

THESIS

THE ECOLOGICAL SELF: A COGNITIVE ANTHROPOLOGICAL STUDY OF IDENTITY,
BODY IDEOLOGY, AND ECOLOGY IN AMERICAN ZEN MONASTIC CULTURE

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ABSTRACT

THE ECOLOGICAL SELF: A COGNITIVE ANTHROPOLOGICAL STUDY OF IDENTITY, BODY IDEOLOGY, AND ECOLOGY IN AMERICAN ZEN MONASTIC CULTURE

This research will examine the unique cultural context of Japanese Zen as it is practiced, embodied and shared in an American monastic setting. It will look at how this particular “culture of meditation” (defined as the U.S. Zen monastic culture) promoted within these communities may influence the way a person frames their bodies, sense of self and environment. Through this process, I suggest that the experience of self-moves from an ego-centric to a more eco-centric ontology, resulting in a unique environmental worldview that may be related to subjective wellbeing. Using a mixed-methods approach this will be explored through the use of ethnographic grounded theory, surveys and a cognitive test measuring visual processing with the intent of providing a case for how a “culture of meditation” may impact the way we contextualize ourselves within the world around us.

An introduction to Buddhism in America will be given, in order to frame the particular Buddhist culture examined in this study, as well as a definition of “meditation” through the vantage of contemporary psychological vocabulary. This study will take a strong interdisciplinary stance. Chapter 3 will examine various theories from psychology, anthropology and ecology as possible frames to interpret the unique cultural and religious identity that is promoted by Zen monastic culture. Then, first hand research conducted at a U.S. Soto Zen monastery in Oregon will be addressed, using an enhanced ethnographic approach to give voice

and rigor to the lived experience of how this “culture of meditation” transforms a sense of self and motivates an alternative ecological worldview.

Chapter 4 will provide an overview of the methods used, detailing information on participants, setting and an analysis of prior participant observation and Chapter 5 will present and examine the data in each step of the study, providing analyses of the findings and identify the emergent themes. A summary of these analyses and description of the conclusions will be discussed in Chapter 6, as well as the limitations of the research process, applications of the findings and recommendations for future directions. Themes of body, self and environment will be explored throughout the study, with the intention of providing a unique exploration of Zen practice, culture and experience.

TABLE OF CONTENTS

ABSTRACT.....	ii
CHAPTER 1- INTRODUCTION	
1.1-Introduction.....	1
1.2-The Field of Contemplative Science.....	2
1.3- Buddhism in a Contemporary U.S. Monastic Setting.....	3
1.4- What is Meditation?.....	4
CHAPTER 2-LITERATURE REVIEW	
2.1- Introduction.....	7
2.2- Psychological Theory.....	7
2.2.1-The Role of Attention in Meditation Experience.....	7
2.2.2- The Mind-Body Problem.....	9
2.2.3- Conclusion.....	11
2.3- Anthropological Theory.....	11
2.3.1- Critical Interpretive Medical Anthropology.....	12
2.3.2- Psychological Anthropology.....	14
2.3.3- Culturally Directed Attention: Framing of Non-self.....	14
2.3.4-Disassociation: Stress and Context for Non-Self.....	17
2.3.5- The Impact of Community, the Sangha and Biopsychosocial Healing.....	19
2.3.6- Conclusion.....	20
2.4- Ecological Theory.....	20
2.4.1- Deep Ecology.....	22
2.4.2- Zen and Socio-Ecological Systems Theory.....	20
2.5- A Call for Culturally-Situated Research.....	23
CHAPTER 3- METHODS	
3.1- Introduction.....	24
3.2- Overview of Methodological Process.....	25
3.3-Participants.....	27
3.4-Setting.....	27
3.5-Previous Participant Observation.....	28
CHAPTER 4: DATA ANALYSIS	
4.1-Semi-Structured Interview: Construction and Data Collection.....	31
4.1.1- Qualitative Data.....	31
4.2-Survey 1: Construction and Data Collection.....	35
4.2.1- Quantitative Data	35
4.3- Survey 2: Construction and Data Collection.....	39
4.3.1- Part 1: Body, Self, and Identity.....	40
4.3.1.1- Quantitative Data Analysis.....	42
4.3.1.2- Qualitative Data Analysis.....	40
4.3.2- Part 2: Wellbeing, Environment, and Conduct.....	41

4.3.3- Part 3: Drawing the “Self”.....	50
4.4- Cognitive Test: Construction and Data Collection.....	51
4.5- Limitations.....	54
CHAPTER 6: CONCLUSION	
6.1- Discussion.....	56
6.2- Applications and Future Directions.....	59
6.3- Conclusion.....	59
REFERENCES.....	62

CHAPTER 1-INTRODUCTION

1.1-Introduction

The room is nondescript—a plainly lit rectangular space with a wooden floor made from panels of bamboo slats. Rows of dark blue mats line the floor with round cushions placed in their center. There is a small statue in the front; from afar, it is not clear if it is a depiction of the Buddha or a person sitting in a meditation posture, there are no ornate fabrics, robes or gold adornments to indicate either way, just a small red vase and a white lily carefully placed by its side. This is a dark and exacted space—that is, aside from the large windows that span its parameter. Like animated *kakemono* scrolls hung across the walls, the windows reveal an extraordinary seascape of leaves undulating in the Pacific breeze. The otherwise refined and stiff room is entirely filled and enlivened by the natural world.

The meditation hall (*zendo*) at Great Vow Zen Monastery is a classic example of the Japanese Zen aesthetic, the intermingling of the natural and human realms. This basic principal of Japanese architecture, *shinzan*, is used to blur the lines between the interior and exterior, in effort to symbolize their true nature— non-duality. This principal of blurred boundaries is at the heart of the Zen Buddhist tradition, as well as the following discussion of the U.S. Zen Monastic experience.

This research project will explore a unique ideological perspective of the body, self and environment as portrayed in U.S. Buddhist monastic culture. It will make a case for how personal worldview can be shaped by a cultural context. The objective of this project is to provide a rigorous analysis of these experiences using cognitive anthropological methods, as well as to promote the integration of culturally-informed anthropological analyses in the

emerging field of “contemplative science.” It is my hope that not only will this research emphasize the importance of context, but also provide a compelling look into the U.S. Zen monastic culture and how it can transform lives—a perspective that has been largely overlooked in academic discourse.

1.2- The Field of Contemplative Science

In the past decade there has been a large confluence of Western scientists and Eastern contemplatives that has resulted in a field known as “contemplative science”—a scientific approach to understanding the effects of meditation practice. With the advancement of neuroimaging techniques and increased collaboration between Buddhist communities and researchers, this field has seen exponential growth—with the formation of large-scale institutions such as the Mind and Life Institute, The Stanford Center for Compassion and Altruism, and the Emory-Tibet Partnership for Contemplative Science.

The overwhelming body of research, however, has been limited to studies regarding the impact of meditation on the brain, largely overlooking cultural context as integral to these ancient traditions. The aim of this work is to expand the field of contemplative science by using anthropological perspectives and methodologies to examine the larger impact of meditation practice not just on a personal, neurological level, but on a more contextual and engaged one—with the intent of demonstrating how culturally-situated meditation impacts the way people relate to themselves and how they enact themselves in the world

This research combines cognitive science and immersive ethnographic research to garner a deeper understanding of subjective transformation as a result of a culturally-rich meditation tradition. Rather than looking at meditation from a merely a biological or psychiatric frame, this research aims to examine meditation from an “ethnopsychiatric perspective,” using the a mixed

methods approach to examine how meditation alters the way people frame themselves within the context of their environment. Two research questions were posed: (R1): *Does participating in a “culture of meditation” change the way we understand our relationship to the environment? And (R2) If so, does this impact subjective wellbeing?* - 3 - The “culture of meditation” is defined as the U.S. Zen monastic culture for the purposes of this study, not to be confused with a broader definition of a cultural interest in meditation at large.

I will examine this change in worldview through a redefinition of “self in context,” suggesting that through meditation practice promoted through a monastic culture motivates people to reassess their relationship to the world around them through a reframing of body, self and ecology. In order to examine this unique cultural context and its potential experiential effects, it is important to establish a background for how this tradition has been taken root in U.S. soil.

1.3-Buddhism in a Contemporary U.S. Monastic Setting

Siddhartha Gautama, the first religious figure of Buddhism, was said to have achieved enlightenment by sitting under a banyan tree for 8 years examining the present moment in sixth century BCE. Following this emerged the philosophical tradition of Buddhist thought that emphasized the impermanence and conditioned dependence of all phenomena of all beings and thus, a renunciation of an individual self and a sense of compassion for not just individual desires, but a sense of care for the entirety of the natural world (Berzin, 2001). Unlike other predominant religious traditions of this time, Buddhism emphasized not doctrinal beliefs based on the word of religious leaders, but on the direct experience of reality based on personal perception of the world through a continual examination of the present moment (Sanskrit: *sati*; English: meditation) as a method to relieve suffering. Buddhism spread across India, throughout

China, Sri Lanka, Thailand, Japan and has since become the 4th largest religion practiced worldwide (Broad, 2003).

Buddhist philosophy and its praxis, however, has undergone many transmutations throughout its long history, making it difficult to talk about a singular “culture of meditation.” The focus of this research is based on a historically unique embodiment of Buddhist practice, as Japanese Soto Zen becomes more deeply assimilated into Western and U.S. thought. Through this process of assimilation, largely following the Second World War, Japanese Zen has not only been received by a largely secular audience in the West, but it has also faced the skepticism, interest and, most recently, support from the scientific community. Through this encounter, the concept of “mindfulness” has been used in order to discuss the practice of meditation without its previous cultural forms, ultimately contributing to the process of forming a particular U.S. culture regarding Buddhist thought.

The complex roots of contemporary Buddhism makes it impossible to talk about “meditation” and “Buddhism” in a generalized way and this is not the intent of this body of work. Rather, this research will examine the unique cultural collaboration between traditional Japanese Zen Buddhism and the way it has been appropriated in an U.S. monastic setting. The discussion about Buddhism for the purposes of this research project, unless otherwise mentioned, will be from this perspective.

1.4- What is Meditation?

Meditation can be broadly thought of in two categories: concentrative meditation and mindfulness meditation—with the former being a specific orientation of attention on a particular set of stimuli (e.g. continually focus on the sensation of breathing) and the latter a more generalized and holistic awareness of ones present moment surroundings (e.g. feeling the

physical sensation of the entire body in space). Visualizations are another form meditative experience that are more commonly found in Tibetan Buddhist practice. This distinction can be seen more specifically in the Soto Zen tradition— with the practice of focused “zazen,” attention on the breath, and “shikentasa,” generalized awareness of one’s subjective experience and proximate environment. In the Soto Zen tradition students typically begin with the practice of zazen and then, when deemed appropriate by the teacher, will begin the practice of shikintasa (Wei, 1960). In contemporary psychological language this has been compared to the cognitive difference between attention and awareness, with attention being an integral component of awareness, but awareness not essential to the ability to attend. It should be noted that awareness differs from consciousness in this discussion—where consciousness is the baseline for both attention and awareness and missing in situations such as deep sleep and coma.

The way awareness is used within Zen will be explored further throughout this body of work, but a basic understanding of the two major ways meditation is practiced is essential to delineate (Kosho, 1993). Most of this research will be targeting the awareness forms of meditation practice as seen in “shikentaza,” with a more holistic, integrative aim.

Unlike some other contemplative traditions, Zen emphasizes an open-eyed awareness practice, where students include visual stimuli into their meditation at both stages: concentration and generalized awareness. Based on this unique orientation of attention to external environmental cues it is hypothesized that through the continual orientation of attention and awareness to a person’s local environment there is a change in perception that modulates 1. A redefinition of self from ego-centric to eco-centric, and 2. A unique ecological worldview.

It should be noted that throughout this paper the word “self” will be used in various ways. It is important to this research that not one definition of “self” be provided, since this research is

aimed at examining the fluidity of self and how the experience of being a self can be flexible. Yet, it is important to clarify that the word “self” will be used contextually based on several factors 1. Experience level of the participant (beginner, intermediate or advanced), 2. Theoretical framework (Buddhist phenomenology, anthropology, or psychology) and 3. Individual conceptualizations of self based on a dual or non-dual worldview. It should be noted that the “self” may at times refer to a biographical narrative of a person, as well as an expanded experience of self—which for the purposes of this research I call “ecological self.” The ecological self, a term from Deep Ecology, will be employed to address this common, yet alternative experience of an expanded self in U.S. Zen Monastic culture.

For a more concise analysis and vocabulary of self based on culturally relevant literature can be found in Evan Thompson’s work “*Waking, Dreaming, Being: Self and Consciousness in Neuroscience, Meditation, and Philosophy*” (2014), where he provides a definition for the various selves that will be examined in this research. In order to make any clear definitions of self, as they apply to this research, however, would require a follow up study of participants based on their understanding of how they use this phrase, where they could choose which way they were using the word. Although questions of “How do you experience your self?” in interview data and “I have a self, please explain” in survey Likert-scale data, as well as a non-verbal, pictorial data to “Draw your self,” will be provided in this research, an important next step for clarifying the various uses of the word “self” is needed using a grounded method in order to target an accurate insider’s perspective.

CHAPTER 2- LITERATURE REVIEW

2.1- Introduction

This research will draw on psychology, anthropology and ecology in order to provide possible explanatory models for the experience of an “ecological self” that will be described in Chapter 4. These theories will provide ways of looking at body, self and ecological worldviews from different perspectives with the hopes of providing a basis for how the experience of Zen monastic culture may impact an individual.

2.2- Psychological Theory

Psychology has been the major force in popularizing meditation in the West and has interpreted Buddhism in scientific and secular terms. It is also the closest cultural perspective to that of the dominant U.S. worldview, thus making it a common bridge between U.S. secular ideology and traditional Buddhist thought. Through this discussion I hope to introduce some of the territory that psychology has pioneered in the research of meditation and contemplative science, while ultimately making the case for the need of culturally informed analysis to be successful discussion of the subjective transformation that meditation can foster. Following this discussion, a discussion from the perspective of anthropology will be presented, providing insight into how this transformation of a sense of self occurs using theories from critical interpretative anthropology and psychological anthropology. Lastly, a brief discussion of the confluence of theories from ecology will be presented as insight into why this unique perspective of self in Buddhism is particularly relevant to modern day ecological discourse. The thesis will end with an anecdote from leaving the monastery and emphasizing the importance of direct experience.

2.2.1-The Role of Attention in Meditation Experience

The role of attention in meditation practice has been well documented over the past decade as neuroimaging techniques have been developed to examine the physical correlates of meditation experience. The overwhelming evidence of these studies suggests that meditation practice not only changes the way people experience themselves, but also may have long lasting physiological benefits.

The means by which this process of physical change occurs is through the function of “neuroplasticity”—defined as: changes in neural pathways and synapses which are due to changes in behavior, environment and neural processes as regulated by attention (Draganski et al, 2014). Neuroplasticity suggests that the brain is constantly in a state of flux and has the capacity to rewire itself. The critical factor in the extent to which neuroplasticity can have an effect is attention and a person’s ability to attend to a set of stimuli over another. This process of attention can be seen in the Cognitive Behavioral Therapies such as MBSR and MBCT, where people are asked to redirect their thought to more positive ways of framing a situation (Chang, 2012) and both psychological and neurological changes can be observed.

Thus, it comes as no surprise then that meditation practice—a process of constant attentional refocusing—would be related to this process of neuroplasticity, resulting in significant neurological changes. In 1984, Brown et al. conducted a study that measured the threshold of perception for light stimulus duration in practitioners and non-practitioners of mindfulness meditation. The results showed that meditators have a significantly lower detection threshold for light stimuli of short duration. In 2000, Tloczynski et al. (2000) studied the perception of visual illusions by Zen masters, novice meditators, and non-meditators. The Zen masters experienced a statistically significant reduction in initial illusion and a lower decrement

in illusion for subsequent trials. The theory of the mechanism behind these difference in perception that accompany mindfulness meditation is described by Tloczynski:

A person who meditates consequently perceives objects more as directly experienced stimuli and less as concepts... With the removal or minimization of cognitive stimuli and generally increasing awareness, meditation can therefore influence both the quality (accuracy) and quantity (detection) of perception. (2010)

In 2009, O Nuallain, Sean examined the influence of meditation on perception using synchronized gamma, showing that during meditation the brain goes into a state in which it is maximally sensitive and perceptive. During this state, it is also observed that the parietal lobes of the brain, where the formation of “bodily self-awareness” is located, loses blood flow and reduces in normal function (Cahn & Polich, 2006). This research suggests there may be a neurological correlate for the “selflessness” and “expanded experience of the body” that will be discussed throughout this paper.

These studies suggest that visual perception, more sensitivity to the environment, and a change in body image are all related to meditation experience. The problem that many of the previous empirical approaches to meditation practice, however, have faced is that they have failed to include 1. Self report and 2. Context as important indicators of how to interpret the results. Thus, it is vital that contemplative science now extends its analysis to include these important factors—which will be the aim of this research project and discussed in the following sections.

2.2.2 The Mind-Body Problem

Not only is a lack of contextual analysis a common feature in these biomedical studies, there also tends to be a lack of cultural fluency, let alone basic familiarity, the with complexities of a Buddhist religious tradition. Although modern psychological and neurological studies have

looked at meditation through a biomedical lens to reveal the potential of meditation practice to influence physiology, there is a major philosophical difference between these two cultures—U.S. psychological thought and traditional Buddhist phenomenology.

Pioneered most famously by Socrates and Plato, the Greek philosophical notion of the mind and body existing in a dualistic relationship, and upheld by the famous phrase “I think, therefore, I am,” mind-body dualism has become a common denominator for psychological thought. This perspective divides the mind and body into disparate systems: the body and the thinking, intelligent mind. This duality of body and mind has acted largely as the premise for Western psychological discourse and cultural notions of what it means to be a “self.”

In Buddhism this divide between mind and body is not satisfactory. Rather than viewing self and mind as emanations from the brain (or “The Ghost in the Machine”), Buddhism does not separate mind and body, nor does it localize the mind in a particular place.

Interestingly—and at central to this research— Buddhism, does not deny the mind body division, but it does not limit the self to the mind or the body alone—it expands the matrix of self to include the environs in which the mind-body exist. The unity of mind, body and environment in Buddhist philosophy enables the concept of interdependence to emerge as a central tenant of Buddhist thought and practice and provides a uniquely human perspective of ecology. Framing the self as a dynamic relationship between mind, body and environment, sheds light on how Buddhism may provide a unique cultural way of envisioning ones self in context. I propose that this non-dual perspective may be the basis for the experience of being an “ecological self,” rather than an individual self that is limited to a physical body. This discussion will be examined more carefully in Chapter 4.

Since there is a major ideological and cultural difference between Western psychology and Buddhist phenomenology, I hope that anthropology can act as the intermediary between these two cultures (a culture of duality vs. a culture of non-duality), to more accurately examine the experiences and potential benefits of U.S. Zen monastic practice.

2.2.3 Conclusion

It is important to acknowledge the work of neuroscience, the potential of neuroplasticity and the previous empirical attempts to describe meditation experience from the perspective of the brain—they have provided fruitful discussion and rigor to an ancient tradition. As discussed in this section, however, it is equally important to be critical of the cultural assumptions of self, mind and body as they are upheld in the Western psychological worldview. In order to collaborate with Buddhist practices it is vital to be culturally informed and to understand the basic differences between Buddhist and Western conceptions of the mind, body and self. Having a cultural broker may be an important way to aid in this challenge, making the role of anthropology particularly apt in contemplative research.

2.3- Anthropological Theory

The field of anthropology has looked at self, mind and body in great detail, while emphasizing the impact of culturally prescribed notions of self shared in a cultural space. An important feature of anthropological approaches that distinguishes them from purely psychological investigations is that they directly look at the link between context and ideology, suggesting that an individual is intertwined with their cultural, social, political and environmental contexts—a particularly relevant perspective for this research. Drawing on embodiment theory (VanWolputte 2004, Reischer & Kathryn Koo, 2004) as a sociocultural and historical process, rather than assuming the unity, neutrality, universality of self (Grosz 1995b, Harraway 1991,

Ingstad & Whyte 1995), the idea that context and culture play a role in the way self-definition occurs is imperative for this research.

2.3.1- Critical Interpretive Medical Anthropology

Critical interpretive medical anthropology has addressed the issue of how culture can be “inscribed” on to the body and influences body ideology, as well as the ways it may impact health. Nancy Scheper-Hughes and Margaret M. Lock propose a useful schematic for the various ways a body can be framed, suggesting that there are “three bodies”—the individual body, the social body and the body politic. According to their work “The Mindful Body: A Prolegomenon to Future Work in Medical Anthropology,” these three domains are defined as “(1) a phenomenally experienced individual body-self; (2) as a social body, a natural symbol for thinking about relationships among nature, society, and culture; and (3) as a body politic, an artifact of social and political control” (Scheper-Hughes & Locke 1987: 6-41).

The individual body is “understood in the phenomenological sense of the lived experience of the body-self” (Scheper-Hughes & Locke 1987: 7). It is the first-person experience of 1. having a physical form and 2. the subjective experience of residing within in this form as it relates to “psyche, spirit soul and self” (Scheper-Hughes & Locke 1987: 7). This bodily domain is, therefore, not limited to a physical body, but also includes the mental constructs of the individual as it relates to the physical world.

This definition is important because rather than being bound by the physical body, the body-mind as proposed by Scheper-Hughes and Lock allows for the impact of mental constructs and beliefs as important features to the way the body is experienced and expressed.

Scheper-Hughes and Lock describe the next bodily domain, the social body, as “the representational uses of the body as a natural symbol with which to think about nature, society,

and culture” (Scheper-Hughes & Locke 1987: 8). The social body is not separate from the body-self, yet intertwined with the other three bodily domains. The social body as Scheper-Hughes and Lock also includes the way people relate to the natural world and how social symbols relates to their experience of self Scheper-Hughes & Locke 1987: 22).

At the third level is the body politic, which Scheper-Hughes and Lock refer to as “the regulation, surveillance, and control of bodies (individual and collective) in reproduction and sexuality, in work and in leisure, in sickness and other forms of deviance and human difference” (Scheper-Hughes & Locke 1987: 8). Whereas the body-self is rooted in phenomenology, the social body is derived from structuralism and symbolism, the body politic uses a poststructuralist view, linking government regulation to power relations. This third bodily domain is not particularly relevant to this discussion, since it does not examine the political structures of the monastery, but provides an important theory for how the body, self and health are intertwined with context. It should be noted that the body politic, however, is still very relevant to the U.S. Zen monastic setting, considering the rigorous forms for sitting, moving together and work, as well as the regulation of bodily forms based on meditation instructions from the teachers (i.e. posture and breath).

Interestingly, in Buddhist phenomenology there are also three bodies, known as the Trikaya, that explain the various interactions between subject and context. The three bodies of Buddhism are as follows:

1. The *Nirmāṇakāya* or *created body* manifested in time and space. It is the personal experience of individual body and identity and most closely corresponds to the “individual body” described by Scheper-Hughes & Locke .

2. The *Sambhogakāya* or *body of mutual enjoyment* is the subtle body made up of light and atoms.
3. The *Dharmakāya* or *Truth body* embodies the principle of enlightenment and knows no limits or boundaries; this is the bodily state that the ecological self emerges, not limiting the body to an individual ego, but encompassing all phenomena.

Although the three bodies of Buddhism as described clearly differ from the three bodies in critical interpretive medical anthropology, being able to look at the body from various perspectives that include content outside of just the physical form is shared. Looking at the body as a construction that is related to various levels of experience is important to the progression from an ego-centered perspective of the body to an eco-centric perspective of the ecological self.

2.3.2 *Psychological Anthropology*

Similar to critical interpretive medical anthropology, the field of psychological anthropology develops the model of “individual in context” by looking at the way culturally shared and transmitted beliefs impact psychological events and subjective wellbeing. Kleinman (1978) introduced the concept of “cultural frames” as a way of explaining how cultural space can impact the way a person conceptualizes themselves and creates frameworks for defining their world.

2.3.3- *Culturally Directed Attention: Framing of No-self*

The notion of a cultural frame is taken from the field of cognitive science, where “cognitive frames” are used to understand how a person’s particular set of schematic representations changes their perception of certain sets of stimuli (Shanahan, 2003). It has been shown in numerous studies that a person’s individual cognitive frame can drastically alter the

way they encode information and make decisions (Wilkerson, 2001). Thus, a “cultural frame” is a way of describing how culture shapes the way a group of people understands similar sets of stimuli. Essentially it is posited that culture directs the attention of an individual who subscribes to that culture, resulting in the assumption of a culturally shared and culturally specific vantage point.

Rather than meditation practice being simply a process of individual rewiring and reframing in the brain, as proposed in psychological theory, I adopt the model that meditation is also a culture that has cultural frames that are shared within a monastic setting, resulting in not only directed attention individually, but also directed attention of a group as a whole.

Much like the limited capacity of the human brain to process, recall and encode information, a particular culture is only able to process, maintain and embody a certain amount of knowledge. Rather than the shared knowledge of culture being vast and all encompassing, it is limited to what the people living and embodying it deem salient and transmit through values, beliefs and practices in a cultural space.

Thus, this form of cultural selective attention is a two way street. Culture directs the attention of its members, yet it is also individuals who govern the saliency of certain beliefs. In Buddhist communities the role of attention interacts at these two levels: the individual allocation of attention during meditation practice, and the allocation of collective energy of the community, emphasizing and repeating explanatory models as a way of shaping subjective experience for members of the community. Rather than merely being a neural rewiring of the brain that results in the redefinition of self in environment, I propose that there is actually a biopsychosocial process that directs attention at both the personal and shared space that may aid in a transformation from an ego-centric to a eco-centric perspective.

Buddhism presents one wrench in this theory, however, with its unique emphasis on *non-conceptuality* that aims at getting outside of cultural conditioning (Pali: *sañkhāra*) in order to see past cultural influence and more directly into the nature of the observer's direct experience. Being attenuated with the influence of cultural conditions, known as *paticcasamuppāda*, or dependent origination, Buddhism attempts to create a culture of no-frames using culturally relevant frames in order to accomplish this goal—a seemingly paradoxical process. This is known as non-conceptuality in Buddhism, with the irony that non-concept (or lack of any frames or explanatory models) can only be achieved through embodying and working with the Buddhist cultural frames in order to get there. This can be seen in the writings of the ancient Buddhist philosopher Dogen:

To study the Way is to study the Self. To study the Self is to forget the self. To forget the self is to be enlightened by all things of the universe. To be enlightened by all things of the universe is to cast off the body and mind of the self as well as those of others. Even the traces of enlightenment are wiped out, and life with traceless enlightenment goes on forever and ever. (Koho, 1993)

The meaning of this teaching demonstrates the process through which this particular cultural practice examines the meaning of self, reframing it through practice, and ultimately seeing past 1. personal frames developed through habit and life conditioning and 2. the cultural frames cultivated by Buddhist monastic practice in order to exist in a state of non-conceptual cognition to see directly into the nature of self: as an aspect of “all things in the universe.”

The realization of no-self is the means by which I propose that this practice impacts subjective wellbeing—emphasizing a sense of intimacy with not just the personal self, limited to an individual body, but by interconnectivity with all living beings and the larger ecology. In Buddhism the realization of no-self does not mean that there is no self at all—a common

misconception—rather, that the self is far more vast and impersonal than the physical body and personal ideas about the world.

A theory of how this sense of no-self can be achieved relates to the practice of meditation on Hindu deities in India. By focusing attention repeatedly on the image and qualities of a Hindu god, the experience of actually becoming the God, or being possessed by their spirit, has been reported by devout Hindus (Snodgrass, 2002). I argue that through the allocation of attention to the environment through open-eyed meditation practice, Zen induces a sense of becoming the environment, rather than a certain deity or godhead. This phenomena provides fruitful grounds for further research into the extent to which attention—personally or culturally meditated—can induce drastic changes in the experience of self and the world. Whether or not a person can free themselves from culturally directed frames, however, is subject to debate.

2.3.4- Dissociation : Stress and Context for Non-Self

Another area of interest in anthropology is the role of trance and dissociation in these kinds of “alternate experiences” of self, providing another possible explanation for this unique experience of self in Zen monastic contexts. Zen monasteries are well known for their strict rituals and emphasis on strenuous physical and psychological labor. Unlike other Buddhist monasteries, Zen intentionally creates a space of stress as a way of encouraging meditators to practice more deeply. Elements like the *kyosaku* – or “wake-up stick” is used during long periods of zazen (mainly during longer retreats known as *sesshin*) to strike practitioners on the back or on the part of the shoulders close to the neck and an emphasis on *raihai*—or repeated full body prostrations, sometimes up to 1,000 times at a given period are well known features of the *zendo*.

Samu, work practice is also a central aspect of Zen monastic life, where individuals of the community work, primarily in difficult tasks that involve physical strain, for long periods of the

day as a training technique of equanimity. Exposure to the elements, especially the cold, is also a featured practice of many Zen monasteries, where frostbite, hypothermia and malnutrition are common ails (Hori, 1994).

The intent of these difficult practices according to Zen philosophy, however, is not to have negative impact on the wellbeing of the community or individual, but to encourage equanimity and a sense of detachment from self as part of the process of meditative insight. From an anthropological perspective this state may be viewed as a dissociation from the self and can be likened to the ecstatic states of spirit possession induced by drumming, dancing, incantations, music, and slow chanting intended to stimulate focus and create an absorbed states during the communal rituals of shamanistic healing that have been commonly researched in this field (Vitebsky, 2001). Interestingly, in both cultures sometimes stressful contexts are used to induce dissociation, resulting in a different state of mind and notion of self as either another being in the case of spirit possession, or perhaps part of a larger ecology in this particular “culture of meditation” of U.S. Zen monastic communities..

Christopher Lynn discusses this process in his article “Adaptive and Maladaptive Dissociation: An Epidemiological and Anthropological Comparison and Proposition for an Expanded Dissociation Model” (2005), where he suggests that dissociation is a psychological aspect of stress response and under certain conditions and applications can actually be an adaptive and part of a healing process. Lynn suggests that “dissociation is posited to be a psychological mechanism for coping with internal and external stress. It is conceptualized as a compartmentalization of consciousness that varies in strictness of compartmental isolation and interaction. Compartments serve to keep stressful internal knowledge out of one’s consciousness and prevent conscious awareness of stressful external stimuli” (2005). Under the cultural

circumstances of Zen practice, I propose that the stressful context of the monastic setting may induce a certain level of stress that results in a dissociative experience of self. I also propose, however, that this contextual stress is not maladaptive, rather, acts as an adaptive process leading to increased reports of subjective wellbeing in meditators who are able to dissociate for an attachment to personal self and body. The relationship between stressful contexts and dissociation is one possible underlying process for the data that will be discussed in this research

2.3.5- The Impact of Community, the Sangha and Biopsychosocial Healing

Of great interest to this discussion is the influence of the *sangha*, or community, on the benefits of U.S. Zen meditation practice. In a Zen monastery the way people sit, move, and eat are all dictated by rules with the intention of moving together as a community. The practice of *oriyoki*, meaning “just enough,” is a meditative form of eating that emphasizes awareness practice by eating in collective and precise movements. During *oriyoki* an elaborate ritual of placing the utensils, bowls, and napkins in certain ways and offering water, sweets and tea to the spirits are all done together as a community. No one eats until everyone else is served with the intention of moving together and “eating as one body” (Rodan, 2013). During long retreats (*sesshin*) all movements of the sangha are choreographed to be the same, walking, standing, sitting, eating and retiring to bed are done together through the use of bells, wooden blocks and drums.

The influence of community in the religious experience and healing is documented in IM Lewis’ book “Ecstatic Religions,” where he posits that there is a sociology of ecstasy and that healing is a communal, social process (2003). Since community is a central feature of U.S. Zen, I suggest that social cohesion and feeling part of a whole is central to a biopsychosocial form of

healing and a potent force in the subjective wellbeing of meditation that has been largely unexplored in current research.

2.3.6 Conclusion

In this section the relationship between context and experience was discussed, citing anthropological theories drawn from critical interpretive medical anthropology and psychological anthropology to examine some of the features of the U.S. Zen monastic experience. The idea of the body being related to not just the physical form, but also to the social, natural and political contexts is relevant to the data that will be discussed in Chapter 4 and Buddhism shares this perspective of self, body and context being intertwined. The importance of cultural frames as proposed by Kleinman and the process of biopsychosocial processes of health, such as social cohesion and adaptive situational stress, are also important theories that may aid in the description of the U.S. Zen monastic experience of body, self, and environment and how this worldview may related to changes in subjective wellbeing.

2.4- Ecological Theory

The ecological theory that is most relevant to this discussion comes from Arne Dekke Eide Næss, a Norwegian philosopher, who coined the term “Deep Ecology,” in 1973. Deep Ecology advocates for the principal of the “inherent worth of living beings regardless of their instrumental utility to human needs,” and that there needs be a change in the way humans conceive themselves in relationship to the world (Næss, 1989). Næss proposed that “rather than assuming an *anthropocentric* worldview, we should adopt an *ecocentric* worldview, where he said that the self is an ‘ecological self,’ rather than an ‘individual self’” (Næss, 1989). According to Næss this shift in worldview to an “ecological self” can occur only through the direct experience of the natural world—a remarkable overlap with Buddhist perspectives of self and

ecology. Through direct experience with the natural world a “deep ecological moment” may arise—a moment that profoundly impacts a person in a way that enables them to see themselves afresh within the ecological system—as integrated, not separate.

2.4.1- Deep Ecology

Shortly after Deep Ecology was first discussed by Næss, a movement in the West to integrate Buddhist theories with the field of ecology began, particularly with the work of Zen teachers D.T. Suzuki in California and many of the contemporaries of the Beat generation taking up formal study in Japanese Zen monasteries such as Gary Snyder and Allen Ginsberg (Cook, 1971). This interaction acted as the basis for what is known as the Buddhist Environmental Movement in the United States (Queen, 2000), which brought together the philosophical tenets of Deep Ecology and Buddhism as a reaction to environmental climate change and later began what would be called an “engaged Buddhist” movement on a global level (Queen, 2000).

2.4.2- Zen and Socio-Ecological Systems Theory

This idea of humans being interconnected to the environment was also seen in the social-ecological systems literature around the same time as the Deep Ecological movement began. Ecologist Mary Ostrom suggested that “All humanly used resources are embedded in complex, social-ecological systems (SESs). SESs are composed of multiple subsystems and internal variables within these subsystems at multiple levels analogous to organisms composed of organs, organs of tissues, tissues of cells, cells of proteins, etc.” (Ostrom, 2009). The idea that ecology, society and individuals are not discrete systems, but a single process of interaction is at the heart of SES, Deep Ecology, and a Zen Buddhist worldview. Oishi & Graham comment on interdependence of these systems as they relate to individual psychology, saying “that economic systems, political systems, religious systems, climates, and geography exert a distal yet important

influence on human mind and behavior” (2009). Examining how these other forces shape psychology, suggests that not only do these forces shape the mind of a person, but also the mind of a person shapes the external factors.—a unique vantage for ecological theory.

Rather than examining the health and wellbeing of a single person, SES suggests that health of an individual is invariably linked to the entire system—a premise that has sparked the One Health movement over the past decade.

In the Buddhist tradition this is why the idea of *karma* is so important, suggesting that what a person does, the mental distress that they carry with them from habits of desire and aversion, is not just hurting that person, but hurts all beings, thus rippling into the system and coming back to hurt the person who created the ill thought forms to begin with—forming the wheel of suffering, also known as *samsara*. This idea is beautifully portrayed in Francis Harold Cook’s translation of the Avatamsaka Sutra:

There is a wonderful net which has been hung by some cunning artificer in such a manner that it stretches out infinitely in all directions. In accordance with the extravagant tastes of deities, the artificer has hung a single glittering jewel in each "eye" of the net, and since the net itself is infinite in dimension, the jewels are infinite in number. There hang the jewels, glittering like stars in the first magnitude, a wonderful sight to behold. If we now arbitrarily select one of these jewels for inspection and look closely at it, we will discover that in its polished surface there are reflected all the other jewels in the net, infinite in number. Not only that, but each of the jewels reflected in this one jewel is also reflecting all the other jewels, so that there is an infinite reflecting process occurring. (Kosho, 1993)

This description is known as “Indras Net” and suggests the interdependence of all beings not only in their sharing of the same context (the net) but also their individual reflection of the whole. The premise promoted by SES shares a similarity with Buddhist worldview, suggesting that everything is linked through a complex network, with the health of an individual and health of the ecology being inseparable.

2.5- A Call for Culturally-Situated Research

Many theories—Buddhist, psychological, anthropological and ecological— have been addressed as a way of understanding the relationship between a culture of meditation and how a transformation of self is integrally tied to perspectives on the environment and subjective wellbeing. It is important to note that these different explanations are not essential truths with one clear theory acting as the dominant way to frame the experience of an ecological self that will be discussed in the following data, but as various explanatory models in which to interpret the unique worldview of self seen in Zen monastic practice.

It is this interest—looking at how these theories actually map on to lived experience—that will drive the following section and empirical aims for this research. It is my hope that through giving voice to actual experiences with Zen and individuals embodying this culture, a deeper appreciation for the transformation from an ego-centric ways of being in the world to a more eco-centric identity can aid in providing nuance within the emerging field of contemplative science. Considering the scope and complexity of this research objective it is of primary concern that this topic be approached as skillfully and accurately as possible, which was the rationale for assuming a mixed-methods approach. The following section will provide an overview of this process.

CHAPTER 3- METHODS

3.1- Introduction

This research used a mixed methods approach, grounding the data in the richness of qualitative, ethnographic narratives while also exploring creative ways to rigorously examine the themes that emerged from these narratives through quantitative data. In order to accomplish this objective, and unlike most research currently conducted on meditation that relies on 3rd person analysis, this research project deliberately used an approach that gathered data from 1st and 2nd perspectives to examine the themes found using grounded theory.

It should be noted that any form of analysis regarding someone's worldview and subjective experience—1st, 2nd or 3rd person, qualitative or quantitative data— may fall short of accomplishing the goal of accurately capturing lived experience. The intent of the three tiered research design, however, was to provide various avenues of understanding, recognizing that a full expression of experience may not be possible through a verbal or scientific account. It is not my intent to assume that this mixed method approach or the three tiered data collection sums up a particular worldview or lived experience of Zen practice. Alternatively, the goal of this research was to approximate as accurately as possible the impact meditation has had on their lives and identify commonalities across the data and participants to provide fruitful discussion about the Zen monastic experience.

Therefore, it is important to preface the discussion of methodology that the findings of this research project are not geared towards making statements about the nuances of experience of any particular participant, rather, the data that will be discussed should be indicative of central

themes that can be used to better understand how meditation practice may shift worldview and the practical relevance to a discourse of environmental ideology within Zen monastic culture.

3.2- Overview of Methodological Process

One year of participant observation as a residential student at Great Vow Zen Monastery was completed prior to this research project. This experience helped to inform research design, as well as provide a better understanding of U.S. Zen monastic culture. I then returned to the monastery in the summer of 2014 for three months to conduct the formal research for this project.

During these three months a series of semi-structured interviews were conducted (p=14), followed by the construction of two surveys based on the data from the semi-structured interviews and participant observation. The first survey (Survey 1) was given to the most “advanced” students living at the monastery. This classification was based on members of the monastery who had lived there the longest and had been recommended by the teachers. Survey 1 consisted of a series of statements about body, self and environment and participants were asked to answer using a 5-point Likert-scale.

The second survey (Survey 2) was similar to Survey 1, but was adapted to be more specific, as well as provided room following each Likert-scale statement for a written description to clarify their response. It also included a non-verbal response where participants were asked to “draw your self.” The data from these measures were coded and analyzed and will be discussed in more detail in the following section.

A task was then administered as a pre/post assessment of a weeklong meditation retreat that measured visual perception. There were 13 participants (7 beginners—defined as having less than one year experience--and 6 advanced meditators—defined as having more than 5 years

experience) who participated in this section of the study. Each participant took the computer generated Local/Global test (Chan et al.) before and after the weeklong retreat.

The intent of administering this cognitive test was to examine if there is a difference pre/post retreat and between novice and advanced meditators in perceptual cognition. The Local/Global test has been used to assess the extent to which a person perceives a scene as global or local (Navon, D. 1977), has been correlated with attentional acuity (Shulman, 1986) and is indicative of a tendency to view a visual field more holistically or detail oriented (Pomerantz, 1983).

I predicted that advanced students would show a trend towards a more "holistic and global" visual processing, whereas a novice will show less of this trend, with both groups hopefully showing a trend towards a more global perspective post-retreat. The tendency to see the global perspective may account for how a person visually responds to their proximate environment, thus changing their cognitive awareness of how they themselves are situated within their proximate environment.

Chapter 4 will examine the data from these assessments, identifying thematic content that emerged across the various levels of data collection. Each major theme will be divided into two sections: quantitative data analysis and qualitative data analysis. The hypothesis that Zen meditation significantly impacts personal beliefs regarding self and the body--resulting in a shift towards a perspective that includes a more "ecological" notion of self will be examined in Chapter 5. In addition, I predicted that the more an individual expresses this belief of the "ecological self" the more likely they are to experience an increased sense of wellbeing.

3.3-Participants

There were a total of 54 participants involved in this study. All participants were residents at Great Vow Zen Monastery located in northwest Oregon. A “long-term resident” was defined as committing to stay and train at the monastery for at least three months. There were participants who had only completed one month of study and participants who had completed more than 31 years of study at the monastery.

The average age was 35 years old, with a range of 19-86 years old. There were a total of 22 females and 33 males. All participants were classified based on their experience level with Zen monastic training as being a “beginner” (1 month-12 months), “intermediate” (1 year-4 years) and “advanced (more than 5 years).

3.4-Setting

Great Vow Zen Monastery is a residential Zen Buddhist monastery and is part of Zen Community of Oregon. Practice here is a synthesis of Soto, Rinzai, and other Buddhist traditions informed by the ongoing study of co-abbots and teachers, Jan Chozen Bays, Roshi and Hogen Bays, Roshi.

The monastery is located 80 miles northwest of Portland, Oregon on twenty acres overlooking the Columbia River flood plain. The building is a renovated elementary school with dormitories, meditation hall, and dining hall, with open garden courtyards within the building. The property has an organic vegetable garden, greenhouses, and an orchard of fruit trees.

Behind the monastery is a large meadow and forested hiking trails. Within the forest is Great Vow's famous Jizo Garden, a memorial garden for people who have died. Some of the statues of Jizo Bodhisattva are made at the monastery and some from as far away as Japan. Across the meadow is the newly dedicated Shrine of Vows, a place where people leave tokens of

their deep aspirations to practice. The grounds are based on traditional Japanese Zen architecture and an aesthetic of simplicity, proximity to nature and non-verbal communication through the use of bells, drums and wooden clapping blocks.

3.5-Previous Participant Observation

My work began at Great Vow Zen Monastery in Oregon, where I spent 1 year in preparation for this research conducting immersive participant-observation as a residential student during spring 2013. Prior to this study I was a student of Zen for 11 years, having first encountered a 10 day meditation retreat when I was attending high school in South India. I had decided to join the monastery after spending the previous year in Sri Lanka on a Fulbright scholarship, which brought me to many Theravada monastic settings. Inspired by the Buddhist monastic tradition, I decided to take a year off to learn more about Buddhism first hand.

The experience of living within a monastic culture provided a rare opportunity to see how this ancient tradition is embodied and adapted within a modern U.S. setting. Participant observation is vital to this research project since an understanding of Zen practice comes from direct experience of the teachings, rather than an intellectual discourse about them.

The daily schedule at a monastery is one of the most notable features of the community, focusing on meditation practice and work.

3:50 a.m. Wake up bell
4:30 a.m. Zazen
6:50 a.m. Service
7:00 a.m. Temple Cleaning
7:20 a.m. Breakfast (oriyoki) in dining hall
8:30 a.m. Work period begins
10:00 a.m. End of work period
10:30 a.m. Zazen
12:20 p.m. Service
12:30 p.m. Lunch (oriyoki) in dining hall
2:30 p.m. Zazen

5:20 p.m. Service
5:30 p.m. Dinner (*oriyoki*) in dining hall
7:00 p.m. Zazen/Interviews with Teachers
9:20 p.m. Formal Tea/Zazen
10:00 p.m. Monastery doors locked

When entering the monastery for the first time you are asked participate in a more intensive schedule known as *tongaryo*, a tradition of initiation from Japanese monasteries, where the student is asked to sit from sunrise to sundown in zazen with only breaks for meals and using the bathroom. Historically *tongaryo* is a way for a student to demonstrate their sincerity in joining in the monastery and ensuring they are physically and emotionally capable of the rigor required for living in the monastery.

When I entered Great Vow Zen Monastery this I entered *tongaryo*. It was an intense period over three days. I did not speak with anyone and only had reprieve from sitting meditation to sleep and eat. After I completed *tangaryo* I was invited into the community. The initiation process continues informally after completing *tangaryo* through the assignment of work practice (*samu*), with the hardest work often given to the newest student. Traditionally in Japan a student was not allowed to begin formal study until 2 years into their time at the monastery, with cooking, cleaning and manual labor being their primary function until that point. At Great Vow Zen Monastery during my first several months I was asked to haul large fallen logs from the riparian forest behind the monastery. It was also winter with the majority of the days accompanied by cold Pacific Northwest rain. Not surprisingly, this process proved to be quite difficult and definitely tested my determination to study formal Zen. Perhaps more surprisingly, however, was the benefits of this form of initiation were also clear: despite the discomfort of the work, I began to see how the way I framed the situation had a direct impact on how I experienced it. Rather than viewing it as hard, cold and terrible, I was able to see it as interesting,

challenging and provocative—showing me how much the way you frame something can impact your experience of it.

As a resident at the monastery you also establish a personal relationship with the two primary teachers through a bi-weekly interview process called “sanzen.” is a one on one interview with the abbots that follows a traditional Japanese form of bows, chanting and incense offering. During this time a student receives personal teachings and support. Often beginning with introductory practices of posture, breathing, and concentration followed by more formal koan study.

This experience was invaluable in shaping my interest in this research project and motivated me to return to the monastery the next year for my thesis research project. I spent 3 months at Great Vow Zen Monastery during the summer of 2014 where I continued participant observation, formal study with the teachers and began to develop a theoretical approach to studying the Zen perspective and experience of an ecological self.

CHAPTER 4: DATA ANALYSIS

4.1-Semi-Structured Interview: Construction and Data Collection

The process of conducting interviews began with an informal assessment of students studying at the monastery. I wanted to ensure that there were equal numbers of beginners, intermediate and advanced students represented in the data pool. As a result, sampling was based on several considerations: recommendations from the abbots, willingness to be interviewed and with an intent to have a balanced gender distribution in all groups.

Each interview took on average one hour to conduct and followed a semi-structured protocol. Since these interviews were conducted to explore the observed themes through participant observation over the prior year, they targeted themes relating to body, self, environment and wellbeing that had been identified as important aspects of an ecological worldview unique to Zen monastic culture. Sections of these interviews were transcribed while in the field in order to help with the process of survey formation.

4.1.1- Qualitative Data Analysis

There were three notable themes that emerged from these interviews: 1. Viewing the body as a process rather than an entity, 2. Viewing self as larger than the body and not separate from the environment, and 3. Describing a change in both their conduct and wellbeing due to this alternate understanding of body and self. I also found that the clarity and conviction that these views were expressed were associated with the level of experience of the informant. The more experienced the informant, and presumably acculturated by the Zen monastic ideology, the more likely they were to express these three themes as their own.

An interesting aspect of the interviews was the brevity or length of their verbal response based on experience level. The average word count for the beginners group was 107 words per question, whereas the average word count for the intermediate group was 97 and the average word count for the advanced group was 18. Although the sample size is too small to make claims regarding these averages, it was a trend that I found particularly interesting.

The first theme— viewing the body as a process rather than an entity—was consistent with my hypothesis regarding the way the body is viewed in Zen monastic culture. Common responses regarding “how do you view your body?” where: “The body is not a fixed thing also changing. Degrading (P4)” and “My body is also part of the undivided whole” (P20). One informant expressed this view, when they described the moment that practice yielded a new way of seeing their body:

I recall a moment in meditation, a few years after I began practicing, when I noticed that I am my shoulder. Or to try to capture it a little more as it felt: SHOULDER! Sensing-sensed-shoulder-space. That moment felt like a breakthrough, but in another way it was just a punctuation in the steady flow of deepening embodiment that meditation makes possible. Coming to feel that I am the non-verbal, pre-conceptual, pre-logical, interdependent experience of the body, in addition to the personal, familial, and anatomical body with which I had learned to identify as I grew up. There where two bodies: the process of having a body in the now and the experience of who I am in time. (P3)

This view, that the body is a process was similarly found in responses to the question “What is the self?” Common responses where based on viewing the self as not separate from the whole: “I see myself as a part of the undivided whole of existence, not separate from anything else” (P18), and “What self? The self is a mental construct. What I call the self is always changing, never permanent” (P3). Rather than viewing the self as a discrete entity many informants expressed the view that both the body and self are changing and dependent on the present moment and environment. This is exemplified when one informant expressed that “the

self is not a fixed thing. It arises with respect to and in response to the world at each moment: that is who I am” (P14).

Two of the most commonly used words in the interviews were “awareness” (18 times) and “space” (13 times). The description of an impermanent self was coupled with the self actually being and combination of awareness and space. One informant said “[I]...have a tiny sense of ‘self’ being contained in awareness, rather than awareness being contained in self. I am much bigger than a tiny self, I have a strange hunch that I am actually the awareness that contains everything. I think that is what they mean when they say ‘what was your face before your mother was born?’ in Zen....I view the self as impermanent, changing always in flux. But it is also large, incredibly spacious!” (P13). This sentiment, although expressed by all experience levels, was more commonly used by those who had lived at the monastery longer than one month, whereas those who had lived at the monastery for only one month tended to focus more on the psychological aspects of self: “I am a being with a psychological narrative. Sometimes during meditation I can see that my story is just a story, but usually there are habits of mind that are so strong that is who I become” (P4).

When prompted to make a statement on “is there an external world separate from your self?” (P15). Many informants discussed that the mind and environment are interrelated, often times describing them as indivisible: “I see the existence of self and other as a creation of the mind. I see all things at the absolute level as being interconnected. Duality is just the way the mind organizes things” (P11). Another informant discussed that “I’m continually seeing the world as me. I don’t remember how I used to see it...” (P23). This discussion brought up beliefs regarding the boundaries, or lack thereof, between self and other. One informant particularly captured this view in their response to this question:

Where before meditation the world seemed to me to have hard edges - clear and objective boundaries separating things, including self and other - I now feel myself to be part of and participant in something processual, malleable, surprising, ungraspable. To the extent that I have, largely through meditation, come to experience the teachings of Buddhism, I feel change and interdependence to be constituent qualities of my life. I do not think I have 'leapt clear of the one and the many,' as the saying goes, but I suppose I have learned to look at concepts like 'one' and 'many' from a very different point of view than I did before (P3).

The influence of this realization that the body and self are fluid processes that are not necessarily separate from the environment on wellbeing and conduct was also a major theme throughout the interviews. A word used in 13 of the 14 interviews was "compassion," to describe how these perspectives have impacted the way they relate to the world around them. During this discussion many people described psychological changes towards the people in their lives," [I am]...more patient and non-reactive. I believe I cause less suffering for myself, my family and the world at large," (P6) as well as a discussion of how meditation experience has altered their conduct to be more compassionate: "Through meditation practice I definitely engage more with the world around me rather than with my 'self.' As I heal myself, I heal the whole. As I express compassion, that influences the whole" (P3). A relationship between the view that the body and self include "the whole" seemed to be a motivating factor for a change in conduct towards others and the environment. All informants identified that meditation experience has changed their sense of wellbeing, suggesting that it has enabled them to be more compassionate to themselves and see the world in a new way.

These themes, 1. Viewing the body as a process rather than an entity, 2. Viewing self as expanded and not separate from the environment, and 3. A change in both conduct and wellbeing as a result of meditation experience, closely support my thesis of the ecological self promoted by Zen monastic culture and provided a clear framework for the points that I wanted the survey to

examine. The foci of body, self, environment and wellbeing were used based on these emergent trends of the interview process and were further explored through the surveys.

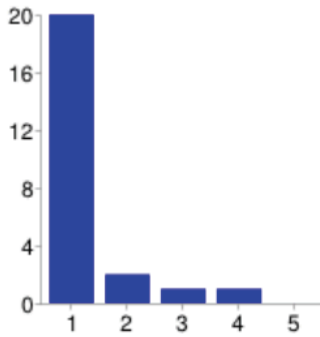
4.2-Survey 1: Construction and Data Collection

The first survey was geared towards examining the extent to which there was sharing between members of the monastic community regarding the themes based on grounded theory. In order to explore this I identified the 24 most experienced members of the community based on length of stay at the monastery and recommendation from the abbots. Once these students were identified they were asked to take an online survey using GoogleForm that would rate the degree to which they agreed with each statement using a 5-point Likert scale. There were 8 items on the survey. Each participant was asked to complete the survey in one sitting and submit their answers online. The responses based on this survey were used to identify if there was an agreed upon set of views between experienced members of the community.

4.2.1- Quantitative Data Analysis

The data from Survey 1 revealed clear themes between the 24 experienced members of the community, suggesting that there was a significant degree of knowledge shared between the most advanced students of the monastery with support that there may be a “normative view” between Zen students living within this particular monastic culture. The following graph shows the distribution of responses regarding the statement “I have a body,” with 1 being “strongly disagree” and 5 being “strongly agree.”

I have a body



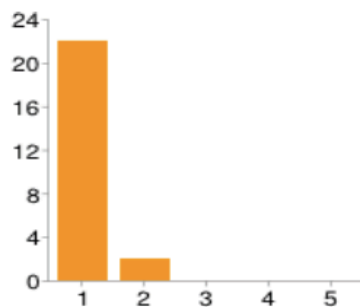
1	20	83%
2	2	8%
3	1	4%
4	1	4%
5	0	0%

Figure 1:Ownership of a body

A total of 83% of participants identified that they “strongly disagreed” with the statement, 8% felt “neutral” and only 4% “agreed” with the statement. These results reflected the overall themes from the interviews, suggesting that there is an alternative perspective of the body within this monastic culture.

Similarly, 92% of participants responded that they “strongly disagreed” with the statement “I am limited to a body.” Only 2% of the participants said they “disagreed,” and 0% of participants said they felt “neutral” or “agreed” with the statement. This response robustly supported the theme found in the interviews that there is a view that the experience of having body is much larger than a physical form, provided fruitful grounds for the perspective that the body includes a larger ecology.

I am limited to a body



1	22	92%
2	2	8%
3	0	0%
4	0	0%
5	0	0%

Figure 2: Limits to a body

An interesting result from the survey was the response to the claim that “There is an external world.” A total of 58% of participants “strongly disagreed” with this statement with 21% feeling “neutral” and 4% “strongly agreed” with this statement. The consensus was not as robust as other items on the survey, but with the majority of participants strongly disagreeing with the idea there is an external world, this item provides an interesting insight into the extent to which this worldview is based on interconnectivity with the world, going as far as denying any form of duality between the internal experience and the external environment.

The second half of the survey was geared towards examining the impact of meditation on conduct and wellbeing.

Meditation impacts wellbeing

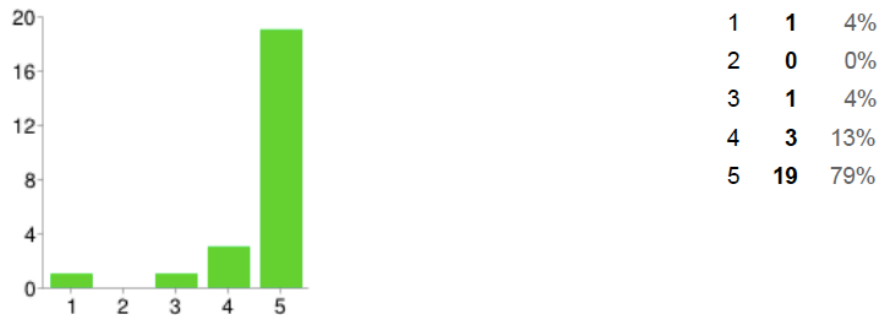


Figure 3: Impact on Wellbeing

A total of 79% of participants “strongly agreed” that meditation impacts wellbeing. And only 4% “strongly disagreed” with this claim. This item examined the positive affects of meditation practice, suggesting that there is a majority experience of a relationship between meditation and a sense of subjective wellbeing.

The following item “meditation impacts the way a person relates to their environment,” was intended to elicit responses concerning environmental conduct.

Meditation impacts the way a person relates to the environment

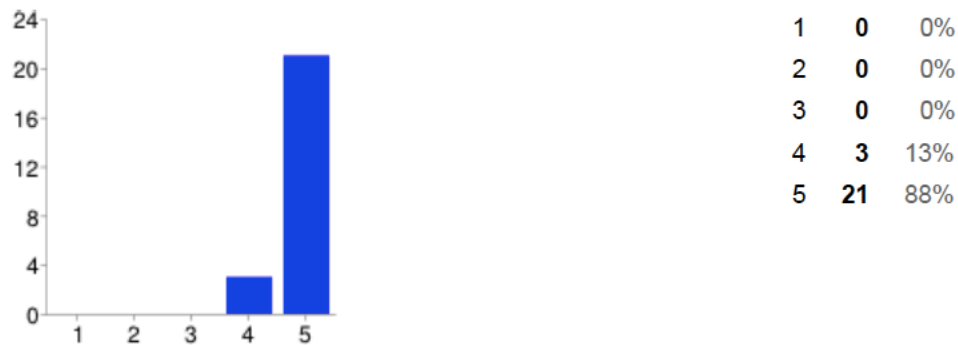


Figure 4: Relationship to the Environment

A total of 88% of participants “strongly agreed” with this statement, with 0% feeling “neutral” and 0% disagreeing with this view. This item provided support for the impact of a different sense of body and self on the way a person conducts themselves in the world around them. Further support for this was seen in 79% of participants strongly agreeing with the statement “Meditation impacts the way a person sees their place in the world,” suggesting that there is a majority agreement that meditation experience impacts worldview regarding self and other.

Meditation impacts the way a person sees their place in the world

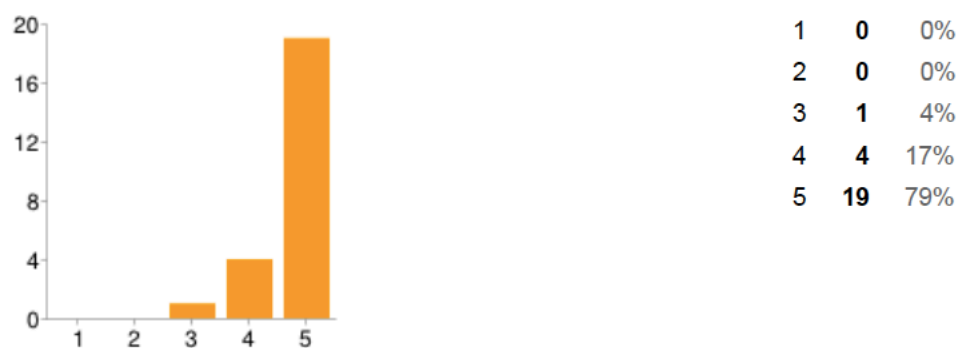


Figure 5: Meditation impacts the way a person sees their place

The consistency of this survey between the 24 participants is notable and suggests that there is a common perspective shared by the most experienced and long-term members of this monastic community.

4.3- Survey 2: Construction and Data Collection

In order to examine the themes identified in Survey 1, an adapted version of this survey was then administered to the entire community (p=54).

The second version of this survey included an opened ended question following each item encouraging a qualitative description of their Likert scale response in order to provide more information about why they chose the answer they did.

The adapted version of the survey also included a third section that was comprised of an optional space to “draw your self,” out of interest in collecting a non-verbal perspective on the experience of “self” within this Zen monastic community. The following section will present and analyze the results of this survey using the average Likert scale response for the three groups: beginners, intermediate and advanced for Part 1 and Part 2 of the survey, followed by an analysis of Part 3 and the drawings coded based on theme.

The distribution of participants in each experience level group was 18 classified as advanced (5+ years of experience living at the monastery), 11 classified as intermediate (1 year-4 years of experience living at the monastery), and 17 classified as beginners (1 month- 12 months experience living at the monastery).

4.3.1- Part 1: Body, Self, and Identity

The first part of Survey 2 was geared at eliciting response data regarding views on the body, self and identity of the participant. These questions were grouped together by this overarching theme of “self” identification. It was predicted that there would be a large difference between participants base don experience level for this section of the survey.

4.3.1.1- Quantitative Data

The first part of the survey elicited responses that supported the data seen in Survey 1, also demonstrating several interesting trends regarding level of experience.

The first four items of the survey explored themes of body and duality. The average Likert scale responses between advanced and beginners were consistent with the predicated outcome, with the advanced participants more commonly disagreeing with the statements, which was also consistent with Survey 1.

A clear trend between the three experience levels is seen in their Likert scale responses for this part of the survey. The advanced group expressed a strong disagreement of the fact they have a body, are limited to a body, are separate from their environment and the existence of an external world. The average Likert scale response between the three groups suggests that there is a change in perspective over time based on experience regarding these particular aspects of their worldview. The average score for the advanced group for these four items was 3.4, whereas the average score for the intermediate group was 2.2 and the beginners 1.4. This progression from the average Likert score of the beginners supporting the statement, to a neutral sentiment regarding the statement, to disagreeing with the statement suggests that there may be a development of the way the body, self and environment are conceived based on how long a person has trained within the monastic community.

4.3.1.2- Qualitative Data Analysis

When asked to respond to the statement “I have a body,” participants classified as beginners tended to express a perspective that the body has a real form and does in fact exist. One beginner wrote “5'3", 140 pounds, male. When I move this hand this hand moves” (P9), demonstrating a direct ideological association between the experience of having a body and physical form. Another beginner wrote “I am average height, muscle tones, skin elasticity. I can

jump, crouch, swim. The regular assortment of muscles and organs all in relatively working order. Eyes that see this page, fingers grasp a pen. I choose to stand or move or in other ways change my physical experience” (P33), showing an understanding of the body as both being physical and something that the mind, or self, is in control of: This idea of being in control of the body was a common perspective in this group: “My experience is that I have a body. It is what supports my life and gives me the power to move through the world” (P42).

Intermediate meditators tended to express an understanding of the body being an entity, with a qualification that through deeper examination in meditation that the body can be viewed as a process, rather than just a solid, physical form: “In a relative sense, yes, I have a body--but in truth I am phenomena, pulsating at very fast rates in and out of space” (P3). The intermediate group also tended to point out a flaw in the statement, suggesting that the word “have” is not the correct word: “Having is the problem, there is a body but it contains the process of having. It is much larger than ‘I’ too” (P23) and “There is a body—‘mine’ is questionable” (P20). These statements indicate a difference between the beginner’s worldview and the intermediate experience of the body, with the body being perceived more as a process of phenomena, opposed to a physical form, as well as a varying perspective regarding the ownership and control of the body. This shows a difference in autonomy.

The advanced group, expressed a view that was predictable based off of the previous Survey 1, with a common response of viewing the body as not only a process, but also something that includes the environs: “I have nothing, there is a body here, but it includes everything in view! The whole world!” (P5). The advanced group also expressed a concern for the word “have,” suggesting that “My experience is that I have nothing, it is moving too fast” (P6), echoing the perspective expressed in the intermediate group of not owning a body, but being a

body. When asked to respond to the statement “I am limited to my body,” a similar trajectory of responses was seen, with the beginner group relating this statement to the physical form—“There are things I cannot do because I am tied to this physical body. I cannot fly, I cannot do things outside of my 30 something year old frame” (P16)—the intermediate group questioning the limits of having a physical body—“Again, I am starting to think that I am much bigger than just physical stuff” (P7) —and the advanced group expressing a perspective of being boundless without a limit— “I is not here. In direct experience things are boundless energy“ (P30).

When asked to respond to the statement “I am separate from my surroundings,” there was more similarity between the groups, largely citing the fact that things are interconnected across all three groups. The beginners, however, tended to perceive interconnectedness as a theoretical truth, describing this experience as “I really feel that sights, smells, sounds etc flow through me” (P15), and “I can philosophically discuss the interconnectedness of all things but my experience has not been similar: I am me” (P1). In this group, the interconnected reality of things is still based on flowing in and out of a physical, independent self. Interestingly, this view is similar to the predominant ecological notions in the West of things being bound by a flow of energy, yet channeled through autonomous forms of life.

The intermediate group shared this view, writing “I am not separate from the world, I am interconnected” (P24), but also introduced new concepts of interdependence: “Everything is always interpenetrating” (P22) and “we inter-are” (P3) These phrases suggest that there is a need to express the difference between interdependence and a quality of being more deeply associated than connected through a flow of energy. Taking the notion of interdependence, which is commonly conceived of as connected, yet also separate, and adapting it to include a shared “being,” is a unique feature between these two groups. The advanced group expressed a similar

perspective to the intermediate group, making direct claims that “I am my surroundings” (P19) and “There is no separation (P45).”

4.3.2- Part 2: Wellbeing, Environment, and Conduct

The second part of the survey had questions that involved the positive dimensions of meditation experience, examining how meditation practice has impacted wellbeing, a person’s relationship to the environment and conduct. Unlike the first series of questions this section revealed that there was very similar perspectives regarding the positive effects of meditation between all three experience level groups.

The overwhelming trend across these items was that meditation practice has positively impacted wellbeing and how they viewed themselves in the world. This data suggests that the positive experiences of meditation are observed by participants directly after beginning meditation practice and are sustained throughout time. Unlike the prior items on the survey that suggested there was a perspective that was related to experience level, the positive domains of meditation practice are observed regardless of experience level. The lack of difference in this question is important to note.

Drawing from the qualitative responses that accompanied these items, one of the most interesting themes was the impact of meditation practice on wellbeing. The way the item is phrased did not clarify if their wellbeing improved or did not improve as a product of meditation experience—simply that it had an impact. Exploring the open-ended responses, however, provided by each participant it is clear that meditation experience has powerfully impacted the participants in a positive way. One informant commented “It has been the most important and potent force in my life--literally changed everything” (P17) and another informant said “No words can describe the difference here” (P51).

A trend for the beginners group was how meditation practice had influenced their psychological states, particularly anxiety and depression: “Meditation has helped me to cope with and manage an anxiety disorder. I experience less frequent and more quickly passing episodes of anxiety” (P25). Another informant mentioned that “Anxiety and depression do not have such a hold on my life anymore, I credit meditation to this” (P34). The impermanence of these negative states was also commented on, saying “anxiety and depression, they are impermanent. I can be free of them!” (P7). The metaphor of anxiety and depression being like clouds was a common image, with informants expressing views that they can let go of these negative states because they are passing experiences: “I feel much less like I have the stories that caused me so much sadness, anger suffering. I am much more able to see them, name them and sometimes let them float away like clouds. I am much more agreeable and nice to be around, I see this in the way I act and the way people have told me I have changed” (P44).

A response that was common in the intermediate and advanced groups was how their definition of wellbeing has changed through meditation experience “Practice has changed both my degree of wellbeing and the underlying definition of wellbeing. Improved functioning of body and mind has been a continued benefit of meditation, as well as how I related in interpersonal settings” (P18). Many informants commented on how this new sense of wellbeing has impacted them socially, saying “I feel happier, much more graceful in social relationships and my anxiety has been reduced” (P12). Another informant said, “Oh yes, I cannot express how much meditation has impacted my sense of wellbeing. They are showing it now with all of the neuroscience research, but more directly, I've seen the way I react and relate to others, people like my mom who used to trigger a lot of aversion can be now taken in with love” (P36). The impact of meditation on social relationships was also a common response: “...I feel like I am

living a lifestyle of merit, ” and that “I am such a different person, I am much better mentally, physically and socially” (P41). The relationship between improved wellbeing and others was also related to from a non-dual perspective by one advanced informant who said “ [meditation experience has impacted] not just my wellbeing, but that of all beings' wellbeing too” (P3), extending the social benefits described by beginner and intermediate students to include a commentary on how personal wellbeing is integrally linked to the world.

Improved subjective wellbeing was a theme that was reported across all 54 participants despite experience level. This result was compelling and suggests that the particular culture, worldview and psychology promoted by Zen monastic experience may increase positive experiences of wellbeing—both short term and long term. The link between the progression of an ego-centric perspective of self compared to an eco-centric perspective of self, however, does not appear to be related to this result considering all experience level groups reported similar experiences, whereas with the prior set of items that assessed this progression of worldview was related to time and experience.

The item regarding how meditation has impacted the way they view their “self,” was also equally supported by all three experience level groups. When examining the open-ended responses to this item, however, a significant difference between their description of this process was seen. Similar to other response data, the beginners group tended to focus on psychological states, often using the phrase “narrative” and ”story” to express that their self-image had been positively impacted by meditation experience. One beginner informant said “I no longer feel tied to the stories of who I am and what I've done” (P14) and another informant expressed this idea, saying “My sense of self is a little bit more free from the stories and worries I have cast on it, I can just see that this moment is me now and that I am not the child, teenager, the person of a past

that no longer is here. If I let go of concepts and stories I am just who I am in the present” (P29). Many of the responses regarding how their sense of self had changed in the beginners group targeted points on thoughts and emotions, having a better sense of control and realizing that they are not the same person from their past, but a new person every moment.

The intermediate group tended to also share some of this language, using phrases like “practice has helped me to see that the self is as ephemeral as everything else” (P17), and the view that the self is “...deeper and more complex and centered around a more mysterious center than just a physical body and a story” (P33). The intermediate group, however, also tended to use more simple language to describe this process, reflecting less on the experience of having a personal narrative, but tended to reflect the ideology of non-duality: “My ‘self’ is not real,” and “my self is the whole self. It includes everything” (P3).

Interestingly, this experience was further developed in many of the advanced students group, with responses like “No longer view myself as an object bound by space and time. You could say I know I am infinitely more than my thoughts about me,” and “Self has expanded endlessly to include all in compassionate care.” A similar discussion of “awareness” and “space” seen in both the interviews and the initial survey with advanced students was seen: “Self is expanded to include all sensations and space at the timeless moment” (P3).

Another interesting feature of the advanced group’s responses to this item was that 15 out of the 18 participants did not use the identifier “my” or “I” to describe their selves, rather they simply used the word “self,” without the possessive pronoun. This trend indicates a conceptual shift in the way they view selves, as not limited to an individual, but potentially connected to a larger perspective of what constitutes “having a self.”

The next two items on the survey, “Meditation practice has changed the way I understand the environment,” and “Meditation practice has changed the way I see my place in the world,” were both geared towards examining how participants viewed an external world and their view on how they see their relationship to it. Similar to the other items in this section, all three experience level groups reported that meditation has impacted both of these domains. The qualitative data supported this trend across all groups, suggesting that the concept of environment, as well as being separate from the world around them had been influenced. A common point of interest for participants was a discussion regarding their relationship to the natural world. One informant said “I grew up in nature so I have always felt close and connected to the environment but now I don’t see a separation between the environment and myself” (P35). This view was reflected in the statement from an advanced informant, who said “There is no inside or outside, there is breath and breeze simultaneously” (P14). Identifying as the environment, rather than as an aspect of the environment, as a common experience, with one informant saying “I understand myself has part of my environment now, whatever is here and now is me” (P1).

A discussion of the environment being “intimate,” with the participants was seen in many responses: “I feel a deeper and more intimate connection to the environment“ (P10) and “the environment is intimate to me, it is held in awareness” (P3). This phrasing is often used in Zen culture to talk about the world, after a famous Soto Zen teacher, Dogen Zenji, said “to be enlightened is to be intimate with all beings” (Shobogenzo). The use of this word, however, is very revealing—suggesting that the environment is not only connected, but is also intimately felt and encountered by the participant. The use of this phrasing suggests that what is usually considered impersonal (an external world) is viewed as deeply personal. This may be one of the

reasons that more “compassionate” conduct to those around them and the world appears to be linked to this change in wellbeing and worldview.

Related to the discussion of intimacy was a common topic of feeling responsible for caring for the world and others. The word “responsibility” was used 19 times in this survey across all experience level groups. One informant highlighted this view, saying “The earth is my being, the birds, animals, plants, clouds live as me, how can there be anything but compassion, care and responsibility to them all” (P52). When asked how meditation experience had changed their relationship to the environment, one informant said, “I am much kinder to it, I cannot say there have been huge changes here, but I love the sparrows in front of the monastery. I think before I would never have noticed them at all” (P19). Another informant commented on this idea of compassion and responsibility: “I am much more gentle to the natural world, especially having worked in the gardens here at the monastery. It has opened up my respect for the natural world” (P43). The relationship between meditation experience, views on the environment and conduct towards the environment is an important feature of this study, suggesting that through experience within the monastic culture and meditation experience people found that they viewed the world more compassionately, with a higher degree of responsibility and with an experience of a change in behavior.

Another important theme that emerged in response to these two items was the change of perspective. The word “view” was commonly used to respond to how meditation practice has impacted the way they see their relationship to the world around them: “My view is much wider and can hold the forest and clouds” (P19). Another informant commented on this widening perspective saying “It has opened my eyes to what is around me more” (P45) and “The environment is tied to me and I cannot live without it, therefore, when I am outside my small

view, I can be in contact with it much more and appreciate what it does to feed and nourish this body” (P7).

View can be used both to describe ideological perspective (such as a worldview), but it can also be used to describe a literal view (a change in the visual field). One informant captures both of these perspectives in their response:” Yes, I see how the environment with more careful observation gives way to a sense of connection to the surrounding environment. I see it entirely different and it changes how I perceive the world, both in this moment and as an idea” (P50).

This discussion proved to be an important precursor to the cognitive test using a Local/Global visual field assessment. It provided preliminary evidence that Zen meditation within this particular monastic culture may impact visual processing of the proximate environment, as well as suggests that this change is related to ideological perspectives regarding relationship to the environment.

4.3.3- Part 3: Drawing the “Self”

Some of the most compelling data from the survey came from the final item—an optional space to “draw your self.” There was no further prompting or parameters. Out of the total participants, four beginners, six intermediate, and six advanced students completed this task. The remaining surveys were left blank. Each picture was coded based on what was depicted. There were four thematic categories of drawings that emerged: drawings of the physical body, drawings of an abstracted body, drawings of nature, and drawings of circles. Zen has a strong emphasis on non-conceptuality and expressing oneself without the use of words. The intention of the survey item was to enable participants to share their perspective on the self a non-verbally through a pictorial responses. The following chart depicts the drawings divided into categories based on coding.

Of the 16 participants who responded to this optional item, 4 participants drew pictures of the physical body (varying from life-like figures to stick figures, but clearly adhering to a lifelike version of the human body) 4 participants drew physical bodies yet included a clear abstraction of the physical form (e.g. a massive heart or a swirl for the head with lines coming off) 2 participants drew scenes of nature and 6 participants drew circles. More interestingly, when divided into experience levels, a clear trend in drawing type can be seen in the following graph.

Of the 4 beginners who participated, all of them drew physical bodies in response to this question. No participants drew physical bodies in the intermediate or advanced groups. Of the intermediate group 4 participants drew “abstracted bodies,” 1 participant drew a scene of nature and another participant drew a circle. In the advanced group one person drew a scene of nature and the remaining 5 participants drew circles. The difference between the beginners group and the advanced groups, with no overlap between drawing type, suggests that there is a difference in the way the body is perceived based on experience level. As would be predicted, the intermediate group bridged the gap between these two groups, with drawing type primarily being abstracted versions of the body, but also including nature scenes and a circle.

This trend is noteworthy, since it compliments the interview and survey data that suggests over time a shift occurs regarding the way the body and self are conceptualized, moving from an ego-centric perspective to an eco-centric perspective. The depiction of the physical body in the beginner group to a more abstracted version of the physical form seen primarily in the intermediate group, is an interesting progression from viewing the body as merely physical to seeing it as having less tangible qualities. The circle is an interesting response, considering in Zen a circle (Japanese: *enso*) represents the “whole.” The *enso*, unlike a classic circle, typically does not connect entirely, leaving a small space between the beginning and end of the

brushstroke to signify that both the inside and outside are the same and that there are actually no boundaries between inside and outside (Seo, 2007). From this perspective it is not surprising that the majority of the advanced group drew a circle to symbolize the self, supporting prior qualitative claims that through meditation experience at the monastery their view on the body has taken a new form: non-duality of the internal experience of self and the external world. The scenes of nature as a theme is also not surprising and further bolsters the ecological perspectives of self expressed in the surveys by participants with more experience within the monastic culture.

4.4-Cognitive Test: Construction and Data Collection

Two weeks following the completion of Survey 2, a cognitive test was administered in order to assess to what extent meditation experience impacts visual processing. The Local/Global test examines if a person tends to view visual stimuli more locally (detail specific) or globally (holistic). Prior research has shown that meditation practice has been associated with higher degrees of global processing (Chan et al, 2007). This research, however, did not focus on Zen meditation, which promotes an open-eyed attention of the visual field during meditation practice. I predicted that participants with more experience training at the monastery would be more likely to exhibit global processing, whereas participants who had less experience training at the monastery would exhibit more local processing—shown to be the normative way of visual processing (Navon 1986). This assessment was also designed to measure trends before a weeklong meditation retreat and after completing a weeklong meditation retreat, with the prediction that a trend towards more global processing would occur irrespective of experience level.

The stimuli for the Global/Local task were generated on a 15-inch computer monitor in white on a dark background. A set of hierarchically formed stimuli was used in this experiment. On congruent trials, the same letter appeared at the local and global levels (i.e., both local and global letters were “H”, or both were “S”). On incongruent trials, the local and global letters were different (i.e., global “H” and local “S,” or global “S” and local “H”).

Each trial was preceded by the appearance of a fixation point in the center of the screen. Participants sat in front of a computer monitor. A tone signaled the beginning of each trial and was followed after 100 ms by a central fixation point (500 ms). Participants were instructed to look directly at the fixation point and not to move their eyes. The fixation point was followed by the stimulus (100 ms), appearing randomly.

Stimuli were presented in two blocks of 80 trials. Each block consisted of 40 congruent trials and 40 incongruent trials, and was preceded by 9 practice trials (not included in the analyses). In one block (the local condition), the small letters served as the targets and in the other (the global condition), the large letter served as the target. Participants pressed the left mouse button for an “H” target, and the right mouse button for an “S” target. Participants were asked to indicate the letter that they saw first (local or global).

A total of 13 participants were involved with this part of the study (7 beginners—defined as having less than one year experience, and 6 advanced meditators—defined as having more than 5 years experience). Participants were asked to complete the task on the first day of a weeklong meditation retreat before the sitting periods began. A total of 10 hours of sitting daily were completed for this retreat. No speaking was allowed for the duration of the week. On the last day participants were asked to complete the task again. There were two versions of the task

that were used with the only difference between the two versions was item order in order to counterbalance and avoid familiarity.

As predicted participants who were classified as advanced students were more likely to view visual stimuli globally (RT=530 ms), more commonly identifying the larger letter compared to the smaller level on incongruence trials, with an average of 83% classified as global dominant. In contrast, the group classified as beginners were more likely to identify the smaller letters (average RT=658 ms), suggesting that they were more likely to view visual stimuli more locally, with an average response type being 72% classified as local dominant for the beginner group. Local or global dominant was calculated by response type average on incongruent trials.

The prediction that there would be a significant difference before and after the weeklong retreat, moving from more local visual processing to global visual processing for all participants, however, was not supported by the data, with there being no significant improvement in response time or response type across all participants.

This assessment has obvious limitations in sample size and statistically significant claims cannot be made. The difference between response type (local/global) between the two groups, however, is robust enough to suggest that there is a significant difference in the way long-term members of the monastic community engage with their visual field. This data supports prior research regarding Local/Global processing (Navon, 1977; Chan & Woollacott, 2007; Shulman, 1986), and supports the qualitative data in this research study regarding the experience of having an “expanded view” through the practice of meditation. This data is preliminary and additional research into the relationship between visual processing and meditation experience is needed. Repeating this experiment across several different Zen monastic sites would also be of benefit to ensure that the visual experience is not limited to a certain group.

4.5- Limitations

The primary limitation in this study was that the sample size was small and limited to one site. It is impossible to know if these observed and reported changes in worldview as a result of being part of a Zen monastic community is a larger phenomena. An additional study of these effects is needed, both in various geographical areas and cross cultural settings in order to determine how robust these effects are and if they occur outside of the monastic culture that this study was based.

It should also be recognized that my previous experience over the past 11 years in the Zen tradition, as well as prior year long stay at the monastery may have influenced the objectivity and neutrality of the data and analysis. Although familiarity with the cultural context of U.S. Zen monastic practice was vitally important to the clarity and direction of this research, it is recommended that a similar study be conducted by someone who has not trained with the teachers and known the participants personally to ensure the data analysis was not bias. This study should be viewed as a preliminary assessment, providing ample room for further investigation, research and collaboration.

The final limitation of this study is a conceptual one. Although clear changes in personal worldview regarding self, body and environment were reported in this data, as well as strong self-reports of the positive impact on subjective wellbeing, this study does not target which aspect of living in the U.S. Zen monastic setting is the underlying cause. Although it was not my intention to conduct a causal research study, it is important to note that there are various uncontrolled factors—such as selection bias of gender, age and economic factors, the motivating factors for coming to live at the monastery—making it difficult to interpret which aspects of this setting is relevant to these expressed changes. On a more basic level, the question of are these

changes due to simply meditation experience or being immersed in the cultural context of meditation experience? How much does the language of the culture shape a person's vocabulary? These questions cannot be answered with the current data and further research is needed to begin to unravel this complex relationship.

CHAPTER 6: CONCLUSION

6.1-Discussion

This research project examined basic features of what it means to be alive and engaged in the world—having a body, being a self and living in an environment. As an attempt to counteract the purely biomedical approach seen in contemporary contemplative science research, this project was based on approaching monastic experience through the lens of culture and first person narrative in order to give weight to the subjective experiences of those embodying this living tradition.

Two major research questions were posed at the beginning of this project: *(R1): Does participating in a “culture of meditation” change the way we understand our bodies, self and relationship to the environment? And (R2) If so, does this impact subjective wellbeing?* These two questions were explored in various ways—participant observation, semi-structured interviews, two surveys, and a cognitive test given before and after a weeklong meditation retreat that measured visual perception. Although there were limitations in the approaches used, several clear themes emerged in response to these research questions:

1. Participating in a “culture of meditation” as promoted by the U.S. Zen monastic tradition does impact the way the body, self and environment are experienced and are directly related to a person’s length of time spent within this culture.
2. Participating in a “culture of meditation” as promoted by the U.S. Zen monastic tradition does positively impact subjective wellbeing and is not is directly related to a person’s length of time spent within this culture.

A common theme regarding the body was that the advanced students at the monastery described their bodies as not fixed to the physical form, rather, a process that emerges from their surroundings. Viewing the body as integrally linked to their ecology and often describing their body as indistinguishable from their environs—citing a non-dual worldview of there being no internal or external world—seemed to be a shared perspective for those who have been part of the monastic culture for more than 5 years. It appears that this shift in ontological perspective may develop progressively over time. The coded drawings of “your self” elegantly demonstrated this change in worldview, with beginners drawing the physical form, the intermediate group drawing the body as abstracted and the advanced group drawing the body as a circle, or “enso,” that symbolizes non-duality. This trend provides a case for how the body, self and environment may differ based on the cultural context of an individual and may be a process of enculturation that alters personal worldview over time. This finding promotes the “individual in context” perspective in psychological anthropology, examining the connections between psychological experiences, ideology and knowledge and how it is linked to cultural context.

Across all experience level groups, however, participants in this study reported a positive impact on their sense of wellbeing as a result of meditation experience. This was one of the clearest and most robust findings from this research, suggesting that meditation is perceived as directly benefitting a person’s subjective wellbeing, despite how long a person had trained at the monastery. This result was surprising, since it was hypothesized that the positive impact on subjective wellbeing would be rooted in a change in an ego-centric perspective of self to an eco-centric perspective of self, and thus motivating a more caring interaction with the world around them. Although both of these themes were clearly supported by the data, the data also suggests that they are not mutually dependent, rather, separate outcomes of U.S. Zen monastic practice.

The data collected using the Local/Global cognitive test suggests that there may also be a physiological component to the observed ideological changes reported by participants. A common experience shared in the various stages of data collection was that there is an experienced “expanded view” that enabled people to assume a perspective that is much larger than just their individual self. The cognitive test may provide some more insight into the experience of this expanded view, with those who had been at the monastery for more than 5 years more commonly identifying the global, holistic visual stimuli than the beginners who had been at the monastery for less than a year, who more commonly identified the local, detail-oriented visual stimuli. This data echoes the more qualitative reports of seeing the world around them more holistically and less egocentrically and is grounds for future investigation.

An important feature of this research is examining the ways in which a person self identifies and how context may be a major force in shaping this process. If a person is participating in a culture that promotes self identification to a physical body, it is hypothesized that their conduct will reflect a more self-centered sense of self; whereas, if a person is participating in a culture that promotes a self identification with a larger ecology, it is predicated that conduct will reflect a more eco-centric, and perhaps more environmentally responsible behavior. Although this research did not measure actual change in conduct or behavior, it does provide the basis for future research to be done in this area. A theme that was expressed by many participants in this study, however, was an increased sense of compassion and care for the people in their lives and the world around them. This suggests that there may also be a change in actual conduct and future studies need to be done to determine this outcome. A cross-site examination is also needed in order to apprehend if this is merely a local finding due to a unique sub culture and monastic training.

6.2- Applications and Future Directions

Understanding the relationship between context and individuals is vital to any applied environmental efforts. The underlying cognitive experience of an individual as a member of a larger culture can aid in the process of making meaningful strides in the direction of conservation and more effective global awareness, sensitivity and compassion. Although this research project covers only a myopic piece of this large and complex puzzle, it is my hope that through a case study of the U.S. Zen monastic culture, with its particularly eco-centered worldview, a deeper understanding of the ways in which individuals and context interact to motivate a profound change in values and beliefs can be brought to light.

The unique culture of U.S. Zen monastic communities may also prove important to the environmental movement and dialogue on human-environment interactions. As presented in this paper, the Zen tradition views the body, self and environment as experientially the same. Unlike the traditional Western ecological and psychological perspectives—that commonly use a framework of disparate systems functioning in parallel—Zen Buddhism emphasizes directly experiencing these systems as functioning as a whole. Through the practice of meditation and the cultural narratives supported by the monastery the data explored in this study suggests that a process occurs that may humanize ecology and makes the human ecological. I strongly believe that this change in worldview is of great interest to the environmental movement, providing a potential way to invoke a deeper sense of responsibility and respect towards the natural world.

6.3- Conclusion

I left the monastery at night— bags heavy and with an amazing task at hand: to try to take what I had learned and capture the experience of living in an U.S. Zen monastery and the

transformation it has had on peoples lives. Driving down the steep driveway along the woods I felt both moved and daunted by this feat, when our car came to a sudden halt.

A massive grey owl, eyes shining yellow in the headlights swooped down directly in front of the car. Ripping the head off of an indistinguishable rodent, probably caught in the field nearby, I watched in amazement as a splatter of tendons, bits of bones and fur left the pavement a wet black.

How could this be me? I thought to myself. The horror of nature. The death, brutality and carnality of an unforgiving and wild world. Where was the compassion, the harmony, the tenderness that so many people had expressed during my time at the monastery and how does the reality of a competitive natural world fit this ecological self perspective? The owl finished his feast and swiftly moved on.

I've thought about this dramatic ending to my fieldwork at Great Vow Zen Monastery often throughout the process of writing this thesis. The question of how can people experience such transformations regarding their bodies, self and the world, driving them towards an increased sense of compassion, respect, for the environment, while there is also so much sorrow, heartbreak and loss in nature. The outcome of this study does not answer this question, but what it does answer is that gazing through the vantage of the "ecological self" as promoted in U.S. Zen monastic culture, the owl and his fodder can be viewed not acts of violence, rather an intimate example of our basic nature: a deeply entwined system of interdependence. At this very basic level, our bodies are reliant on the giving and giving up of life—an immense process of surrender originating from a vast and complicated ecological system. Seeing ourselves not just as parts of this ecology, but as this system itself is equally humbling as it is profound. In this light,

the owl and his dinner provide an appropriate image to leave this research project— the merging of the internal and external world, with the body as its nexus.

The themes identified in this research regarding body, self, environment and wellbeing are all important features of the U.S. Zen monastic experience. A series of qualitative and quantitative measures were used in the hopes of giving insight into the lived experiences of people embodying in this unique “culture of meditation” from various perspectives. Yet, the conclusions that can be drawn from these measures are only the beginning, with an incredible amount still to be understood. Graphs, charts, coding, analyses, interview skills and theory testing are all ways that the experience of the “ecological self” can be examined and shared, but, in line with the Buddhist tradition, direct experience is the best method. I have been inspired and amazed by witnessing the accounts of how meditation practice has transformed lives and have been even more moved by what I have learned participating in it myself. It is my hope that this research can act as an impetus for those who are interested in the U.S. Zen monastic experience to participate in this amazing culture firsthand.

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