martial arts studies. A striking example is *Striking Beauty* by Barry Allen (2015), in which the author (who is a martial artist himself) takes a comparative look at western and eastern philosophy through the lens of traditional martial arts. In *Striking Beauty*, Barry Allen (2015) writes about the philosophy of Asian martial arts “practice and traditions from a comparative philosophical perspective” that includes references to Foucault (207). In this book, Allen discusses Chinese and Western philosophy in relation to traditional martial arts as well as martial arts aesthetics and ethics. He has also argued that Daoism influenced Chinese martial arts (Allen 2014). Meir Shahar (2000, 2001) and Stanley Henning (1981) both posit that there were philosophical influences in the development of traditional martial arts, especially Northern Shaolin Kung Fu¹. Shahar (2000, 2001) argued that Buddhism played a large role in the development of Chinese martial arts, and Henning (1981) argued that Confucianism played a large role. These arguments are not mutually exclusive, especially given that there are characteristics of both that can be seen even in modern teachings of Northern Long Fist in the United States. Alex Channon (2014) wrote about the ways in which martial arts and combat sports successfully “undo” gender in training situations. Burt et. al. (2011) wrote about the use of Capoeira to address and lessen aggression in young people.

Martial arts is a heavily physical practice that often involves full-contact sparring, forms/kata, conditioning, philosophy, and more. Women and men generally train together, breaking the “trend” that men and women must be separated for training in sports (Channon, 2014). Memoirs about one’s experiences or biographies about prominent martial artists are relatively common; in *Aikido off the Mat*, Park (2018) recounts her experiences throughout decades of experience in Aikido. There are heaps of biographies about Bruce Lee, who was a

martial artist that studied Wing Chun under Ip Man, founded Jeet Kune Do, authored three books about Chinese martial arts, and starred in various Kung Fu movies, famously using nunchaku. Short descriptions for various martial arts are given in the Nomenclature section of this paper, found on page v.

2.2. Communities of Practice and Legitimate Peripheral Participation

One of the theoretical frameworks of the present study comes from *communities of practice*. Wenger, McDermontt, and Snyder (2002) define communities of practice as “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (p. 4). Through their interactions, people in a community of practice share knowledge and wisdom about their shared topic of interest with each other. Communities of practice can have many different characteristics, but the three common characteristics among all communities of practice are a domain of knowledge, a community that cares about that knowledge, and a shared set of practices within this domain of knowledge (26-29). The authors have four key points about the nature of knowing: knowledge lives in the human act of knowing; knowledge is tacit as well as explicit; knowledge is social as well as individual, and; knowledge is dynamic (8-10). The argument that knowledge is dynamic is important to the present study. Wenger et. al. argue that “Without communities focused on critical areas, it is difficult to keep up with the rapid pace of change [in science and technology]” (6). While the authors are focused on cultivating communities of practice within organizations such as businesses or non-profits, the definitions and conditions they give for communities of practice fit both the automotive community and traditional martial arts community.

Legitimate peripheral participation is a learning theory in which newcomers learn from other members of a community through contextualized interactions in communities of practice (Lave and Wenger 1991). Lave and Wenger state that a “community of practice is an intrinsic condition for the existence of knowledge...[because of] The social structure of this practice, its power relations, and its conditions for... legitimate peripheral participation“ (98). They also state that one of the most important factors in legitimate peripheral participation is “access by newcomers to the community of practice and all that membership entails” (100). The authors strongly link membership to motivation and argue that legitimate peripheral participation is “motivated by the growing use value of participation, and by newcomers’ desires to become full practitioners” (122). This can be seen in both the automotive community and the martial arts community, in which people may spend decades in their communities of practice before becoming mentors or may never become mentors to other members.

2.3. Feminist Standpoint Theory

In “Is There a Feminist Method?” Sandra Harding (1987) argues that current attempts at feminism in social research are insufficient for truly feminist purposes and gives characteristics for truly feminist research. She also distinguishes between method, methodology, and epistemology, and concludes that even though they are different they are fundamentally connected. She says that “preoccupation with method mystifies what have been the most interesting aspects of feminist research processes” (1). She describes the failings of simply ‘adding women’ to social research. She gives attention to “three different characteristics of those feminist analyses that go beyond additive approaches” (1). The three characteristics Harding argues for are drawing from women’s experiences, having a research goal **for** women, and situating the researcher. In “Situated Knowledges: The Science Question in Feminism and the

Privilege of Partial Perspective,” Donna Haraway (1988) writes in response to Sandra Harding’s article. Haraway argues against elitist assumptions of objectivity and argues for a situated knowledge as a feminist objectivity. The science question mentioned in the title is one of objectivity and validity of different types of knowledge forms.

2.4. Expertise

Extensive knowledge about martial arts and expertise about cars both count as expertise because both groups devote time and effort to gaining more knowledge about their craft and “esotericity is not a defining characteristic of expertise” (Collins 2016). Neither is particularly esoteric – anyone can like cars or become a martial artist – but expertise is still garnered within these communities. Legitimate peripheral participation has some similarities to interactional expertise, wherein people garner expertise by interacting with people that have expertise (Gorman 2011). While interactional expertise can be a useful tool to start to understand the language/jargon of a new group, legitimate peripheral participation fully entrenches one into the community and teaches them how to *be* a member of that community. Scholarship about expertise is useful in understanding and finding insight into the forms of knowledge and wisdom that members of a community can cultivate. The automotive community is an example of “pro-am” expertise in that laypeople can garner enough expertise over time to become experts within their communities (Greenberg 2005). Like Wenger et. al. (2002), Collins (1974), one of the theorizers of interactional expertise, argues in favor of tacit knowledge. In the present study, expertise is used to show how members of a community of practice garner legitimacy.

2.5. Similar Work

There has been extensive research on communities of practice in fields such as organizational psychology, management, and Science and Technology Studies. Most of this

research focuses on occupational communities, such as teams within a company or networks of musicians, and nearly all of it focuses on the process of “cultivating” a community of practice. There has been some scholarship that points to the ways in which occupational communities of practice change over time. One of these is a study of IBM Global Services (Gongla and Rizzuto 2001). The study took place over a five-year period and concentrated on how the communities of practice within IBM evolved. Another study pointed to how blogs can increase communication in communities of practice (Byington 2011), but the study gives guidelines for creating an online, blog-based community of practice rather than studying how an existing community was changing to include blogs. The use of blogs is very interesting because they allow for collaboration; the scope of this 2011 study looks at solely online communities of practice rather than in-person communities or hybrid online/in-person communities. Very similar to both the 2011 study and the present thesis is Griffith’s (2017) analysis of online discourse surrounding Capoeira; Griffith analyzed the insistence of Capoeira players that time and practice will make anyone a better Capoeira player. Channon and Phipps (2017) analyzed ‘alternative femininity’ within combat sports. Brownell (1995) presents an ethnography of sports in China in which she analyzes “the production of an image of the “legitimate body” [that] is contested behind the scenes and a consensus temporarily reached in public performance” (8), or the “body culture” of sports in China.

3. Methods

The present study used participant observation, interviews, and analysis of secondary sources to study how communities of practice change over time. Participant observation took place at various public events and meetings run by either classic car clubs or martial arts schools. The present study consists of approximately ten interviews, with six from martial artists and four from classic car enthusiasts. The secondary sources used for the present study include books and videos depicting kata, books describing automotive history and classic cars, documentaries about either martial arts or classic cars, magazines popular in both communities, and more.

The classic car community has been chosen because of its inclusion of various kinds of engineers and mechanics as well as laypeople in the community. People gain lay expertise by interacting with mechanics and engineers; engineers and mechanics have expert knowledge about cars. The primary data source for understanding the classic car community was participant observation and interviews, with some analysis of secondary data sources such as newspapers or blog posts about events such as car shows. Interviewees from this community are from multiple different car clubs, as club culture and personalities may differ from club to club. Classic car enthusiasts that were interviewed generally live in the Northeast United States because it is difficult to contact these groups without a contact or without physically coming to their meetings.

The traditional martial arts community was chosen because of its use of mentorship and its long history of subjective knowledge. The primary data source was interviews, with some participant observation at a martial arts event in Tampa, Florida. This event was the precursor to a yearly martial arts symposium by and for experienced women in martial arts. Additional participant observation was done at the Saratoga Martial Arts Festival. This festival involves

two-hour-long seminars in several different martial arts styles, from traditional styles to modern styles. Seminar topics include but are not limited to joint locks, throws, grappling, pressure points, and conflict resolution. This festival attracts more than two hundred martial artists every year, and some travel from as far as Virginia to spend the weekend learning new techniques with other martial artists. At the festival, martial artists have the opportunity to make new friends, reconnect with old ones, forge new connections to schools that they may want to study with, and share their own knowledge about their system.

3.1. Participant Observation

Participant observation was used to observe interactions between community members at public or private events held by both communities. Participant observation for both communities took place at national and regional events such as the Women's Martial Arts Symposium or the Chrysler Nationals in Carlisle, PA as well as club meetings for various martial arts styles and swap meets or car shows. Rather than observing through fly-on-the-wall style participant observation, I fully engaged with these events and took notes immediately after participating. This allowed me to engage more closely with the interpersonal dynamics of each community. I started observing the classic car club in July of 2018 and participated in the Saratoga Martial Arts Festival in 2016. Participant observation did not include inferences about specific people but include notes about how the community functions as a unit. Some of the interviewees were part of the observed groups. Because participant observation took place at public events, it was not necessary to get informed consent from all participants.

3.2. Interviews

Each interviewee was interviewed for at least half an hour, allowing for extra time for extended answers. The interviews were semi-structured and open-ended so that the interviewees

could determine the meaning of the questions as well as the significance of their answers. Most interviews were done in person, especially if they lived in Capital District or Northern New Jersey; two interviews took place in Tampa. Interviewees included retired engineers, mechanics, automotive technician instructors, laypeople, martial arts instructors, and martial arts practitioners of various styles. Interviewees were sent informed consent forms over email, by mail, or in person. Informed consent forms are stored in a locked drawer in my desk.

Interview questions covered topics such as attitudes towards knowledge found on the internet, instruction methods, and more. Interviewees were not told which questions were the most important to the study and were allowed to speak for as long as they wanted. If multiple interviewees used the same word or displayed similar attitudes about a topic, that became a code with which I could find similar instances in participant observation notes and secondary sources. There were some difficulties in conducting interviews as members of both communities are difficult to contact through electronic means. As a result, only seven martial artists and three classic car enthusiasts were interviewed. While this is disappointing, it did allow for more in-depth analysis of the interviews I was able to conduct.

3.3. Secondary Sources

The present study used secondary sources to understand how the priorities of these communities have changed over time. Secondary sources include magazines circulated within these communities, such as *Black Belt* or Hemmings' *Classic Cars* magazineⁱⁱ. These magazines are largely digitized, so finding data from these sources includes searching the archives of these magazines for a longitudinal look at these communities and their attitudes about various codes used in this paper. Other secondary sources include online promotions for car shows, videos of *kata*, and more. Many of these videos were found by members of the communities and sent over

Facebookⁱⁱⁱ. Appreciation goes to Julian Mihov and Alvin Yu in particular for sending over any and all videos related to martial arts that they could.

3.4. Analysis

To analyze data for the present study, I went over my notes to find words or ideas common across interviews and secondary sources. These became codes with which I analyzed what the communities of practice in question valued as important. These codes included discipline, valid knowledge, “common sense,” self-preservation, motivation, and more. Other common mentions included Bruce Lee, MMA, lowriders, and various American automakers, but these did not become codes. I sorted the codes into the main six categories (women’s experiences, discipline, valid knowledge, interpersonal relations, “common sense,” and motivation) discussed in the Data Analysis section and then found examples from my notes for each subcode within each of the six main categories. An early example of coding is featured in Figure A.

The present study used five primary codes to understand how these communities of practice interact at different points in time. The five codes include, in order: discipline, valid knowledge, interpersonal relations, “common sense,” and motivation. Nearly every interviewee talked about discipline unprompted regardless of community, and some people talked about it while being observed during community meetings and events. The term “discipline” is used in the context of applied time and effort rather than as a distinct field of practice. Each of these five primary codes include two or three subcodes that help clarify each primary code. The subcodes under discipline include work ethic, mentorship, and self-improvement. The subcodes under valid knowledge include mentorship, collaboration, and embodied knowledge. Subcodes for interpersonal relations include toxic masculinity, self-preservation, and personal collaboration.

“Common sense” subcodes include self-preservation, direct action, and awareness. In the context of interpersonal relations, self-preservation is low as a vehicle for humor, while self-preservation is heightened in the context of “common sense” and motivation. The final primary code, motivation, includes working class, self-preservation, and self-improvement. The subcode self-improvement has its own subcodes, including physical fitness, safety, and valid knowledge, as members of both communities need to work on all three of these in order to have material or mental self-improvement; that is, self-improvement that can be brought on by either physical prowess or mental preparation.

After coding was done and the Data Analysis section was mostly complete, I attacked the whiteboard in the conference room with dry erase markers (this was affectionately called “crazy whiteboard theorizing”). I looked for commonalities between communities, how the communities changed over time, and links between those changes and my codes. After my first round of analysis, I went back and analyzed my analysis by finding which community characteristics were static and dynamic over time, then by looking at the ways in which the construction of valid knowledge (the only dynamic characteristic found) might change. I also frequently went back to background literature to look for missed opportunities and insights from previous read-throughs. Several rounds of “crazy whiteboard theorizing” led to content for this thesis. Figures B and C feature different stages of “crazy whiteboard theorizing.”

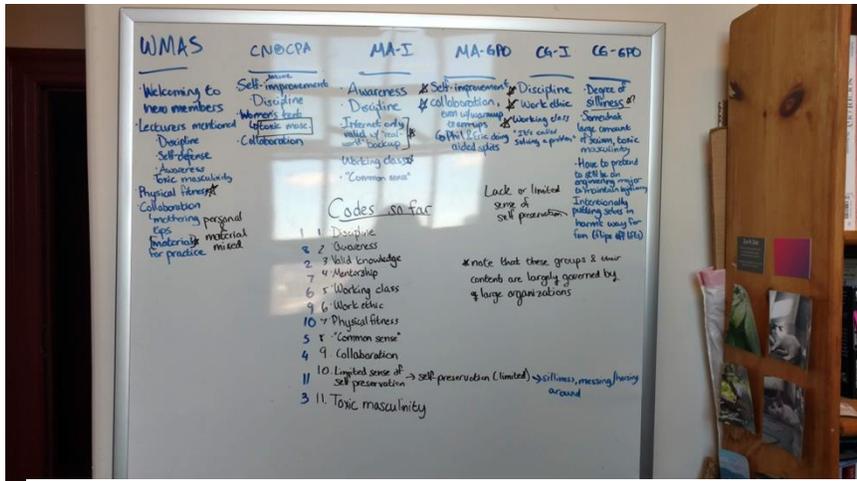


Figure A. Coding via Whiteboard. Source: Author

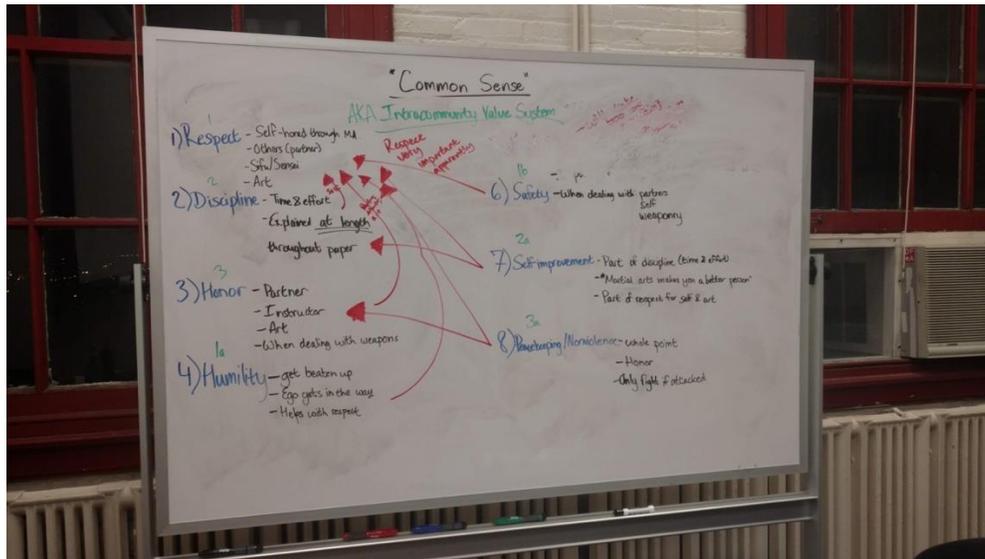


Figure B. Analysis of “Common Sense” in martial arts, via whiteboard. Source: Author

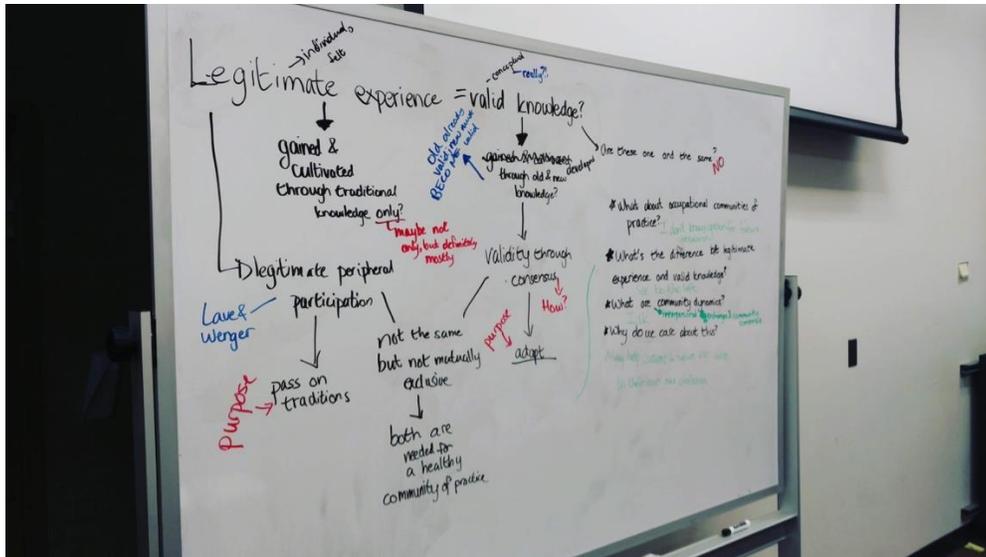


Figure C. A frustrating visual thought process delineating between legitimate experience and valid knowledge, via “crazy whiteboard theorizing.” Source: Author

4. Data Analysis

Overall, about fifteen people were interviewed for this thesis. Seven of them were martial artists and the other three were self-described “car guys.” Members of both groups had a wide variety of income-earning occupations but were drawn together by an affinity for their craft, which is often draining on their resources rather than contributory. It is worth noting that martial arts and classic car restoration/modification are expensive – a single classic car can cost tens of thousands if not hundreds of thousands of dollars (not including repair, insurance, parts, and other care) and martial arts can be expensive unless one makes their own weapons and/or forgoes safety equipment. Both also require extensive amounts of time and effort.

4.1. Women’s Experiences

Some of the participant observation for the present study took place at the Women’s Martial Arts Symposium, which took place in Tampa, Florida on January 19th, 2019. This event spanned about eight hours and featured female instructors from Nevada, Oklahoma, Texas, and Florida. As this was not a tournament, there was no competitive component; the purpose of the event was for experienced female martial artists from across the United States to collaborate and exchange training ideas and techniques. Most of the attendees and instructors were from Isshinryu Karate, with one attendant coming from a different style of Karate and one (me) coming from Northern Long Fist. There was a total of seven workshops, each taught by an Isshinryu Karate sensei. These workshops included themes such as “Ten Martial Maxims,” kata collaboration and exchange, “NO with an Attitude,” short staff kata instruction (*tokushin no gusan*), and knife techniques. The dojo where the event took place had two main rooms, and in the one of those rooms the front wall was covered with pictures of previous instructors and

masters in Isshinryu Karate. The wall also featured sayings and a code of conduct for martial artists called “The Karate Creed.”



Figure D. A sign depicting the Karate Creed. Taken at the dojo where the Women's Martial Arts Symposium took place. Source: Author by permission of Ingram's Pro Karate



Figure E. Signs that exemplify Karate ethics and values; these focus on nonviolence and discipline. Source: Author by permission of Ingram's Pro Karate

There was a light-heartedness about the Women's Martial Arts Symposium, as if these women could figuratively let their hair down without men around (not literally; that would be impractical and tactically inadvisable). Some women poked jabs at the machismo of male martial artists, and some talked about how they were passed over for promotions or sparring matches because they are women. While male martial artists reportedly have a tendency to hold back to avoid hurting their partners, these women did not hold back any force; men can have a tendency to patronize women in martial arts, so these women go out of their way to make up for this by showing how tough they are. During lunch, I sat with three women who compared parenting techniques to get their children to listen to them. We talked about how there are fewer women in

martial arts because they drop out for work or to take care of family. The mothers in the conversation were adamant that they wanted their children to do martial arts because martial arts practice gives children discipline, an outlet for excess energy, and keeps them “out of trouble.”

The Chrysler Nationals at Carlisle is a yearly event that occurs in the summer; it is either very hot or very rainy every year. The venue takes up about a square mile of land and is also home to national car shows for Corvette, Chevrolet, Ford, and more. Most of the square mile is taken up by classic cars with their hoods up to display engines. The event is almost entirely outdoors; there is an obstacle course for Jeeps, different sections for different eras or clubs, and a vendor section on the other side of the buildings that bisect the grounds. On the outside, one of these buildings is a stadium; on the inside, all buildings house expensive classic cars like old race cars, concept cars, rare cars like the Plymouth Prowler, bathrooms, vendors, and/or the “Women’s Oasis,” which is actually in a tent rather than a building. Vendors, who are outdoors, sell everything from car parts to posters to diecast models of classic cars.

The representation of women at the event is interesting. There are a few stereotypes of women at this event; daisy dukes-wearing women that adorn cars in the stadium, exasperated middle-aged women who would rather be anywhere else than at *yet another* car show with their husband, women who own classic cars, and women who like classic cars. An analysis of the use of women as decorations was done well by Chappell (2013) in the context of lowriders and his analysis is also useful for understanding the use of women at this classic car show. At this car show, there is a yearly “Daisy Duke Competition“ in which women wear daisy dukes, small shirts, boots, and cowboy hats. This beauty pageant is inspired by the TV show *Dukes of Hazzard*. The Chevrolet Nationals and Ford Nationals at the same venue also does a beauty pageant, but this time with bikinis; they both also have the Women’s Oasis. The representation

of the second type of woman is exemplified by the Women's Oasis. The Women's Oasis is a large tent that is the only air-conditioned location throughout the whole event. The Women's Oasis is a strange experience; in this air-conditioned tent, women can escape from the hustle and bustle of the vast number of car guys roaming around and the loudspeaker of the stadium. The vendors in this tent sell jewelry, accessories, cosmetics, massages, and more to the women who attend this event. Both the beauty pageants and the Women's Oasis are run by the venue, which assumes that classic car enthusiasts will appreciate the opportunity to ogle at the beauty pageant contestants or that women want to be away from the cars. The second representation of women – the exasperated women – are what the venue expects women to want. An anonymous attendant of the event noted that they found the beauty pageant “repellant” but did note that some other attendees do appreciate these events.

This summer, Chrysler Nationals at Carlisle will feature an event dedicated to the 50th anniversary of the Charger Daytona. The Chrysler Nationals at Carlisle also features an event called “Young Guns – The Future of the Mopar Hobby,” which features the cars of licensed drivers between the ages of sixteen and twenty-five. The point of this event is to foster collaboration and networking between young classic car enthusiasts who are “the future of the Mopar hobby.” Various classic car clubs at the show will hold their own events, including lectures like the one taught by electrical engineer Bob Lincoln a few years ago. The end of the three-day car show features a winner's parade in which cars that have won one of the many trophies are paraded around the show grounds.

My own experience as a woman in these communities has been rather interesting. I was raised in the martial arts community; I've known Sifu Eddie longer than I can remember. Even though I spend my free time in a predominantly male community centered around violence, I

have only felt existentially threatened once while studying martial arts in the past seventeen years. This instance happened at the Saratoga Martial Arts Festival in 2016 at a de-escalation seminar. The drill in question involved one person trying to instigate a fight with another. I was the recipient of the instigation, and the very large, unfamiliar man that I was partnered with used body language that I immediately associated with an extremely unpleasant experience that I went through as a high school freshman; when the instructor noticed what was happening, he stopped the drill and checked to see if I was okay. I did not train with that partner again. I understand that I am young and that my experiences are not universal to all women within the martial arts community; I have been lucky to have instructors that value my safety.

When I was training to become a mechanic, for four years I was the only girl in a class of about seventeen students. Until I was a junior, I shared a locker room with the boys, who were prone to teenage idiocy but were not malicious. My presence as a woman was either ignored (“just one of the guys”) or used for humor (such as the teachers addressing us as “gentlemen and Zoe”). I was given tasks that were not as physically demanding even though at the time I was about as strong as any of the guys in the room. While none of the guys in my grade were threatening, the aforementioned unpleasant experience was perpetrated by one of the guys in the grade preceding us. While in the autoshop, we worked in teams; starting in sophomore year I worked with the only two guys who actually allowed me to participate in the physical process of fixing a car. One of the instructors was off-putting, so one of my partners usually stood between me and that instructor. I liked the other instructor; he took me under his wing for detailing work and was interviewed for the present study.

4.2. Discipline

Discipline within both the classic car and martial arts communities involve work ethic, mentorship, and self-improvement. Nearly every interviewee brought up the word discipline unprompted, and some elaborated to explain their notion of discipline. In both communities, discipline does not mean a distinct path but an individual drive to learn and improve themselves. This was apparent in interviews, participant observation, and archival research. An editorial by *Black Belt* editor M. Uyehara says that “[in the olden days,] a sensei wouldn’t take any back talk from his students...He devoted many hours to teaching the kids discipline and confidence in themselves,” and goes on to support corporal punishment for misbehaving children (Uyehara 1972, 8). Both communities speak positively of discipline. This is somewhat to be expected in communities of practice, and it is interesting that the ways in which discipline is passed along in both groups are similar.

Having a solid work ethic is paramount in both communities. Both need a work ethic to perform highly physical tasks such as exercising or performing repairs on cars. This work ethic was exemplified in an interview with the instructor of the mechanic training program. He told a story about one of his previous students that he helped outside the program. The student came to him looking for a job (and was inexperienced at the time), and the instructor made him start by cleaning the outside of the cars for a while. When the instructor knew he had a work ethic and that he could be trusted, he had the student do the inside of the cars and started to teach him basic repair work. Then, once the student had proven himself, the instructor taught him more and more about being a mechanic. Eventually, the student got ASE certified and got an autoshop of his own, eventually becoming a successful mechanic himself. In the introduction to this thesis, Sifu Eddie’s lectures were used as a vignette to demonstrate the importance of a solid work ethic to

the practice of martial arts. Chris Scully, a long-time martial artist, pointed out the importance of working a specific technique over and over again because that will be most useful when faced with an actual dangerous situation. Various attendees to the Women's Martial Arts Symposium and the Chrysler Nationals at Carlisle also noted the importance of a work ethic, especially in reference to their children or themselves. Some interviewees pointed to their mentors as the people who fostered their diligence and discipline.

One of the ways in which individuals within these groups foster discipline within these groups is with mentorship. This is a personal relationship between an established member of the community and a new member; the example of the instructor and student in the previous paragraph is an example of mentorship. Mentorship is also exemplified within the martial arts community; various interviewed martial artists made a point of speaking highly of their teachers, especially students who have had the same mentor for more than a decade. During participant observation, a martial artist was observed passing along legends of their first Sifu. This Sifu was apparently the strongest person they'd ever seen and could destroy people just by raising his eyebrow^{iv}. Sifu Bill Luciano of Pai Family Fist noted that as one trains in martial arts, they become part of a family, but also that some of the point of martial arts training is to eventually move on past your mentors; the most successful students are those who move on and keep learning. Mentorship was important during the four-year long mechanic training program; in the first year of study, two seniors were tasked with mentoring the incoming class. These mentors set the student culture for the freshmen, including a lowered sense of self-preservation as a form of humor. An example of this was the practice of doing flips off of hydraulic lifts.

Mentorship is as important to the mentors as it is to students. In martial arts, an instructor devotes a lot of time and resources to teaching their protégé in the hopes that their mentee will

also pass along the martial art. Sometimes mentorship can become difficult for mentors; the mechanic instructor has been teaching for more than twelve years, but the school in which he teaches has started to devote fewer resources to his program. This was obvious as soon as the interview started; more than half of his auto shop had been given to the new Aerospace engineering program at the school; the rest of the shop had been walled off. There was equipment strewn everywhere and contractors had put dirty equipment in the paint room, effectively destroying any airbrush opportunities that had existed. Almost all the hydraulic lifts were nowhere to be seen, making it much harder to actually fix cars. The other instructor retired a few years ago, and the school has been reticent to hire a qualified replacement. It was saddening to see this school limit the effectiveness of one of its only programs that do not require expensive higher education to be a viable occupation for its alumni. This is a disservice to students of the school who do not have enough money or the desire to go into higher education.

Participant observation for traditional martial arts took place at multiple locations, primarily Peter Kwok's Kung Fu Academy in Westwood, NJ and the RPI Kung Fu Club in Troy, NY. Participant observation at both involved full participation to both blend in and to gain an understanding of how internal body dynamics and nonverbal communication takes place. Data from this observation goes back more than five years, with higher quality notes in recent years. The original practice space at Peter Kwok's (circa 2003) was a large rectangular room bordered on three sides with windows; the fourth side was long and lined with mirrors. On the side opposite the mirrors, dozens of trophies lined the windows and a balance beam was stored beneath the windows. On either side of the windows, multiple racks of swords, wooden and metal, were bolted into the wall. The far corner from the door into the room was the storage area for pads and tall heavy bags. Next to the heavy bags, a wooden dummy was bolted into the wall.

The other corners housed two staff bins, benches, and a stack of mats. One of the sides of the room featured the school logo mounted on the wall, with a three-foot-tall gong below it. This gong is still used seventeen years later to signify the beginning and end of practice. The middle of the room was broken up by two large pillars, both of which were covered in carpet to avoid injury. Various weapons and Chinese calligraphy prints were hung around the room. The main floor was devoid of decoration to avoid trips and falls. The entire school smelled distinct because Grandmaster Elia would burn cedarwood incense in the staircase leading into the school. Many kung fu schools have a relatively similar layout, with mirrors, safety gear, weaponry, mats, and sometimes a gong. Many martial arts schools have a small shrine dedicated to the teachers of the owner of the school as well as previous and current highly-ranked members of the style.

I was lucky to experience the nomination of a protégé at a Peter Kwok's holiday party; Grandmaster Elia called for everyone's attention, gave a short speech, and gave one of his students the rank of Master, thereby designating him as the practitioner who will pass along the art next. This protégé has been a Sifu for more than a decade and he is a police officer; all of the black belts at the school have an occupation outside of martial arts that funds their ability to teach. In Northern Shaolin Kung Fu, and many other martial arts, knowledge is passed from teacher to student through long-term mentorship. Because traditions are passed down from teacher to student, there is a lot of room for interpretation and changes are made to accommodate for personal differences (such as physical limitations). During the process of teaching forms, prescribed movement becomes an intergenerational game of telephone wherein two sets of movements can look completely different but still are the same form. This is why forms, procedures, and even stances can vary greatly not only between schools, but between teachers as

well. Organizations like the Jingwu Association and Nanking Guoshu Institute have tried to standardize Chinese martial arts forms, but to no avail.

The Sifus give short lectures that are sometimes interspersed throughout practice, and these lectures are filled with knowledge that one cannot get from simply looking at *kata*. The silk cloth bolted to the hilt of a *dao* (broadsword) serves many purposes: it looks elegant, distracts opponents, and can be used to wipe away blood. Different schools use different belt denominations (and some don't use any at all), and forms vary greatly not only between schools, but between teachers as well. There have been times that two Sifus from the same school will have different details for the same technique within a *kata*, and the student must remember who likes which way in order to do the form correctly when in the presence of that Sifu. Differences in *kata* are even more common between schools than they are between teachers; *Tan Tui*, a form for intermediate students, has a few different recognized variations. This particular form is split into sections that exemplify a specific technique or set of techniques. While the internal body dynamics and purpose of these techniques are similar across variations, the variations both look different and have different quantities of sections. There are variations with either ten or twelve sections; some involve starting and ending each section with a Rooster stance and some start and end each section with a Shaolin stance. A Rooster stance involves standing on one leg, knee at waist height, with toes either pointed down to protect the opposite knee or up to prepare for specific kicks. Different styles have different preferences, but this is a generally acceptable Rooster stance. These differences are mainly aesthetic; forms like this have the same internal body dynamics and similar martial applications across variations regardless of aesthetic.

Over a period of years, martial artists grow strong bonds with each other. Kung Fu practitioners who train together for long enough become “kung fu brothers” or “kung fu sisters.”

In repeatedly beating each other up, martial artists learn to foster respect for each other, patience, humility, confidence, and discipline. Martial arts both build up and destroy ego at the same time^v; while it is great to be able to flip a 200-pound man, it is equally humbling to be thrown to the ground or put in a compromising position. During practice, it is relatively normal for martial artists to earn bruises, scrapes, and to overwork their muscles so they are sore the next day. This pain becomes a source of pride and a short-term badge of honor for some martial artists as it shows that they have worked hard. This lowered sense of self-preservation is in stark contrast to the normal pattern of heightened self-preservation in martial arts circles.

Self-improvement is important to both the classic car community and the martial arts community, though it is more paramount in the martial arts community. While interviewees in the classic car community sometimes pointed to the desire to get better at restoring their cars, every martial artist pointed to repeated practice as the route to better technique. One of Sifu Tom Dayon^{vi} of Peter Kwok's sayings was "Do it until you hate it and then do it some more." Sifu Matthew Jacobs and Sifu Eddie Bates of the same school emphasize that "practice makes better." Sifu Bill Luciano of Pai Family Fist defines art as highly honed skill, with martial arts being highly honed martial craft, and that the byproducts of martial arts training are discipline and strengthening. He also noted that "[he] doesn't really teach people martial arts, [he] teaches them how to learn." The automotive instructor said something very similar; he pointed out that he was really trying to get his students to think about how to solve a problem and to think about why and how things work in order to solve those problems.

4.3. Valid Knowledge

An electrical engineer from the classic car community, Bob Lincoln, said this when asked about the differences between engineering knowledge and layman knowledge:

Which one is more useful when dealing with old cars? Engineering knowledge allows one to make decisions in repair, restoration, painting, rust remediation that lead to better and longer lasting solutions. For instance, many people use Bondo epoxy and fiberglass screening repairs for rust, but Bondo is porous and allows moisture to wick through to the base metal, which causes more rust within a year or two. Repairing with appropriate primers, galvanized steel and epoxies that are impervious to moisture have given much better results. I have done repairs that show no rust breakthrough or degradation for 5 to 10 years afterward, despite regularly driving in winter climates where salt exposure is extensive.

This engineer is pointing out how relatively esoteric engineering knowledge is superior to layman knowledge in specific circumstances when doing repairs. He is pointing out that engineers are more likely to know what is and is not proper practice for long-lasting repairs that are done correctly. The mechanic instructor noted that rather than teaching his students how to do a single type of repair, he was trying to get them to learn how things work in order to do things correctly.

While mentorship is important for cultivating discipline, it is also important for determining what kinds of knowledge or expertise are valid within these communities. This was especially apparent in interviews with both classic car enthusiasts and martial artists. Valid knowledge in these communities is cultivated through mentorship, collaboration, and embodied knowledge. When asked if he had any mentors that he looks up to, Julian Mihov answered,

I have a couple of them. Some of them go back even before my time obviously... I like a lot of the military books, I like Sun Tzu..., the people also that I've been taught by, I have a high respect for. I cherish the relationship that I've developed with them over time, including the person who is interviewing me {high five exchanged}.

When asked about the validity of YouTube videos, martial artists had more complex answers than expected. While many did say that YouTube videos alone are not usually valid sources of martial arts knowledge (the expected answer), they also noted that videos of something someone already knows can be a useful training tool and that if the videos are backed up by one's mentor, then that video can become a valid source of training material. Some pointed to specific YouTube video uploaders such as Jake Mace as purveyors of fake martial arts. Overall, people noted that knowledge was more valid within their community if it came from a mentor than if it came from a disembodied source.

The purpose of events such as the Women's Martial Arts Symposium, Saratoga Martial Arts Festival, and car shows is for members of these communities to connect and collaborate with each other. At these events, members of these communities of practice lead or attend seminars, talk to each other during breaks, and make friends and connections, all while seeing the similarities and differences between their craft and the craft of others at the event. The mechanic instructor noted that he goes to swap meets and car shows not only to display his detailing and airbrush work, but also to see what other people are doing with their classic cars. Collaboration was especially apparent at the Women's Martial Arts Symposium, where I was able to show a tai chi technique to an Isshinryu Karate practitioner that she didn't know. This technique involved redirecting an attacker's incoming two-handed grab and using the recoil from

loading the back leg to push them away. This interaction lasted about two minutes but was very informative for both parties, as one thinks more deeply about their actions when sharing and because the other learns something new. This also occurred with a quick wrist grab drill, where we took turns getting out of a wrist grab and putting the other in the same wrist grab.

Embodied knowledge is knowledge that comes from one's body and the interactions between one's body and mind. In martial arts, it is the direct, raw information that one receives while training either by themselves or with a partner. *Qi* might fall under the realm of embodied knowledge in Chinese martial arts. Embodied knowledge can be hard to put into words, as Chris Scully put it:

[Feeling good as a motivation] is a complex thing. It's a physiological thing, ... feeling good is relief of stress, it's a physical exercise of my body which I am sort of relishing in, it's the physical capability that I have, ... if I'm talking specifically around martial arts, martial arts are a activity that allows me to stop thinking about other stuff when I'm actually practicing it because I'm not trying to get punched in the face or I'm trying to, you know, work on something {sighs} that's hard to put into words, so it's nonlinguistic. It's trying to feel things in my own body and it's trying to make shapes with the intent to get the right reaction out of someone else's body and I think in a lot of ways it pulls me from the world of language and symbols that I'm trapped in otherwise.

While elusive to description, embodied knowledge within martial arts is central to individual practice. One must respond to input from their body to prevent injuring themselves or

others, including injuries that are cumulative. Cumulative injuries are those that build up little by little over time due to poor alignment or structure. Embodied knowledge can also be found in muscle memory; Sifu Tom Dayon's mantra to do something until you hate it then do it some more comes into play here again. Doing this builds up muscle memory, which makes it so that under the right circumstances one's body will "know what to do" before their brain can react.

4.4. Interpersonal Relations

Individuals in both the martial arts community and classic car community run into some degree of toxic masculinity. In this case, toxic masculinity is exaggerated machismo in which men compete to be more "masculine," pressure women to fit into their conceptions of female gender roles, have an increased drive for domination and competition, and might have egotistical tendencies. It was easier to talk to women about this issue. When asked about being marginalized in the martial arts community, a female Isshinryu Karate sensei who started studying in 1979 said:

Yes. When I was a beginner, for the first fifteen years I did not because I did not consider myself that knowledgeable and so it didn't bother me because I didn't feel I was good enough to become an instructor... But starting in around year twenty, it started to bother me quite a bit because there weren't very many women masters. Women were just starting to hit that level, that many years of training to get promoted, but there still weren't a whole lot of women teachers anywhere. A lot of times when you go to an event, the first thing that people look at was how many stripes were on your belt...and they would go [look you up and down and go tsk tsk tsk] 'Oh, you're just one of

those ... you're a woman, you don't, you're not there yet.' Even though there were many women who were very good instructors.

Most interviewees did not exhibit these behaviors, though when asked about toxic masculinity, a male martial artist balked and danced around the question rather than answering it. Toxic masculinity was also observable in the classic car community; when observing a classic car club, on multiple occasions I had to pretend to be an engineering student or preface my presence with a justification (usually I used my mechanic experience to get what I needed). When I didn't justify my presence, it was "lightly" suggested that I go to the women's table or the car in which the men's wives were gossiping. When I pretended to know nothing about cars, they were willing to explain some of the inner workings, but did not go into much detail and were slightly condescending; it's possible that they did not mean to be condescending, but it happened nevertheless.

Mentorship seems to muddy this form of masculinity. It was interesting to see how instructors responded to female students; automotive instructors were gleeful about their female students, often pointing out their positive qualities. They also tend to defend their female students; in the year or two before I was in the training program that the mechanic instructor taught, there were no girls in the program. Upon my arrival, the instructor started petitioning the school administration to designate a separate locker room for me (at the time, there was a single locker room for boys and girls in the automotive program, which is a clear violation of Title IX). It took two years before the administration granted one, and in the meantime, I shared a locker room with the boys. Marv of the Adirondack Model A Club^{vii} pointed to one of his female students as the best welder he'd gotten in the summer youth program. Sifu Eddie has been father

figure to me; whenever I come home, he lets me know that he is proud of my progress as a martial artist and as an academic.

In both martial arts and the classic car community, sometimes humor comes in the form of limited self-preservation. A “fun” activity among the mechanics I trained alongside was taking flips off of hydraulic lifts, which is dangerous to say the least. In martial arts, sometimes people will exaggerate receiving a kick or strike for comedic effect or to make their partner relax. It is more common, however, for martial artists to use someone nearby as a dummy for fake strikes (that don’t actually land the strikes) when the person isn’t looking. Both of these have some training value but are used for humor and show a somewhat limited sense of self-preservation. Every now and then, limited self-preservation as humor doubles as collaboration; sometimes two people will team up for warm ups or stretches and do them in an amusing but dangerous way. Once such instance occurred at Peter Kwok’s, where two advanced students (both grown men with advanced ranks) decided to do assisted butterfly stretches by having one stand on the knees of the other^{viii}.

4.5. “Common Sense”

Both the classic car community and the martial arts community pride themselves on being “down to earth” with “common sense.” This common sense is described as thinking things through and “solving a problem” (according to the mechanic instructor). Both the classic car community and the traditional martial arts community have some conception of what constitutes “common sense” and why it is important, and also that people outside of the community might not have it. The traditional martial arts community’s common sense includes heightened self-preservation, direct action, and awareness. The classic car community has similar notions of

what “common sense” is, though without as much of an emphasis on heightened self-preservation.

In interpersonal relations, self-preservation is sometimes lowered as a form of letting one’s guard down around friends and as humor. Overall, however, self-preservation can be heightened as part of “common sense,” even when not actively participating in a community activity. Interviewees were not directly asked about self-preservation, but the subject often came up anyway. Sensei Diane Ortenzio-Cooling talked about the Guardian Angels, a neighborhood watch group formed in 1979 in New York City who used martial arts to deter crime on public transit. This group wore berets and was unarmed; the point of the group was self-preservation and defending others rather than inciting violence. This self-preservation goes beyond the training room, but sometimes self-preservation is highlighted during training; there are a few seminars at the Saratoga Martial Arts Festival every year that highlight self-defense, including one in 2017 in which the instructor taught de-escalation techniques to stop a fight before it happens. Self-defense is also honed through repeatedly going through drills with partners. It is not unheard of for martial artists to know how to craft makeshift weapons out of everyday objects such as books, cell phones, scarves, and more.

The aforementioned de-escalation seminar also bleeds into the direct action aspect of “common sense.” Both communities see direct action as an integral part of the way they think; the mechanic instructor called it thinking about “how to solve a problem” in reference to fixing things; he also said, “I can fix anything except a broken heart.” During participant observation a few martial artists said similar things about solving problems, though in this case the problem was being attacked. The Women’s Martial Arts Symposium was interesting in that when women talked about self-defense and direction, their descriptions of what to do when attacked were

highly graphic; these descriptions often involved grabbing an attacker's private squishy bits and pulling as hard as possible or poking people's eyes out. Sometimes they even used gestures to signify blood.

Martial artists and car guys both pointed to awareness as a key part of "common sense." During participant observation, the mechanic instructor told a story about when he didn't pay enough attention when cleaning something and wound up running his hand across fiberglass, getting injured in the process. He also warned against being unaware when dealing with car batteries, making sure his students always wear safety goggles; if someone gets battery acid in their eyes, they'll go blind. Sensei Diane Ortenzio-Cooling described awareness as a skill; she also pointed towards an article describing civilians, martial artists and law enforcement, and criminals as sheep, sheepdogs, and wolves, respectively. She said that sheepdogs are tasked with protecting the sheep, but that sheep are afraid of sheepdogs because they look like wolves. Sheepdogs are always aware of their flock and of the wolves surrounding the field; she said that while the sheepdogs were originally meant to be only law enforcement, they could also be martial artists.

4.6. Motivation

Members of these communities have a wide variety of occupations that don't necessarily have any relation to their passion for the community that they are a part of. Their occupations could be anything from editors to contractors to engineers to HVAC technicians. Some of these people have careers that match up to the communities of practice in the present study, such as cops or mechanics. However, every member of these communities are part of the community for a reason other than money; both classic car restoration and martial arts are incredibly expensive. Therefore, the motivation for not only joining these communities but being a member for years,

if not decades, is something else. Some motivations – not all – include self-preservation, discipline, the need to fight, being working class, culture, fitness, and gaining social connections. These are individual motivations, and they can change over time; however, the overall composition of motivations for an entire community may be relatively static for these communities.

Women often join martial arts as an avenue for physical self-preservation because it is dangerous to be a woman in society. Some people may learn how to fix cars so they have a financial resource to fall back on. People may want discipline for themselves or for their children. Some people join martial arts because they want to fight people; this motivation isn't necessarily welcome, as many martial artists view martial arts as an avenue for self-defense rather than as an offense. Physical fitness can also be a motivation; when asked about his motivations, Chris Scully said:

Motivation is fundamentally mysterious. I don't know why I'm motivated to do things...If you had asked what are my motivations for doing martial arts, I would have to say to feel good, and that's a complex thing.

Instructors and parents may want children to do martial arts or may teach them how to fix cars as a way to pass on their culture and their worldviews. People in both communities use their community to form social connections and find friends. These people will sometimes start to make long-lasting friendships^{ix} not just with mentors but with their contemporaries as well; this social connection is part of what makes these communities last so long; both communities started before the advent of the Internet and are still going strong.

4.7. Value Judgements

Value judgements are visible in both the classic car community and the martial arts community through intracommunity interactions. Interactions common among the classic car community and the traditional martial arts community highlight community attitudes and values surrounding debates, veneration of heroes, and various levels of militarism. Knowledge and techniques produced by martial artists have been co-opted by militaries and vice versa. American car manufacturers have historically been tapped for production of weaponry and army vehicles during periods of war (Zatz 2018). Members of these communities may be members or supporters of law enforcement or the military, though this could be because people learn martial arts in both situations.

Debates highlight what forms of knowledge the community hold as “valid.” One such debate is the schism between lowriders and restorers; lowriders heavily modify their cars to fit their personal aesthetics and needs, while restorers modify their cars only to the extent that the cars closely resemble what they would have looked like when they were manufactured. Car restorers see lowriders as irreverent of classic cars, often “tainting” the cars with unnecessary modifications and unoriginal paint colors. There are also seemingly endless squabbles concerning which automakers are preferable to others as well as what constitutes a muscle car. In martial arts, there is a debate as to whether practices such as MMA and Wushu should be considered martial arts. Traditional martial artists may see MMA as a tactically-focused practice that does not reach the same cultural and ideological depths as traditional martial arts.

In both the classic car community and the martial arts community, there is a veneration of heroes that acts as an affective mythology, such as that for Conor McGregor (Kelsey 2017). With this veneration there is sometimes a willful minimization of that hero’s beliefs or possible

agreement or admiration of those beliefs. For example, people who look up to Chuck Norris generally look up to his tactical and physical prowess rather than his homophobic views. In the classic car community, these heroes are often the founders or engineers at American car companies. Examples include Henry Ford, the Dodge brothers, Ransom Olds, Virgil Exner, and more. When drafting questions for the classic car community, I was steered away from asking potentially inflammatory questions about Henry Ford's racism and rampant antisemitism, including questions about the Sociological Department. In martial arts, members of the community may venerate masters, especially good practitioners, and/or kung fu movie stars. Examples include Ed Parker, Chuck Norris, Bruce Lee, Joe Lewis, Jackie Chan, and more. In both communities, these heroes are almost exclusively male.

5. Discussion

In addition to notions of gender roles and mentorship as a learning method, there are five aspects of knowledge common between the communities of practice studied in the present study; these are a desire for discipline, collaboration, a landscape of motivations, “common sense,” and valid knowledge. Four of these aspects are static across time; that is, these aspects of the communities of practice stay roughly the same even through drastic changes. The final aspect, valid knowledge, is dynamic because the construction of valid knowledge relies on what the community at large determines to be valid. Most of the following discussion is focused on the martial arts community. Car communities such as lowriders have been the subject of academic scholarship, so showcasing commonalities between the classic car community and martial arts community serves to show the academic value of studying the traditional martial arts community, which is where most of the insights of the present study came from.

5.1. Community Commonalities

The four static aspects of the communities of practice can be seen in both communities but are more easily found in the traditional martial arts community. The desire for discipline is exemplified by M. Uyehara’s editorial in *Black Belt* magazine asserting that parents should be sending their children to martial arts schools so that children learn discipline. Many parents within the martial arts community hold similar attitudes about discipline for their children. The Adirondack Model A Club runs a youth group every other summer in which they teach teenagers how to build a car from the frame up, including welding, sanding, and everything else that the car may need. The point of this is both to teach the children the content needed for fixing a car but also to give them something to do and to give them some discipline and real-world skills that their schools may not give.

Members of both communities of practice often have a desire for collaboration, whether this is through knowledge exchange or working together. In the classic car community, collaboration comes in the form of swap meets, car shows, joint projects, and club meetings. At swap meets, classic car enthusiasts can exchange modification and restoration ideas or see interesting methods that other people are using. Joint projects such as the Adirondack Model A Club Youth Group allow classic car enthusiasts to work together (with children) to fully rebuild and restore Ford Model A frames into cars. In martial arts, collaboration can come in the form of joint demonstrations, seminars, multi-style events such as the Saratoga Martial Arts Festival, and through individual practice with other martial artists. Collaboration can also come in the form of knowledge exchange through the Internet, especially through sites like YouTube. Griffith (2017) provides an interesting analysis of the role of comments on YouTube in the attitudes towards learning in the virtual Capoeira community.

The overall composition of motivations across a community might not change very much over time. Kids do martial arts to learn, for fun, so they have something to do, and for a social connection to people their age. These kids grow up to become adolescents, who want to fight, need something to do, want physical and mental fitness, stress relief, and a social connection. Adolescents grow into grown-ups who want fitness, stress relief, might be working class, want self-preservation, and want a social connection. If these grown-ups become parents, they want discipline for their children, culture to be passed to their children, and a social connection for their children. Eventually, after many years of training, people may become instructors whose motivations are to pass on culture and knowledge, keep their own physical fitness, and may have a sense of duty to their students as well as their mentors. It is worth noting that the motivations of

people within each of these groups may not include the ones listed or may include different motivations, and that people can enter or exit these communities at any age.

Martial artists and classic car enthusiasts both have some semblance of “common sense.” This “common sense,” as described by members of these communities, reflects intracommunity value systems that members of the community generally hold. In most traditional martial arts, these value systems often center around respect, discipline, and honor. Respect includes respect for oneself, for others, for mentors, and for the martial art itself. Humility and safety fit into respect; one needs humility when working with others and egotism gets in the way of practice. Safety is especially important when dealing with partners but is also important for preventing injuring oneself and having respect for one’s own body. Discipline, which has been discussed at length in this thesis, includes both time and effort and self-improvement. This self-improvement is physical, mental, and emotional; as Sensei Faust (an Aikido Sensei) said, “martial arts makes you a better person.” Honor is the third value in this common set of intracommunity values; honor includes honoring one’s partner, their instructor, and the martial art. Honor has commonalities with respect, though it also includes proper etiquette for handling weaponry and peacekeeping/nonviolence. Peacekeeping and nonviolence may seem counterproductive, but members of the traditional martial arts community (in interviews, participant observation, and secondary sources) stressed that martial arts is for self-defense rather than picking a fight. The sheep, sheepdog, and wolf analogy from earlier exemplifies the assumed duty of martial artists to be peacekeepers and possibly protectors of others.

5.2. Martial Arts as Political Act

While traditional martial arts is focused on internal body dynamics, martial arts can be a political act that reflects race relations, national identity, and can act as resistance to oppression.

In 1964, Bruce Lee fought with Wong Jack Man in a private duel so that he could continue to teach martial arts to non-Chinese people (specifically white people) (Dorgan 1980)^x. Another example is more recent; countries in the Middle East have Judo competitions regularly, and it wasn't until October 2018 that the United Arab Emirates both allowed Israeli athletes to participate and played the Israeli national anthem at the medal ceremonies (*JTA Wire Service* 2018) when an Israeli won a medal. This only occurred because of an intervention from the International Judo Federation in which the IJF cancelled the annual competition in Abu Dhabi because of the 2017 incident when the United Arab Emirates refused to allow Israelis to participate (*Jewish Standard* 2018). The International Judo Federation was also active in the 1960s; during this time, they protested against the removal of Judo as an Olympic sport in 1964 and ruled against the inclusion of a South African chapter of the IJF in 1969 due to Apartheid (*Black Belt* 2008).

Martial arts can act as resistance to oppression. This can be showcased by quite a few martial arts, but three in particular showcase the liberatory potential of martial arts. Krav Maga was developed in the 1930s by Imi Lichtenfeld (who also went by Imi Sde-Or) to help Jewish people protect themselves against antisemitic attacks around Europe. Lichtenfeld later moved to Israel and developed Krav Maga further while in the Israeli Defense Forces (Sde-Or 2002). Krav Maga is a relatively new martial art, but its development and use in Israel as well as its popularity around the world has made it a valid martial art. Another example is Filipino martial arts; this includes many martial arts, but the main categories are Arnis, Escrima, and Kali. Filipino martial arts have been used to resist occupation multiple times throughout history, from Spain in the 1500s and 1600s to Japan in the 1940s (Terry and Cox 2017). Capoeira is an Afro-Brazilian martial art that was developed by slaves to resist oppression; this martial art sneaks

martial techniques into a physical format that looks like a dance (Assunção 2005). Assunção describes Capoeira's history that "features African warriors and their initiation cults, the horrors of the Middle Passage [and] black slaves fighting policemen on the squares of colonial cities in the New World... Capoeiristas confronted Portuguese stick fighters in the streets and Japanese *jiu-jitsu* champions in the ring" (2); he goes on to analyze the meaning of resistance in Capoeira's history.

Martial arts can be used to form a national identity. This is the case with Thailand's Muay Thai, where practitioners are both exporting the martial art and the culture that it comes from (Vail 2018), the national Filipino martial arts of Arnis, Escrima, and Kali^{xi} (Wiley 2000), and China's use of Chinese martial arts as a source of cultural heritage (Haiming 2012, Yan 2012). China is especially intentional in its use of martial arts to project a national identity. From the Qing dynasty into the 1930s, martial artists would showcase their art in marketplaces for money (Judkins 2013). In the 1950s, China used Wang Zi Ping, a prominent martial artist, to promote their image of Wushu as a major cultural export (Judkins 2019). A more recent example is the Balinese martial art of *Mepantigan*, which was founded in 2002 (Graceffo 2019). This martial art borrows martial techniques from various martial arts from both inside and outside Bali, with an emphasis on teaching Balinese culture and philosophy in conjunction with the martial art. While this martial art is a bit young to be called traditional, it may become a bonafide traditional martial art in its own right in a few decades, just as others such as Jeet Kune Do have done in the past few decades.

5.3. Knowledge Classification in Communities of Practice

While some aspects of these communities of practice are relatively static over time, the construction of valid knowledge within these communities is dynamic. What is thought of as

valid knowledge changes over time to help these communities adapt to new social and technical challenges. Wenger et. al. (2002) argue that knowledge is dynamic within communities of practice, and this holds true with the non-occupational communities of practice observed in the present study. However, scholarship about communities of practice at large has not discussed different types of knowledge within communities of practice. There are four kinds of knowledge to consider when thinking about knowledge within these communities. The four kinds of knowledge that these communities interact with regularly include traditional knowledge, new knowledge, anti- knowledge, and non-knowledge (ignorance). Traditional knowledge is cultivated through normal avenues within the communities; that is, through legitimate peripheral participation. This traditional knowledge could include standard methods of teaching within these communities, developing relatively esoteric knowledge via mentorship or legitimate peripheral participation. This knowledge is both solidified and sought after for these communities; traditional knowledge is static in its content and construction and can be foundation for the community's collective identity. This is the knowledge that Wenger et. al. (2002) discuss as being dynamic.

Knowledge used and produced by non-occupational communities of practice has inherent politics that go beyond the political act of one participating in the community. Technology such as social media and YouTube exponentially spreads, speeds, and deepens the repertoire of knowledge available for classification by community consensus. This expansion makes it harder for communities of practice to classify potentially verifiable knowledge because it is easier for adversarial knowledge to masquerade as new knowledge or traditional knowledge. Because of the limitations of disembodied communication methods, new knowledge may be incorrectly classified as adversarial knowledge. Intracommunity value systems (like the "common sense" of

both communities presented in this thesis) influence the classification a given knowledge set may receive, but the representation of said knowledge on social media and YouTube muddies the community's ability to properly classify and therefore accept or reject knowledge.

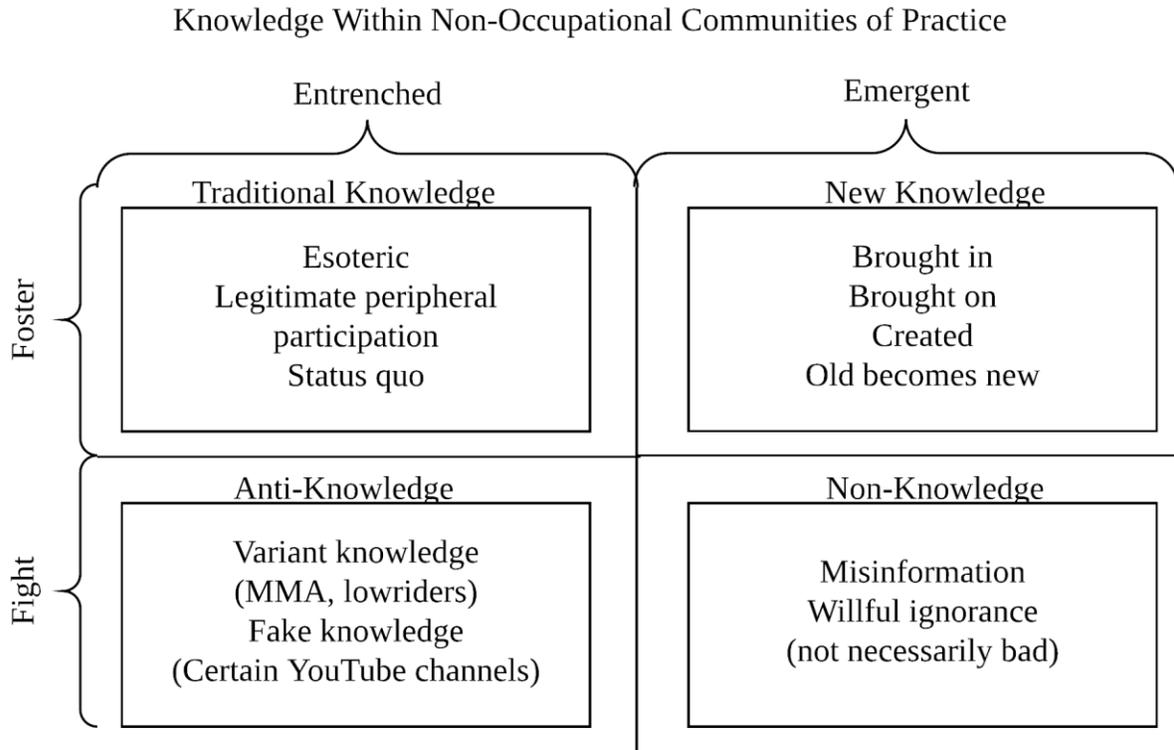


Figure F. Diagram depicting four kinds of knowledge within non-occupational communities of practice. Source: Author

5.3.1. *New Knowledge*

New knowledge is dynamic, emergent, and fostered by communities of practice. This knowledge is brought in from outside sources, brought on by new organizations with new motivations, created by members of the community of practice, or old knowledge that becomes new through the expansion of available knowledge. Knowledge that is brought in from outside sources could be from other communities of practice such as Brazilian Jiu Jitsu or boxing.

Organizations can reorder or bring on new knowledge through standardization or management of knowledge; examples include the standardization of Long Fist forms by the Jing Wu Association in the early 20th Century and the management of martial arts tournaments by the International Judo Federation. The IJF protested against the removal of Judo from the Olympics in 1964 (*Black Belt* 2008) and mandated that the United Arab Emirates allow Israeli athletes to compete (as described earlier in this paper). New knowledge can also be created by members of a community of practice; this was the case for Jeet Kune Do, the martial art founded by Bruce Lee. Bruce Lee originally studied Wing Chun under Ip Man, but eventually formed his own martial art that has grown to be widely accepted in traditional martial arts circles^{xii}. This also occurs with forms; forms and *kata* do not pop up out of nowhere but are created. A Northern Shaolin form called Twenty Methods, for example, was created by Wang Zi Ping^{xiii}. New knowledge can also be old knowledge that has become new with the expansion of available knowledge; this happened when Tae Kwon Do was introduced to the United States in the 1960s (*Black Belt* 2008), the recent relative surge in popularity of Filipino martial arts and might be happening soon with ancient Indian arts such as Kalarippayattu.^{xiv}

5.3.2. *Non-Knowledge*

Non-knowledge, or ignorance, is not inherently harmful to a community of practice. Michael (1996) argues for a typology of discourses of ignorance, in which there are different types of ignorance. In “The Speculum of Ignorance,” Tuana (2006) argues that any robust theory of knowledge should include a study of ignorance (1); in the article, she describes the ways in which epistemologies of ignorance benefitted the women’s health movement in the 1970s and 1980s. When it comes to non-knowledge in communities of practice, this non-knowledge can refer to people who are outside of the community of practice or new members that have not

gained legitimate expertise, but it can also refer to the ways in which women's bodies are (mis)represented. Non-knowledge can stem from misinformation and willful ignorance. Misinformation can come from media portrayals of the community of practice, such as portrayals of martial arts in kung fu movies, *wushu*, and more. Outsiders and newcomers also participate in willful ignorance, which could be purposely ignoring a community of practice or perhaps holding prejudices against a community of practice.

Because both of these communities are heavily male, the presence of women in these communities can be seen as a spectacle or can be completely ignored. Women as a spectacle occurs in the objectification of women in car show beauty pageants and in the use of women to show "miraculous" demonstrations of martial techniques. When I was doing participant observation in the classic car community, there were times I was ignored when I asked questions because it was assumed by some of the men that I wouldn't understand what they were talking about. As tempting as it was to play dumb, I generally corrected this by explaining my mechanical background; the resulting shock usually resulted in bashful answers. This assumption that I would not know anything about cars is an example of willful ignorance on the part of members of this community. In the martial arts community, techniques are often created with the assumption that men will be the ones to actually perform the technique. This goes for things as simple as a block against a roundhouse; one such block involves crossing one's arms in front of them to create a "v" shape that catches the kick. This technique is relatively easy for people who are not endowed with breasts, but for those with an extra few inches on their chest this technique is difficult or impossible^{xv}. This ignorance of women also goes deeper; as welcoming and collaborative as multi-style events are, most instructors are male.

5.3.3. *Adversarial Knowledge*

Adversarial knowledge, or anti-knowledge, is entrenched but seen as damaging to the community of practice. There are two types of adversarial knowledge: variant knowledge and fake knowledge. These types of knowledge are not the same to the community of practice. Variant knowledge could be seen as the enemy by a community of practice; this is knowledge that competing communities of practice may hold as their traditional or new knowledge. To the classic car community, restorers see lowriders as variant knowledge. The traditional martial arts community sees MMA (mixed martial arts) as variant knowledge. This variant knowledge is formed by outside communities with similar characteristics but that ultimately have different goals that seem inane, off-topic, or even offensive to the first community of practice. This type of knowledge originates from outside the community of practice. It is important to note that variant knowledge can be reciprocal; the second community of practice may see the first community of practice as variant knowledge. Fake knowledge is knowledge that fringe members of the community may try to pass off as legitimate, while many members of the community find this to be superficial, false, or offensive. This type of adversarial knowledge comes from within the community. In traditional martial arts, examples include “sham instructors” (*Black Belt*, 2008), YouTube videos such as those of Jake Mace, and “belt mills”^{xvi}. Neither variant knowledge nor fake knowledge are accepted as valid by a consensus of the community of practice at large. These four kinds of knowledge operate simultaneously within a community of practice. In order for a community of practice to be healthy, it should foster traditional and new knowledge while finding ways to fight adversarial and non-knowledge.

It is worth noting that the classification of certain knowledge is not stagnant within these communities of practice. The position of knowledge in any of these categories depends on which

community is perceiving said knowledge, and knowledge can flow from one classification to another. Verification through consensus can move new knowledge into traditional knowledge, and knowledge that is traditional to one part of a community may be new to a different part of the community. Traditional knowledge can become variant through intracommunity debates; conditioning, for example, is a relatively common practice in traditional Chinese martial arts but is seen as variant by practitioners of some other martial arts and MMA.

There is a lopsidedness to the knowledge verification process in communities of practice. Knowledge that comes from privileged sources such as men or from certain popular styles like Judo may have more clout towards getting verified as traditional knowledge as opposed to variant or fake knowledge. Part of the verification process for knowledge is related to popularity of an idea, and both communities see men as the prototypical member of the community. Women are less likely to become long-term members of male-driven non-occupational communities of practice such as the ones presented in this thesis. This could be for multiple reasons: the invisibility of women in these spaces, women are expected to reproduce and raise children, and there are societal pressures for women to participate in more “feminine” pursuits. Women in combat sports may redefine their perceptions of what constitutes being feminine to form an alternative femininity in order to operate within combat sports (Channon and Phipps 2017). The relative lack of women compared to men in these communities and the ignorance of women’s bodies contributes to fewer women becoming subjects of affective mythology than men (Kelsey 2017) and to the phenomenon that women are less likely to be invited to lead discussions or to teach.

There is a societal notion that femininity and weakness are intrinsically connected, and this notion is amplified within these two communities. This could be because of the high

proportion of members of these communities being from the military and law enforcement^{xvii}, though it could also be from a general societal pattern that devalues the contributions of women. Women in these communities gain perceived credibility by eschewing traditional notions of femininity; the goal is to become “one of the guys” in order to have more credibility. The diminished visibility of women within these communities both discourages other women from joining and makes it more difficult knowledge produced by the women within these communities to become verified into traditional knowledge. Knowledge produced by women in these communities may enter some sort of knowledge purgatory somewhere between anti-knowledge and non-knowledge.

6. Conclusions

In 2017, MMA fighter Xu Xiaodong fought Tai Chi practitioner Wei Lei in a duel; in this duel, Xu quickly took down the Tai Chi master (Tatlow 2017). Xu had grown disillusioned with the commercialization and apparent fraudulence of many Chinese martial arts masters and challenged the effectiveness of traditional Chinese martial arts. As a result of the duel, “many Chinese [people] were deeply offended by what they saw as an insult to a cornerstone of traditional Chinese culture” (Tatlow 2017). As a result of this uproar, Xu was labeled an enemy of Chinese culture; his social media accounts were closed and he lost any sponsorship he had as an MMA fighter (*South China Morning Post* 2019). Because of the perceived cultural value of traditional martial arts to China, the position of traditional martial arts as traditional knowledge was used to push Xu and his variant knowledge into a precarious position. This example highlights the ways in which the political act of martial arts can interact with variant knowledge between two communities and with the national identity of a country.

The present study asks questions of importance not only to the communities in question but to scholars of communities of practice as well. These communities do not exist in a vacuum and are reflective of the political climates in which they operate. The Women’s Oasis at Carlisle events is reflective of a society that objectifies women and the Women’s Martial Arts Symposium is a reaction against the devaluation of women in martial arts and the lack of existential safety that women face. In the 1960s, there was a reaction against teaching Judo to Africans in South Africa by white Judo practitioners (*Black Belt* 2008) and until recently, Jewish athletes could not participate in international tournaments in the Middle East. The present study fills a research gap; there has been little to no research on how non-occupational communities of practice change over time. The distinction between occupational and non-occupational is

important because non-occupational communities of practice likely have a more diverse set of motivations and are driven by passion for a craft rather than making a living (though these are not mutually exclusive).

The present study aims to understand how non-occupational communities of practice change over time. The questions used to get closer to this understanding involved asking members of the classic car community and the traditional martial arts community about their opinions regarding knowledge found on the internet and legitimate experience. To answer these questions, we must understand what legitimate experience is, how it is different from valid knowledge, and how these communities of practice have changed according to members and secondary sources. Legitimate experience is held by individuals and is cultivated mainly through traditional knowledge practices such as mentorship and legitimate peripheral participation. Valid knowledge is somewhat more conceptual as it is developed and validated by a community at large. Traditional knowledge practices are part of valid knowledge, though the construction of valid knowledge within a community is more dynamic than the traditional knowledge. Legitimate experience is a way to pass along traditions, while valid knowledge (or the expansion of valid knowledge) is what allows communities to adapt to social arenas.

Valid knowledge is either traditional knowledge or new knowledge that has been verified through collaboration between established and new members of communities of practice. In traditional martial arts, the desire for discipline stems from traditional knowledge such as legitimate peripheral participation and mentorship. Collaboration comes in the form of knowledge exchange and joint projects such as seminars and actively working with martial artists from other styles. While an individual's motivations may change over time, the overall landscape of motivations within a community of practice stays relatively static over time.

Intracommunity values within martial arts come down to respect, discipline, and honor and have done so for decades. At no point is knowledge valueless or without context; the knowledge that these communities use operates in ways that reflect both the social climate that the community resides in as well as the intracommunity value system that influences the community of practice.

Changes in the construction of valid knowledge within a community of practice allow the community of practice to change their internal dynamics in response to the internet. The desire for discipline, collaboration, overall group motivations, and intracommunity value systems stay roughly the same even though the construction and acceptance of valid knowledge within the community changes. The construction of valid knowledge within communities of practice lies in the verification of new knowledge. This suggests that new knowledge can become traditional knowledge. When a community of practice is able to verify new knowledge into old knowledge, they are able to change their construction of valid knowledge, thereby adapting to new social and technological challenges.

There are some questions that the present study leaves unanswered that are open for future research opportunities. Do communities of practice that consist primarily of women have different knowledge verification practices? Do martial arts communities in countries outside the United States also follow this pattern? Do communities that have variant knowledge to the communities presented in the present study have different methods for constructing valid knowledge? What happens to this theory of valid knowledge when feminist standpoint theory is used to analyze the contributions of women to these communities? There are common characteristics between the classic car community and the traditional martial arts community. Both originated before the advent of the internet, focus on discipline, are centered around a passion for the content of the practice, use legitimate peripheral participation, have social events

for collaboration, are working-class activities, and have some semblance of “common sense” within the community. In addition to the questions posed above, there are two sets of possible future work involving valid knowledge within communities of practice; future work surrounding theory and groups that could be considered for future work. Future work centered around theory could ask how communities of practice can foster “good” or valid knowledge, how they can fight adversarial knowledge, and how to actively adapt a community of practice to changing social and technological conditions. Future groups that may be interesting and productive to observe include yarn art communities and other traditionally “feminine” crafts, carpenters, plumbers, blacksmiths, obscure artifact collectors (i.e. typewriters or fountain pens), and academia. It may be fruitful to study the knowledge practices of non-occupational communities of practice such as the ones presented in this thesis from the lens of marginalized groups such as LGBT+ people or people of color, especially using methods found in feminist standpoint theory.

The present study has been an inquiry into the ways in which knowledge is used and classified within non-occupational communities of practice. This inquiry comes from a place of affection for these communities. The observations concerning women’s experiences in these communities came out rather critical, more so than originally expected. The process of analyzing data for this thesis was somewhat revelatory in that it added a degree of disillusionment with these communities while at the same time allowing a deeper appreciation for the traditions and knowledge held by these communities of practice as well as the knowledge of competing communities. As described at the beginning of this thesis, Sifu Eddie regularly stresses the importance of time and effort in his lessons. This thesis has looked between the lines of those lessons to ask how time and effort fit into the knowledge-scape of martial arts and, more generally, into the classification of knowledge within non-occupational communities of practice.

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Endnotes

- ⁱ As this style of Chinese martial arts has more than one name, I may refer to it as Northern Shaolin Kung Fu, Northern Long Fist, Long Fist, and Long Fist Kung Fu.
- ⁱⁱ Hemmings' headquarters is in Bennington, Vermont. They welcome tours of their garage full of antique cars, including a real Bantam.
- ⁱⁱⁱ Specifically, the group page for Sifu Bill Luciano's school and the public page run by Sifu Kisu.
- ^{iv} I know this Sifu and can confirm the legends.
- ^v One of the interviewees, Chris, had a very good explanation for how this feels.
- ^{vi} Sifu Tom, sometimes affectionately called 'Monday Tom' because he taught on Mondays, passed away in 2006. He was a kind man and a good teacher.
- ^{vii} This club is focused on the restoration of Ford Model A cars, which are antiques rather than classic cars. Antiques are older than classics and far more valuable.
- ^{viii} This was incredibly stupid to do and they both got told off by a nearby Sifu.
- ^{ix} At this point, my oldest friend is Julian Mihov, who has been my kung fu brother since 2001 or 2002 (we don't remember the exact date).
- ^x This story is a bit muddled, as Wong and Lee recalled different events at the duel.
- ^{xi} This is also known as Escrima; this martial art revolves around the use of two bamboo sticks, each roughly twenty-six to thirty inches long.
- ^{xii} This is relatively common knowledge, so I do not have a reference for it.
- ^{xiii} This is according to Grandmaster Randy Elia of Peter Kwok's Kung Fu Academy via electronic messaging.
- ^{xiv} This was observed during participant observation.
- ^{xv} This gender-neutral language is on purpose; people of any gender can have extra inches on their chest (whether from muscle or from fatty tissue). Not all men have flat chests and not all women have breasts.
- ^{xvi} This term was used by a martial artist during participant observation.
- ^{xvii} This is possibly the reason why there is also an ignorance and invisibility of LGBT+ people in these communities.