THESIS

A PHENOMENOLOGICAL STUDY IN

UNDERSTANDING HOW PARADIGM SHIFTS CAN OCCUR

Submitted by

April Elizabeth Wackerman

Department of Construction Management

In partial fulfillment of the requirements

For the Degree of Master of Science

Colorado State University

Fort Collins, Colorado

Spring 2010

COLORADO STATE UNIVERSITY

April 6, 2010

WE HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER OUR SUPERVISION BY APRIL WACKERMAN ENTITLED A PHENOMENOLOGICAL STUDY IN UNDERSTANDING HOW PARADIGM SHIFTS CAN OCCUR BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE.

Committee on Graduate work

_____
Brian H. Dunbar

_____
Delwin Benson

_____
Antonette M. Aragon

_____
Advisor: Mary Ellen C. Nobe

_____
Department Head: Mostaffa Khattab

ABSTRACT OF THESIS

A PHENOMENOLOGICAL STUDY IN

UNDERSTANDING HOW PARADIGM SHIFTS CAN OCCUR

The building industry is uniquely positioned in the context of contemporary societal trends as it was one of the industries hardest hit by the financial recession of 2007 and is one of the most environmentally unsustainable industries in the United States. While green building and sustainable design initially emerged as a way to affect change toward environmental sustainability, the share of global energy use from buildings continues to rise. Building leaders claim that in order to make a meaningful impact on looming environmental problems and pressures, an all-encompassing paradigm shift is needed in the building industry from an anthropocentric paradigm to one that more fully values and understands the interconnectedness between humans and nature.

Little is known about what factors and activities facilitate transformative shifts in thinking for building professionals. This study examined the experiences of participants of the 2009 Whole Thinking Workshop hosted by the Center for Whole Communities in Vermont. The workshop was designed for leaders of environmental stewardship and social equality and included building and land use professionals. Like many professionals, the leaders in attendance were generally entrenched in their thinking and professional approach in their respective movements. The workshop provided a framework for leaders to explore their own biases and achieve a shift in thinking for how their work relates to the *whole*. The goal of the research was to understand and describe

the participants' perception of the specific activities and factors of the workshop that facilitated a shift in their thinking. This study was conducted within a phenomenological framework and data were collected from participant observation, a focus group, and in-depth interviews. Three major themes emerged in the data and are characterized as *dimensions* of how to facilitate paradigm shifts in a workshop setting, and include: (1) Time, (2) Systems, and (3) Humanity.

The Time Theme documented that time was a factor in facilitating paradigm shifts in two ways including an uninterrupted and appropriate amount of time during activities, in silence and during open dialogue, and time spent away from regular responsibilities. The Systems Theme documented the elements that created an environment conducive for shifting thinking, including shared understanding, diversity, safety, consistency, and engaging activities. The Humanity Theme documented elements that facilitated a shift in thinking by cultivating the quality of being human, including spirituality, contemplative practice, storytelling, aligning values, and open dialogue.

This study provided insights to offer building professionals by revealing factors and activities of the Whole Thinking Workshop that were perceived as successfully facilitated shifts in thinking, therefore expanding understanding in how paradigm shifts *can* occur.

April Elizabeth Wackerman
Department of Construction Management
Colorado State University
Fort Collins, Colorado 80523
Spring 2010

ACKNOWLEGEMENTS

There is no end to education. It is not that you read a book, pass an examination, and finish with education. The whole of life, from the moment you are born to the moment you die, is a process of learning. J. Krishnamurti

I am overwhelmed with gratitude for the people in my life that have extended support, care, and love toward me during this project. I have learned immensely about myself and the world during this journey. It is with great gratitude that I have reached this milestone and that I am able to continue the journey of learning. I could not have completed this project without the support and contribution of a several advisors, friends, colleagues, and loved ones.

The compassion and undying support given by my love, Adrian, has been extraordinary. I deeply appreciate your capacity to love and support me through every step of this degree. Thank you for always encouraging me to follow my heart.

I am grateful for those on my committee, Dr. Mary Ellen Nobe, Dr. Antonette Aragon, Brian Dunbar, and Dr. Delwin Benson. Each of you contributed tremendous insight and direction throughout this project. Your encouragement pushed me to continue to work hard, and I am could not have finished this project without your support and expertise. Mary, your belief in me allowed me to carry forward and your insight on research was invaluable in guiding my direction. Antonette, you were so caring towards me and I am so grateful for your understanding in my need to verbally process. Your

v

expertise in qualitative research and phenomenology was invaluable in my learning. Brian, you have been a role model and a source of inspiration for me since the start of this degree. Thank you for reeling me in to this program and always encouraging new ideas. Delwin, for making me promise to make it to the finish line before you would sit on this committee.

Josie Plaut, I am deeply grateful for your capacity to understand and support me as a friend and colleague throughout this project. You have provided incredible insight and inspiration from the start and I look forward to continuing this work with you.

To my friends and family, you believed in me and cheered me on all the way through. Thank you for the loving and unconditional moral support and for lending your ears to verbally process my ideas, both were integral to my progression.

I thank the co-founders of the Center for Whole Communities, Peter and Helen, for allowing me to study one of their programs for this project and helping me to coordinate the pieces to make it happen. Your work and ideas at the Center provide great inspiration and hope to me regarding tapping into the potential of people by finding a way to connect and cultivating relationships.

Table of Contents

TABLE OF FIGURES

TABLE OF TABLES

CHAPTER ONE: INTRODUCTION

We are going through the toughest time economically since the Great

Depression…it's going to be tough and we are going to have to work

through…structural difficulties that [have] built up over many decades.

U.S. President-elect Barack Obama on December 16, 2008 (Obama, 2008)

The United States has experienced unprecedented challenges in the last decade

and society is coming to grips with implications of an imbalance between human

progress and a flourishing natural world. Specifically, there are three dominant trends

during the last few years that make it a relevant time to study paradigm shifts. As the

statement above by President Obama suggests, one prevalent trend in the United States

economy is the financial recession, officially announced by the *National Bureau of*

Economic Research in December 2008 (Guiterrez, 2008). Two other dominant trends are

a surge in mainstream perception of, and interest in environmental issues, and the growth

of social networking. The building industry is uniquely positioned in the context of

contemporary societal trends as it was one of the industries hardest hit by the financial

recession and is one of the most environmentally unsustainable industries in the United

States. While sustainable design and green building initially emerged as a way to affect

change toward environmental sustainability, the share of global energy use from

buildings continues to rise (Watson, 2009). Building leaders claim that in order to make

a meaningful impact on looming environmental problems and pressures an all-

encompassing paradigm shift is needed in the building industry. Leaders in the building

industry need to initiate the paradigm shift in the building industry from an

anthropocentric paradigm to one that values the interconnectedness between human developments and the natural world. A brief review of the economic recession, growing environmental awareness and social networking is relevant, as these trends play a role in the potential of a paradigm shift in the building industry and beyond.

Trends in Contemporary Society

Financial Recession of 2007

The financial recession of 2007 has been called the worst financial situation in the United States since the Great Depression (Isidore, 2009). The *National Bureau of Economic Research* defines a recession as a significant decline in economic activity lasting more than a few months. Scott Reynolds Nelson, historian and writer of American society, says that the current crisis closely resembles the Long Depression of 1873 – 1896 (Florida, 2009). Insolvent mortgages, complex financial instruments, widespread unemployment rates, and a banking crisis thwarted the financial economy of the United States during the Long Depression of 1873 – 1896 (Florida, 2009). Similar factors characterize the current recession including a 26-year low in domestic manufacturing activity (Heffner, 2009), an unemployment rate that has doubled to 9.8% with almost 36% of unemployed persons being jobless for 27 weeks or more (Bureau of Labor Statistics, 2009), housing prices dropping back to 2004 prices nationwide (Nutting, 2008), and increasing property foreclosure rates (Ivry, 2008).

History illustrates, however, that the rise and fall of global financial centers have occurred at nearly a predictable pace (Florida, 2009). Previous national crises have been nationalizing events, where the people come together to reinvent their place in the global

economy. Thomas Kuhn, a leader in the understanding of paradigm shifts, said that crisis advances change (von Dietze, 2001). Therefore, it is likely that the current financial crisis will change the United States' economic geography. Given the impact of the recession on the building industry, it is also likely that there will be significant paradigm shifts within the building industry.

Surge in Environmental Awareness

Early essays and reports, such as Aldo Leopold's *A Sand County Almanac* (1949) and Rachel Carson's *Silent Spring* (1962), have raised concerns on the reality of global environmental issues such as deforestation, biodiversity loss, ozone depletion, and global climate change for decades. More recently, documents such as *Global Environmental Outlook 3* (GEO-3) (2002), *The Millennium Ecosystem Assessment* (2005), *Limits to Growth 30 Year Update* (2004), and *Global Climate Change Impacts in the United States* (2009) have brought together thousands of independent scientific studies from around the world. Together, they measure the declining health of the ecosystems and social systems that are necessary for human survival. While this information has been accessible, until recently, the mainstream American public has taken little consideration to these invisible, yet inevitable, challenges (Stauffer, 2005). Al Gore's *Inconvenient Truth* (2007) has been credited for raising mainstream awareness of global warming and reenergizing the environmental movement (Butts, 2007). One indicator of the enhanced mainstream awareness of environmental issues is the wide range of dedicated "green issues," or periodicals dedicating an entire volume to environmental causes, in mainstream publications and periodicals such as *Vanity Fair, Outside, Surfing, Time, Fortune, The Rolling Stone, and The New York Times*. While the number of dedicated green issues by

3

mainstream publications dropped in 2009, the coverage of environmental topics has become more integrated throughout each volume (Merchant, 2008a).

Since mainstream media has been discussing the reality of present and impending implications of climate change, the United States has seen a surge in the "green" economy. Green consumer packaged goods and products launched during 2009 tripled the launches of 2008 (Neff, 2009). Corporations are, also, beginning to recognize that business can only exist through recognizing the necessary relationship with the natural world, and restructuring their business models to value *natural capital*, or goods and services related to the natural environment (Hawken, Lovins, & Lovins, 1999). Executives increasingly understand the implications of sustainability for their businesses and are acting aggressively to mitigate the risk that the future presents (Berns, Townend, Khayat, et al., 2009). By engaging their workforce, companies large and small are making changes to everyday business practices towards sustainability that show tangible, bottom-line results (National Environmental Education Foundation, 2010).

Despite contemporary economic stresses, and perhaps as a result of them, the American public is growing more aware of the need for social and environmental stewardship and responsibility in business, and in personal lives (Berns et al., 2009). In contemporary society, sharing information and knowledge has been facilitated by social networking and has emerged as a new way to advocate for social and environmental responsibility through spending choices. A societal paradigm shift will occur when business and consumers demand that products and services are provided with the value of the natural world in mind.

Growth in Social Networking

Social network services, such as Facebook, YouTube, MySpace, and LinkedIn have seen exponential growth in number of users in the last few years, a third dominant trend in contemporary American society. Social network services, also referred in mainstream media as social networks, are generally defined as web based services that provide the means for individuals to interact with each other. While the use of social networking has been largely for personal use, businesses and non-profits are increasingly using these services to communicate with their consumers about social and environmental issues such as stewardship, education, community involvement, and employee engagement. While mainstream social networking services are providing avenues for businesses and causes to network with their consumers, there are also social networking services devoted solely to substantive issues, including *Changents, JustCause,* and *Change.org.* Considering the far reaching audience, the potential of these services as a communication tool is exponential and the presence of social media in mainstream America is a fundamental shift in the way that people communicate (Socialnomics, 2009). In this world of easy access to information that is rapidly sharable, word of mouth has a new meaning. Hampton, Sessions, Ja Her, Rainie (2009) found that people have more diverse networks and that social networks such as Facebook have increased social connections locally. Social networks provide an easily accessible avenue for people to connect with others. As paradigm shifts begin to happen in disparate parts of the world, social networking increases access to people and offers the potential for citizens worldwide to accelerate a paradigm shift in how we develop as societies, as nations, and as people.

The Future

The future of the United States economy has the potential to eliminate the debt-ridden, over-consuming, under-producing American empire (Florida, 2009), making way for a new identity that values human well-being, as well as health of ecosystems and a *living* wealth, or an economy that favors intrinsic value and healthy relationships (Korten, 2009). The paradigm shift in the building industry is closely related to this emerging identity in American society. In both cases, it is about shifting values away from decisions based primarily on the economic bottom line and toward an integrated bottom line that values social and environmental costs and benefits. Our nation's current measure of economic performance, the Gross Domestic Product (GDP), is misleading and unrepresentative of the true health and welfare of the United States economy (Talberth, Cobb, & Slattery, 2006). In the current economic situation, alternatives to the GDP, such as the *Genuine Progress Indicator* (Talberth et al., 2006), are gaining traction. Increasingly, governmental and non-governmental organizations rely upon sustainable economic welfare, such as the Genuine Progress Indicator, as opposed to valuing economic activity alone (Talberth et al., 2006). Since 1957, the GDP has more than doubled, but the average level of happiness has declined, divorce rates have doubled, teen suicide rates have doubled, and violent crime has tripled (Laszlo, 2008). Furthermore, fewer adults and youth are spending time in nature (Louv, 2005). There is an opportunity for citizens of the United States to awaken to a new measure of health, one that values harmony between the financial economy, thriving ecosystems, and societal well being (Korten, 2009).

Context of the Problem

The building industry was one of the industries hardest hit during the recent downturn in the United States economy. The construction market fell 7% in 2007, 14% in 2008 and 26% in 2009 (McGraw Hill Construction, 2010; Siemens Industry, Inc & McGraw Hill Construction, 2009). The construction sector has been identified as one with some of the largest job losses in response to the economic recession (Bureau of Labor Statistics, 2009).

Additionally, the building industry represents the largest consumer of material and energy resources of all the economic sectors in developed countries (Kibert, Sendzimir, & Guy, 2000). According to the U.S. Green Building Council (2009), buildings account for 72% of electricity consumption, 39% of energy use, 38% of all carbon dioxide (CO_2) emissions, 40% of raw materials use, 30% of waste output (136 million tons annually), and 14% of potable water consumption. To this end, the building industry has incredible opportunities to make meaningful changes to environmental degradation worldwide. Sustainable design and green building emerged to minimize and mitigate environmental degradation from buildings and awareness has grown throughout the construction industry in the last few years.

While the green building movement has grown, the efforts to reduce the impact from the building industry are incremental, only striving to decelerate the inevitable (du Plessis 2006; McLennan 2004). For example, Watson (2009) reports current green building efforts are still not making a dent in the overall effort to halt climate change and states that total building sector emissions in 2050 will need to be only 20% of what they are today.

The health and sustainability of the world's environmental, social and financial systems are facing mounting challenges in effort to support ever-increasing pressures of society. Just as businesses are beginning to make operational changes to mitigate risks of climate change, the building industry needs to make sweeping operational changes in how buildings are designed, constructed, and operated. McDonough & Braungart (2002) assert that "less bad isn't good enough" (chap. 2) and building industry leaders claim that in order to truly address impending environmental challenges, a paradigm shift in thinking and in practice in the building industry is necessary (du Plessis, 2006; McDonough & Braungart, 2002; Reed, 2006). Thomas Kuhn, a philosopher and historian of science, defines a paradigm as a discipline that is considered unified by a large proportion of participants in the field (Sharrock & Reed, 2002). The definition of a paradigm has also been interpreted as a set of theories or particular perspective in a specified field (von Dietze, 2001). In *Presence: Exploring Profound Change in People, Organizations, and Society* (2005), Joseph Jaworski said, "the only change that will make a difference is the transformation of the human heart" (p. 26), suggesting that the paradigm shift needs to begin at the individual level. While society as a whole needs this paradigm shift, the building industry could make significant improvements by shifting paradigms towards valuing ecosystems and societal well being as much as the economic bottom line.

<div align="center">Problem Statement</div>

The problem is that little is known about what factors and activities facilitate transformative paradigm shifts in thinking and in practice in a workshop setting for building professionals. Plaut (2006) found that conferences can trigger change, and

Anderson (1998) found that workshops intended to initiate change can be very effective (as cited by Plaut, 2006), but few, if any, workshops for building professionals aim to initiate the kind of change that is needed. This study sought to explore how paradigm shifts can occur in a workshop setting and understand the meaning of the experiences of the Whole Thinking Workshop participants. The Whole Thinking Workshop was catered to leaders of environmental stewardship and social equality and included building and land use professionals. This study explored the Whole Thinking Workshop because the participants, like many professionals, are generally entrenched in their thinking and professional approach. The workshop intended to guide the participants through an inward and reflective process that sought to help them shift their view of their work and their potential, through safe and productive dialogue about the roles of race, class and privilege in their work. In other words, the Whole Thinking Workshop provided a framework for leaders to explore their own biases and achieve a shift in thinking for how their work relates to the *whole*. The goal of the research was to understand and describe the participants' perception of the specific activities and factors of the workshop that facilitated a shift in their thinking.

<center>Significance of the Study</center>

A qualitative approach was used in this exploratory study to understand the phenomenon of the Whole Thinking Workshop. The Whole Thinking Workshop engaged participants in an experience that was designed to expand values and help identify new goals for participants in their respective professions. The purpose of this research was to examine the experiences of individuals who attended a workshop that was aimed at shifting thinking and identify specific factors and activities that the participants perceived

<center>9</center>

to foster a paradigm shift. This information may provide insights to building visionaries about engaging building professionals in paradigm shifts. No study to date explores the experiences of the Whole Thinking Workshop participants specifically related to paradigm shifts. As this study reveals, paradigm shifts are complex and are not typically achieved in one workshop. This study addresses the need for building industry leaders to learn appropriate steps in designing and facilitating workshops and programs that foster paradigm shifts.

Research Questions

While the overarching question is "how can building industry leaders facilitate an industry-wide paradigm shift to value the interconnectedness of humans and nature," the research questions for this study specifically explored shifts in thinking as perceived by the Whole Thinking Workshop participants. Within this context, the study is intended to better understand how paradigm shifts can occur in a workshop setting. The following questions define the focus of the specific study:

1. Do workshop participants perceive that they experienced a shift in thinking because of their experience(s) at the 2009 Whole Thinking Workshop?

2. What are the specific activities used in the Whole Thinking Workshop that helped to facilitate shifts in thinking in a workshop setting for the research participants?

3. What insights can be gained for building professionals to begin the work of shifting paradigms?

Boundaries & Limitations of the Study

This research focuses only on the individuals participating in the Whole Thinking Workshop and is bounded by the experiences of the participants of the July, 7-9, 2009 workshop held in Vermont. The results were dependent upon the objectivity, honesty, and articulation from participants and dependent upon participant permission.

The limitations and shortcoming of the study are the following:

1. Results could have been skewed by one or two participants that are unusual thinkers, by the quality of the facilitation, the pace of workshop, or the quality of activities.

2. Different results could have emerged if the workshop were in a different setting.

3. The workshop participants voluntarily attended the workshop and were leaders of their respective fields; therefore there was inherently some level of receptivity to the workshop topics and willingness to participate in the workshop activities. Different results could have emerged if the participants were expected to be there or lacked an introductory level of knowledge surrounding the topics. Additionally, because the participants were leaders, their shift in thinking was relative to their existing predisposition to the subject matter.

4. None of the interview questions asked the research participants to speak about the shift that was specifically intended by the workshop organizers. Instead, the interview questions asked them to speak about their shifts related to their experience in general. While the research participants generally touched their shift as related to what was intended by the organizers, asking the participants to speak

about this specifically could have provided a commonality between the research

participants and could have added to the rigor of the research.

The results of this will add to the literature on how to facilitate shifts in thinking

in a workshop setting, therefore expanding understanding in how paradigm shifts *can*

occur.

Definitions of Terms

Paradigm Shift: A large scale shift in mindset and in behavior.

Shift in Thinking: A small scale shift in mindset that may lead to a large scale
transformation.

Sustainability: Broadly defined as the use and preservation of earth's resources to ensure
its capacity to support thriving future generations of humans and other species.

Regenerative Design: Lyle (1994) defines regenerative design as design that replaces
linear processes with cyclical ones, allowing for continuous replacement, renewal,
and rebirth. Regenerative design insists on an integration of human development
with natural systems in which both are sustained, nurtured, and enhanced (Reed,
2006)

Environment: The natural world and its interrelated and interconnected systems.

Built Environment: Alterations to the natural environment by human beings including,
manmade or enhanced landscapes, buildings, parking areas and infrastructure.

Green Building: Building design, construction and operations that seeks to reduce,
eliminate or even reverse harm done by the building industry to the natural
environment.

CHAPTER TWO: REVIEW OF LITERATURE

Advancement of Green Building

When initially conceived, the green building movement was a paradigm shift in the building industry. The concept of sustainable design, which McLennan (2004) defined as a "philosophy that seeks to maximize the quality of the built environment, while minimizing or eliminating negative impact to the natural environment" (p. 4), has guided the green building movement. According to Edwards (2005), the Sustainability Revolution has been defined by the "new value system, consciousness, and worldview" of the diverse individuals leading the revolution (p. 5). In 1984, Worldwatch Institute published its first *State of the World* (1984) annual report, which stated "We are living beyond our means, largely by borrowing against the future." In response to the *State of the World* (1984) report, the Brundtland Commission coined the definition of sustainable development in 1987. Their report, *Our Common Future* (1987), defined the term sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." *Our Common Future* (1987), motivated by the recognition that the economic model was not working and that sustainable development was needed, outlined long-term environmental strategies for achieving sustainable development by the year 2000. During the last decade, green building has transformed from a fringe movement, into a mainstream practice (Kibert, 2005; Siemens Industry, Inc & McGraw Hill Construction, 2009; Watson, 2009). Additionally, the development of green building assessment methods, such as Building Research Establishment Environmental Assessment Method

14

(BREEAM) and Leadership in Energy and Environmental Design (LEED), has addressed the need for an applicable and meaningful method for measuring environmental impact and energy performance, the central issues that face efforts to reduce the impact of the built environment (Cole, 2005). In addition, green building rating systems have allowed proponents of sustainability to measure the significant growth that has occurred in green building. It is recognized, however, that green building rating systems lack comprehensive social equity metrics, meaningful regional characteristics, and metrics that adequately address environmental concerns (Hodgin, 2008).

Awareness of the concepts, methods, and financial benefits of green building have been driven by energy and cost savings, government mandates and initiatives, green residential construction demands, and improved access to and quality of sustainable materials (Siemens Industry, Inc & McGraw Hill Construction, 2009; USGBC, 2009). In February of 2009, the U.S. Green Building Council (USGBC) confirmed that the number of both LEED-registered and LEED-certified projects doubled in 2008—from about 10,000 registered projects at the end of 2007 up to more than 20,000 by the end of January 2009 (Ward, 2009). Moreover, in the following year, over 350 million square feet of buildings became LEED certified, tripling the record number of certifications in 2008 (Watson, 2009). Despite the current economic condition, the green building market is trending towards expanding to as much as $140 billion by 2013; in contrast, the green building market only represented a $10 billion value in 2005 (Siemens Industry, Inc & McGraw Hill Construction, 2009). The growth of the green building industry is an indication of market transformation toward sustainability.

While reports show market transformation toward green building, and green buildings are designed to reduce environmental impacts, the share of global energy use from the building sector continues to rise (Watson, 2009). Furthermore, relative to the impending pressures of climate change, green buildings are still not providing sufficient contribution to halting the building sector's environmental impact (Watson, 2009). And still, social equity is considered the "missing leg" in the building industry (Wendt, 2009). Social equity is generally defined as equal value on an individual without regard to social class, age, gender, race, and/or ethnicity. Much of the social equity efforts narrowly focus on improving human health and productivity for building occupants, neglecting a broader inclusion of safety and justice for all people (Herz, 2006 as cited by Hodgin, 2008; Wendt, 2009).

Regenerative Design

Although the green building industry is working to design, construct, and appropriately operate high performance buildings, these efforts are still insufficient (du Plessis, 2003; du Plessis, 2006; Lyle, 1994; McDonough & Braungart, 2002; Reed, 2006). The green building movement represents a shift in practice that intended to effect large-scale change regarding negative environmental impacts associated with buildings; however, the solutions are based in the same thinking, using the same tools, and with the same paradigm that caused the problems (du Plessis, 2006). Proponents of initiating a new paradigm shift point out that the current green building strategies of incremental improvement are only attempting to reduce damage to the environment rather than repairing damage and promoting healthy ecosystems (McDonough & Braungart, 2002; Reed 2006). Furthermore, McDonough & Braungart (2002) assert that "less bad isn't

good enough" (chap. 2). For example, Watson (2009) reports that total building sector

emissions in 2050 will need to be only 20% of what they are today. In other words,

standards and requirements outlined in LEED that address carbon dioxide emissions will

need to increase tenfold by 2050 (Watson, 2009). The problem with incremental change

or improvement is that it is not major, long-term structural change (Hallsmith, 2003).

Dunphy et al. (2003) assert, however, that incremental change is necessary for a path

towards transformational change. The green building movement has served as this path,

but in order to truly make an impact on looming environmental problems and pressures,

an all-encompassing paradigm shift is needed (du Plessis, 2003; du Plessis, 2006; Lyle,

1994; McDonough & Braungart, 2002; Reed, 2006).

John T. Lyle (1994) defines this paradigm shift in the building industry as one

that adopts regenerative design, which replaces linear processes with cyclical ones,

allowing for continuous replacement, renewal, and rebirth. Regenerative design insists on

an integration of human development with natural systems in which both are sustained,

nurtured, and enhanced (Reed, 2006). In order for true *sustainability* of the human

species to be achieved, human habitats and developments must be restorative to the

natural world (McDonough & Braungart, 2002). The paradigm shift has also been

considered a social and cultural *evolution* that recognizes interconnectedness with nature

(Laszlo, 2008). Hodgin's (2008) study was focused on creating a tool that would

facilitate a more appropriate understanding of the human/environment relationship.

Hodgin (2008) found that current tools that attempt to facilitate building professionals to

go *beyond* sustainability still do not appropriately address the interconnectedness between

human developments and the natural world, nor do they consider comprehensive aspects

of social equity, such as education, beauty, community involvement and socio-economic diversity. This new paradigm shift in the building industry would acknowledge that buildings and the activities within them, should promote healthy ecosystems, stable economies, and equitable societies, and restore natural resources by becoming active parts of the ecosystem in which they exist (Berkibile & McLennan, 1999). Janine Benyus, the founder of the nature as mentor frame of mind, claims, "Your building project should do at least as well for ecosystem services as the ecosystem it replaced" (Altes, 2008, para. 5). In regenerative design, solutions grow from and reflect the systems of a particular place, especially if they are to promote the health of the systems (du Plessis, 2006). Laszlo (2008) speaks of a societal shift from *Logos*, today's economically, politically, and culturally fragmented society, to *Holos*, a global civilization that possesses the will and the vision to achieve solidarity. Laszlo (2008) articulated the reality of our culturally fragmented society by stating, "We have big houses and broken homes, high incomes and low morale, secured rights and diminished civility" (p. 56). Laszlo affirms that we need to find a way to live on this earth with out destroying ourselves and the natural world and offers 10 steps for doing so. It is clear that growth is inevitable in some way, but unchecked growth in energy and material production is not possible in a finite system (Laszlo, 2008). Change is no longer a theory, nor an option – it is a reality, an imperative of our survival (Laszlo, 2008). Laszlo concludes that "not only is nature a dynamic system capable of rapid transformation but humanity is also" (2008, p. 15).

Paradigm Theory

As leaders in the building industry call for a paradigm shift, Thomas Kuhn's theoretical perspective of the nature of paradigms provides a base to qualify paradigm shifts in the building industry. While Kuhn did not coin the term paradigm, he revolutionized its meaning and is responsible for widespread use and understanding today (Horgan, 1991). He has been referenced as the most cited author on the topic of paradigm shifts (Horgan, 1991; Sharrock & Reed, 2002; von Dietze, 2001). In his controversial, yet highly referenced book, *The Scientific Structure of Revolutions* (1962)*,* Kuhn endeavors to offer an alternative understanding of how science is conducted (von Dietze, 2001). He did not call for a paradigm shift in the scientific community; rather he postulated that science is advanced by a series of paradigm shifts. As a philosopher and historian of science, Kuhn debated that the advancement of science is punctured by revolutions, rather than by a process of steady and gradual development by accumulation (Crotty, 1998; Sharrock & Reed, 2002; von Dietze, 2001). To elaborate, when normal science no longer answers questions being posed, a period of crisis emerges, new paradigms are created to answer questions, and eventually the scientific community settles on a new paradigm, defining a new period of normal science (Sharrock & Reed, 2002; von Dietze, 2001). According to Kuhn, scientific progress is achieved through a series of revolutionary leaps, so that "when paradigms change, the world itself changes with them" (1962, p. 111). While Kuhn's paradigm theory was developed to describe the advancement of science, his articulation and definition of a paradigm shift has shaped and broadened the understanding for others to begin to recognize the need for a paradigm shift in their own context or field (von Dietze, 2001).

While Kuhn first released the paradigm shift theory in *The Scientific Structure of Revolutions* in 1962, he refined his theories over the following decades, and eventually stopped using the word paradigm by 1980, replacing it with revolutionary change (von Dietze, 2001).   From early definitions, paradigm shift is the act of reinterpreting old information, seeing information in entirely new ways, and seeking new kinds of information (von Dietze, 2001). According to Kuhn, "…when paradigms change, there are usually significant shifts in the criteria determining legitimacy both of problems and of proposed solutions" (1962, p. 109). The main function of a paradigm shift, however, is to achieve conformity; therefore the shift does not stop at seeing the world in a different way, but that a majority sees the world in the same, new way (von Dietze, 2001). The nature of a paradigm shift starts with a breakdown of current model, initiating the possibility for the breakthrough of the new. The breakdown of the current model is seen as a crisis, and knowledge grows through crisis. While it is argued that not all crises lead to an abandonment of an old paradigm, crisis will always precipitate a paradigm shift (von Dietze, 2001). As Rachel Naomi Remen explained, "a time of crisis is a time of change" (Moos, 2008). In the case of the building industry, the crisis is the impending economic, social, and environmental collapse due to unchecked growth and fundamentally unsustainable use of human and environmental resources. Just as the process of transformation undergone by a caterpillar to become a butterfly, the transition phase is neither easy for the butterfly nor comfortable for the caterpillar. While it may be difficult to dislodge a paradigm, no paradigm is permanently entrenched (von Dietze, 2001).

William James, credited as the founder of American psychology, described two types or degrees of change: gradual, systematic change, and sudden, discontinuing transformation (Miller and C'de Baca, 2001). Plaut (2006) found that not all champions, or those that fight for a cause, have transformational experiences, and some individuals find themselves committed to the cause through a gradual process. Miller and C'de Baca (2001) coined the phrase *quantum change*, or a profound and lasting effect on a person, and on how a person understands and perceives reality. Laszlo (2008) defines a *quantum shift* as a sudden and fundamental transformation in how we humans relate to each other and nature. The theory of evolution explains that when instability reaches the critical point, the system either collapses or shifts to a new state of stability (Laszlo, 2008). Gardner (2006) explains that a true shift in mindset produces a change in behavior.

<div align="center">The Scope of Change</div>

While the literature on effectively implementing organizational change is growing, literature is thin on why human change happens (Miller and C'de Baca, 2001). The literature suggests common themes in the process of initiating change on both large and small scales. Literature also outlines different degrees and rates of change, which is relevant in understanding the realm of paradigm shifts. Kuhn defines a paradigm shift as a large scale change; however, small scale change can be meaningful to one's larger paradigm shift (Miller and C'de Baca, 2001). The sequence of Kuhn's theory of paradigm shift includes open recognition of inadequacies, explicit expressions of discontent by members of the paradigm community, and ultimately one paradigm emerges with majority support (von Dietze, 2001). Kuhn (1987) identifies three features of change that must exist in order for a prevailing paradigm to shift. First, the change is

holistic, and must occur "all at once or not at all." Second, change is understood in its own terms. Just as meaning is often lost in translating two different languages; meaning is preserved when the language is learned in its own terms. Third, the means to analyze has changed, just as the units of analysis change. Miller and C'de Baca (2001) acknowledge that change can happen on large and small scales and suggest that change happens through the experience of an epiphany, then one has clarity of a new truth, and interconnectedness is revealed and recognized, and therefore, a new reality, that previously was not considered, is acknowledged. Similarly, Plaut (2006) found that common *triggers*, or a point of origin that sets in motion an individual's shift in mindset, for change could be small and large, including attending a conference or listening to a speaker or experiencing visible societal crises such as the energy crisis of 1970's. Plaut (2006) also found that innovators and inspirers, and religion and spirituality were influential elements of the study participants' pivotal experiences. Miller and C'de Baca (2001) suggest that some individuals are particularly apt at inspiring others to have pivotal experiences and commonly found spirituality was related to their participants' epiphanies.

Plaut's (2006) research showed that there is a phased degree and rate of change that exists in individual's experience with a shift in mindset. Plaut's change model, shown in Figure 1, shows the spectrum of change initiatives from rejection to champion. When one begins to fight for a cause, they shift to a champion. Additionally, Figure 2 illustrates the concept of the varying degrees and rates of change in mindset. The significance is that an individual can become a champion through a transformational, pivotal experience, or gradually, over a longer period of time.

RATE OF CHANGE

DEGREE OF
CHANGE

A

B

REJECTION   CHANGE IN MINDSET   CHAMPION
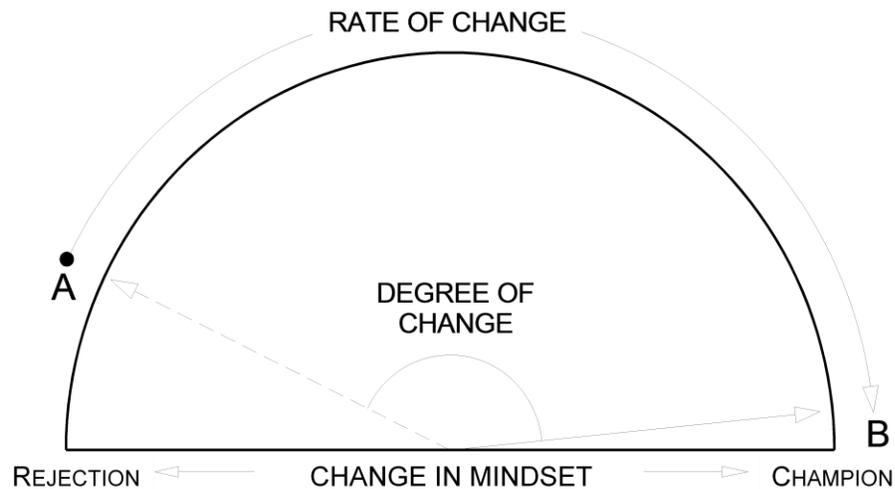
Figure 1: Phased degree and rate of change model (adapted from Plaut, 2006, p. 51)

The scope of change actually taking place involves letting go of old ways of

seeing, even all ways of seeing (Hallsmith, 2003). Benson & Darracq (2001) offer a

graphical framework to illustrates the complexity of individuals' worldviews and assert

that these multidimensional worldviews influence learning, decisions, behaviors, and

education. Every individual form their views through the following 6 contexts: (1)

physical and biological systems, (2) economics and business, (3) personal psychology

and personality, (4) societal norms, behaviors and cultures, (5) laws and political systems,

and (6) technologies and beauracracies. Educators and facilitators need to make

connections to these contexts in order for the audience to be receptive and adopt new

information (Benson & Darracq, 2001).

Senge, Scharmer, Jarworski, and Flowers (2005) assert that most change

initiatives fail, not because of a lack of vision, but because people cannot "see" the reality

they face. Furthermore, the typical response to an unfamiliar proposal is rejection (Senge

et al., 2005). Therefore, creating the context for the possibility of transformation to

23

happen through sharing, listening, and responding is highly important (Hallsmith, 2003;

Senge et al., 2005). Senge et al. suggest a new theory on change and learning that

encompasses a deeper process. They explain that people are often stuck in old patterns,
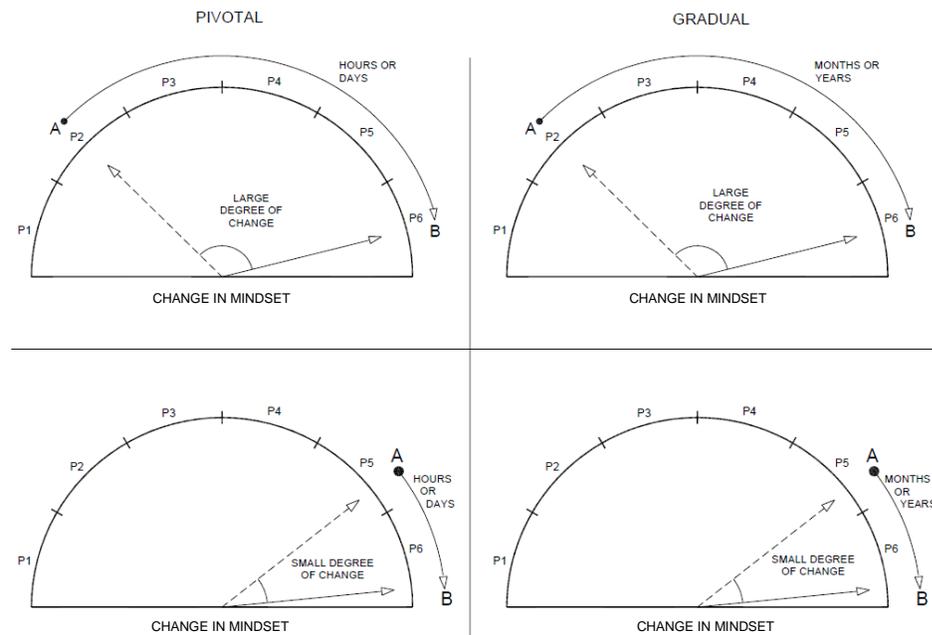
Figure 2: Phased change scenarios for gradual or pivotal experiences differentiating degree and rate of change (adapted from Plaut, 2006, p.52)

conventions, or paradigms that limit their visions and actions, therefore change initiatives

need to be deep and personal. Drawing from interviews with more than 150 scientists,

and social and business entrepreneurs that have undergone profound change in their lives,

Senge et al. developed a process that summarizes the findings of their study and coined

the concept *The Theory of U*. The Theory of U asserts that the process for

transformational or profound change generally includes three basic gestures, or

movements: suspension, redirection, and realization. Brian Arthur, noted economist of

the Sante Fe Institute and one of the participants in their study, said "Every profound

innovation is based on an inward-bound journey, continuing to a deeper place where

24

knowing comes to the surface" (Senge et al., 2001, p. 13). Senge et al. found that

transformation is achieved through a deeper awareness of the larger whole and

connection to that whole, which produces a dramatic change in the person, organization,

or society.

The following is a summary of the three basic gestures of the "U movement."

The first basic gesture, suspension, involves becoming aware of our thought stream and

our underlying assumptions. As the thoughts pass, we become aware of them, without

judgment, and assumptions are suspended. This process allows us to become more aware

of our thoughts, as opposed to not being aware of our thoughts and otherwise let our

thoughts "have us." Suspension begins the process of "seeing." The second basic

gesture, redirection, involves turning ones attention, or redirecting, toward the source

rather than the object. In other words, redirection is turning our attention toward the

generative process that is causing the assumptions to be made. For example, suspension

leads one to see old patterns, and redirection dissolves boundaries and draws attention to

the source of those patterns. When a direct connection to the source of the patterns or

assumptions is acknowledged, a shift occurs. Realization is the third basic gesture that

includes putting the shift into action. Realization is not imposing one's will, but rather, it

is action that is in accordance with the new clarity and knowledge. Realization begins

when we let go and surrender our perceived need to control. Time is essential for

suspension and redirection to occur, however, realization is done swiftly. An illustration

of this process is shown in Figure 3.
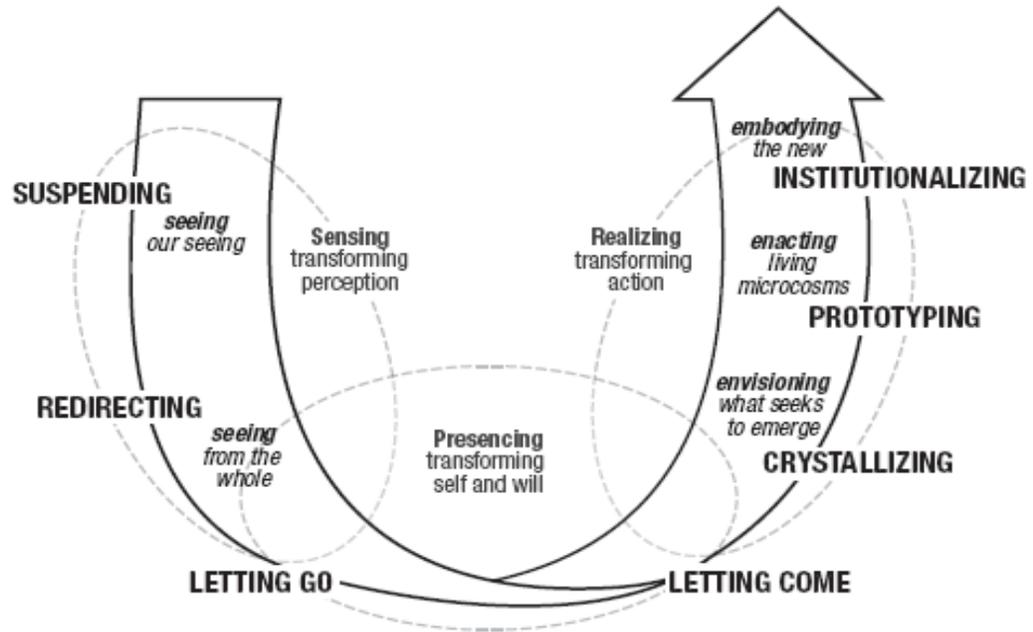
Figure 3: *Seven capacities of the U movement (Senge et al., 2005, p. 219)*

Senge et al. (2005) assert that when habitual thinking is halted, a new reality is seen. The shift unfolds when we see our connection to that reality more clearly. Understandably, this is a highly personal process. Scharmer and Jarowski's (as cited by Senge et al., 2005) research with innovative scientists found that each scientist made a connection to their commitment to personal inner work in order to find truly innovative discoveries.

Senge et al. (2005) found several activities that complemented the process of going through the U movement. For example, during the suspension phase, the research participants used mindfulness practice, such as meditation to build capacity to suspend assumptions and enhance awareness of their thoughts. In a group setting, Senge et al. found open dialogue to be effective for increasing individual's level of awareness. They assert that open dialogue acts as a container that holds what the individuals share. When

26

one releases their thoughts, the individual is allowed more space and receptivity to other thoughts or perspectives. Activities that complimented the redirection phase also included open dialogue, but more specifically it was sharing personal stories. The impact of sharing personal stories provides the opportunity to see another person's reality and by sharing stories, people become more willing to hold and consider different stories. Thus, people are freed from being "isolated by their own stories," which allows them to redirect their thoughts (Senge et al, 2005, p. 72). Our sense of isolation and separation from one another is a profound barrier to increasing awareness. Another activity, called scenario planning, was demonstrated to be an effective tool for transforming the sense of self. Scenario planning involves articulating the different options for the future, based on how the different choices are made. It is effective for more clearly understanding implications of decisions and recognizing that individuals do have a choice (Senge et al., 2005).

Bruce Sterling, founder of WorldChanging, described the structure of transformational change to a group of industrial designers. He said,

> This [change] can't be one of these diffuse, anything-goes, eclectic, post-modern things…it's got to be narrow, doctrinaire, high-velocity movement…about abundance of clean power and clean goods and clean products, not conservative of dirty power and dirty goods and dirty products. Explosive not thrifty. Expansive, not nagging. Mainstream, not underground. Making a new cultural narrative, not calling the old narrative into question (Robertson, 2007, p. 49).

Human change can occur on a small or large scale through varying degrees and rates, which is important for understanding the realm of paradigm shifts.

Summary

The green building movement seems to be on the brink of a paradigm shift toward a regenerative model of design, construction and operations. This shift is in response to looming economic, social and environmental crises. According to Kuhn, crises are an important ingredient to change but there are many factors hindering human change. It is clear from the literature that meaningful, profound, transformational change needs to be deep and personal so that underlying assumptions can be called into question. The Theory of U offers a rich background on the context of paradigm shifts and the process of profound individual, organizational, and societal change. While little is understood on why human change happens the literature suggests that understanding *how* human change can occur is more applicable. By examining the process of intentional transformation in thinking we may be able to gain insight on guiding and facilitating paradigm shifts toward a regenerative model in the building industry.

CHAPTER THREE: METHODOLOGY

Rooted in the disciplines of anthropology and sociology, qualitative research

designs became readily utilized by researchers in the realms of education, social work,

and psychology in the 1970s and 1980s (Denzin, 2000). While quantitative methods are

used to test hypotheses, qualitative research designs are exploratory with the emphasis on

finding emerging categories identified during the process, using research questions that

focus on the *how* or *what* (Creswell, 1998; Creswell, 2003). Qualitative research is

appropriate when used to explore a concept or phenomenon of which little research has

been done (Creswell, 2003). A qualitative study can increase the understanding of the

development of perceptions through an exploration of social realities in individuals or

groups of individuals (Berg, 2007). For the purposes of this study, qualitative research

methods were determined as the best option for studying the factors and/or activities that

may facilitate a shift in thinking in a workshop setting. A quantitative research

methodology was insufficient for this study because it was not possible to clearly isolated

variables and would not allow for the participants' complex and contextual

circumstances. Qualitative research is better suited to investigate interdependencies and

is therefore able to explore unanticipated variables (Creswell, 1998) and can address the

dynamic experiences (Marshall and Rossman, 2006) of paradigm shifts. Further, the

researcher reserved the right to modify the initial research questions as the research

evolved through interaction with participants in order to provide the flexibility necessary

to explore unknown variables and describe findings (Creswell, 2003; Marshall &

Rossman, 2006). Researcher biases and subjectivity can be a general concern with

qualitative research; therefore methodological triangulation is often employed (Emerson,

2001). Methodological triangulation is the practice of combining multiple methods as an attempt to ensure understanding of the phenomenon being studied (Denzin, 2000). It adds rigor and increases the richness and the verification of the data (Berg 2007; Creswell 2003; Denzin, 2000). In addition, triangulation can help to inform or develop other data collection methods (Creswell, 2003). This study attempted to guard against biases by collecting information from a variety of sources, using two methods: observation and interviewing (Emerson, 2001). Additionally, the researcher offered the workshop facilitators the chance to review the research findings to cross-check for bias.

<div align="center">Phenomenological Approach of Qualitative Research</div>

As a qualitative and constructivist method, phenomenology relies on information gathered from those who have experienced and lived the phenomenon (Creswell, 1998). The goal of the research was to understand and describe the specific activities and factors of the workshop that facilitated a shift in thinking specifically from the perspective of a specific cohort of workshop participants and based on their lived experience of the phenomenon. The phenomenological approach was selected for this study because there is a lack of understanding on specific factors in a workshop setting that are effective in fostering shifts in thinking, and eventually contribute to a paradigm shift, as told from the perspective of those that experience the phenomenon (Creswell, 1998). In this study, the phenomenon was the July 2009 Whole Thinking Workshop.

The phenomenological approach to research facilitates exploration of a phenomenon within its context using a variety of data sources, offering an opportunity to gain tremendous insight into a case (Baxter, 2008; Creswell, 2003). Creswell (1998) asserts that the process of data collection and analysis is fundamental to a

<div align="center">30</div>

phenomenological approach; first, the researcher must explore stories and opinions as told by the participants and identify significant statements; the statements are then advanced into meanings, which are then clustered into common themes.

<div align="center">Participation / Observation</div>

Participant observations are most appropriate when little is known about the phenomenon, as was the case with this study (Jorgensen, 1989). Participant observation is significant in studying a phenomenon to understand the context of place and setting (Denzin, 2000). In this study, the researcher participated as an active member of the workshop and also recorded written fieldnotes of brief accounts, descriptions, and reflections of matters observed. For the sake of disclosure and in order to and build rapport with the workshop participants, the researcher made her role transparent to the population (Adler and Adler, 1987). The researcher became an insider, thereby "gaining deep and direct personal experience into their worlds" (Adler & Adler, 1987, p. 21). By participating as an active member in the workshop, the researcher maintained closeness to the "phenomena and the members' natural standpoint" (Adler & Adler, 1987, p. 63). Taking an active member role includes taking part in the core activities, and assuming a functional role in the workshop (Adler & Adler, 1987). An active member role is significant in grasping the "subjectively meaningful world" of the participants (Rochford, 1985 as quoted in Adler & Adler, 1987). Instead of having to infer the meaning from the participants interactions and behaviors, open interactions and conversations with the workshop participants allowed the researcher to clarify questions for the interviews following the workshop. Based on the researcher's experience with the phenomenon of the Whole Thinking Workshop, slight modifications were made to the interview

questions. The primary purpose of participant observation for this study was to build rapport with the workshop participants and develop trust in a way that was conducive to conducting phenomenological interviews.

It should be noted that the researcher had attended one other Whole Thinking Workshop previously; therefore, the activities and situations therein were familiar to the researcher. Familiarity with the workshop served as an aid to the research. In addition, the researcher facilitates collaborative workshops in a professional setting and felt natural during the Whole Thinking Workshop.

Phenomenological Interviews

While participant observation provided a rich understanding of the process and context of the Whole Thinking Workshop, in a phenomenological study it is necessary to talk to the participants to attempt to understand how paradigm shifts occur from their point of view. The phenomenological interviews consisted of one focus group of workshop participants and individual in-depth interviews with a sample of the workshop participants. Focus groups in this context are "guided or unguided discussions addressing a particular topic of interest or relevance to the group and the researcher" (Berg, 2007, p. 145). The focus group allows the opportunity for individuals that have had a similar experience to share ideas with the researcher (Creswell, 1998). The choice to conduct the focus group immediately following the workshop was intended to (1) ensure the opportunity for the researcher to build rapport before the interview, (2) to allow for immediate dissemination and elaboration of participant experiences while their experience was fresh in their mind, and (3) triangulate researcher observations. Individual

interviews allow the participant and researcher to explore more in-depth experiences, opinions, and perceptions related to the phenomenon being studied.

While focus groups provide a breadth of useful information, they often do not allow participants to fully expand on their views, motivaions, beliefs, and thoughts. The primary goal of the individual interviews was explore the participants' experiences and perceptions of the Whole Thinking Workshop in greater depth and without influence from other participants. By using interviews, the researcher is showing that the intent of the study is to describe the participants' perspective on an event (Marshall and Rossman, 2006). Interviews "provide maximum opportunity for complete and accurate communication of ideas between the research and the respondent" (Cannell and Kahn as quoted in Berg, 2007, p. 97). When combined with participant observation, conducting interviews "allow(s) the researcher to understand the meanings that everyday activities hold for people" (Marshall and Rossman, 2006, p. 112).

Research Setting

The research for this study involved participants of the Whole Thinking Workshop, which was developed and facilitated by the Center for Whole Communities. No studies to date have explored Whole Thinking Workshop participants' experiences as related to paradigm shifts. While not catered towards building professionals, the workshop is catered to leaders of environmental stewardship and social equality. This study explores the Whole Thinking Workshop because these leaders, of whom are generally entrenched in their thinking and professional approach in progressing their respective movements, are guided through a personal process as an effort for encourage the participants to catalyze paradigm shifts for themselves.

33

Center for Whole Communities

The Center for Whole Communities works to facilitate "a more just, balanced and healthy world by exploring, honoring, and deepening the connections among land, people and community." Peter Forbes and Helen Whybrow co-founded the non-profit organization on a historic property, known as Knoll Farm, which had been farmed for over two centuries. In an effort to conserve the land so that it would not be subdivided and developed, the Vermont Land Trust had a competition for organizations to propose what they would do with the land. The Center for Whole Communities was the winning proposal, with the mission to begin the work of a new land movement that integrates conservation, health, justice, spirit and relationship.

Located in the mountains of the Mad River Valley outside of Burlington, Vermont, the Center brings people to a place where human settlements and the natural world are harmoniously intertwined with each other. The Center strives to embed their integrated vision of living through serving locally grown food, utilizing locally sourced structural timber for their buildings, installing solar energy to meet nearly all their electrical needs, and promotes a sense of sharing, accountability, and community for those who visit. The organization consists of environmental and social activists that have spent their lives trying to understand societies' relationship to land. In 2002, the organization was launched to engage individuals from across the states to consider and implement a new paradigm for how our respective *movements*, or social groups which are working to create change in the world, collaborate and communicate with one another. According to Peter Forbes, when movements recognize and depend on other movements, one's movement is strengthened (P. Forbes, personal communication, 7.9.2009).

Whole Thinking Workshop

Soon after launching the Center, the co-founders came to realize that they wanted to bring people to the farm. They envisioned that the extended stays at the farm would empower a new appreciation and deeper understanding of the significance of growing one's own food, in addition to learning to "live in service to their own ideals and vision, and to re-kindle their purpose and passion" (Center for Whole Communities, 2009). The first efforts of bringing people to the farm started as week-long Whole Thinking Retreats, and now they offer a variety of shorter workshops including The Whole Thinking Workshops, which are intensive, two day sessions designed to strengthen the work of organizations, coalitions and communities through reflection and consideration of how their work relates to the 'whole.' As quoted from some of their marketing material,

> The Whole Thinking workshop is an intensive workshop designed to help diverse leaders create new coalitions and new approaches in order to address broad-level environmental and social change. We will practice transformational leadership that includes listening, cultural competency, adaptation and flexibility, making room for others and cultivating a moral voice (Whole Thinking Workshop pamphlet).

During the workshops, the participants are guided through an inward and reflective process that seeks to help the leaders shift their view of their work, and their potential, through safe and productive dialogue about the roles of race, class and privilege in their work. In other words, the Whole Thinking Workshop provides a framework for leaders to explore their own biases and achieve a shift in thinking for how their work relates to the *whole*.

IRB Acceptance

Permission from the Institutional Review Board (IRB) at Colorado State University to begin research was granted before the participant recruitment process began. The application included assurances and methods that comply with the University requirements regarding human research. A copy of the consent form is found in Appendices D and E.

One of the co-founders of the Center assisted in gaining entry into the field through written consent (Appendix H). The co-founders of the Center for Whole Communities agreed to provide access to the workshop facilitators and participants, as needed.   In addition, they agreed to the researcher's role as a participant while attending the Whole Thinking Workshop at Knoll Farm in July 2009.

Participants and Methodology of Data Collection

In a phenomenological study, the participants need to have experienced the phenomenon (Creswell, 1998). For this study, the phenomenon was the Whole Thinking Workshop. This particular Whole Thinking Workshop was an open invitation, therefore the workshop participants voluntarily attended. The participants were leaders of their respective movements and were interested broadening their perspective of their work and appropriately address the needs of the future. The research collection was conducted from July 2009 through August 2009. This study engaged three levels of data collection including (1) participant observation, (2) a focus group, and (3) semi-structured facilitator and participant interviews. Initially, the workshop participants were introduced to the study through electronic mail sent from the Workshop Coordinator. The participants were invited to ask questions and/or opt-out in order to ensure comfort with the study.

Each of the confirmed workshop participants agreed to the researcher's role as a participant in the workshop. After receiving permission to attend the Whole Thinking Workshop as a researcher, the researcher invited the workshop participants to further participate in the study through the focus group and individual in-depth interviews. Additionally, the researcher invited the two workshop facilitators to participate in the interviews. Of the 18 workshop participants, 7 agreed to participate in the focus group and individual interviews. Both of the facilitators agreed to be interviewed for the study, which served as a method of triangulation, as well as offering insights to the researcher. The participants were able to answer questions related to their experiences with the workshop, and their perceptions of the activities, in addition to the impact the workshop had on shifting their thinking.

<center>Procedures for Collecting Data</center>

The researcher relied on three data gathering techniques to carry out this study: (1) participant observation, (2) a focus group, and (3) semi-structured facilitator and participant interviews. The choice to collect data from multiple sources was intended to triangulate the study, as is expected for a phenomenological study. The data collection for this study occurred in the following order; workshop facilitator interviews before the start of the workshop, participant observation during the workshop, a focus group of workshop participants immediately following the workshop, and participant interviews one month after the workshop. Combined, all three methods produced a deeper understanding of the participants' experiences and perceptions of paradigm shifts based on their involvement in the workshop (Berg, 2007; Marshall & Rossman, 2006). Procedures for collecting data are outlined below.

<center>37</center>

1. Facilitator interviews were the first form of data collection. Before the interview started, the researcher asked that consent forms be signed for participation. The researcher interviewed both of the workshop facilitators before the workshop began. Both interviews were conducted individually, in the comfort of their office. Open-ended questions were asked in reference to facilitator's goals and expectations of the workshop, as well as regarding the facilitator's insights into fostering paradigm shifts for individuals in a workshop of this nature. The facilitator interviews served as a measure of reliability and validity for the researcher to cross-check during data analysis. The interviews were audio-recorded and transcribed.

2. The researcher attended the Whole Thinking Workshop as a participant. The researcher made her role as a researcher known to the other participants, but participated in the workshop just as any other participant by engaging with the group during the workshop activities. This form of researcher as participant served to build rapport with the workshop participants, gain insight into the field of study, and as a reliability and validity check during data analysis. Throughout the workshop, the rearcher took jot notes on topics related to the participants' experiences with the workshop factors and activities. The participant observation will add to the field data and provide deeper insight based on the researchers experience.

3. The focus group was held at the Center for Whole Communities, immediately following the closing of the workshop, and was scheduled for 120 minutes. Before the workshop, the Center for Whole Communities sent correspondence to

the participants via email, which explained the research study and offered the respective volunteers a chance to participate in the focus group immediately following the workshop. The size of the group is significant, because while a larger group creates more responses, a smaller group allows each participant to discuss their views and experiences on the topic and is more in line with the goal of phenomenological research designs (Creswell, 2003). At the beginning of the focus group, the researcher asked for consent forms to be signed for participation. The focus groups consisted of 5 of the July 2009 Whole Thinking Workshop participants. The meeting was audio-recorded and transcribed. The focus group yielded significant insights about the experiences of the workshops and allowed the researcher to clarify questions for the individual interviews. The focus group helped to refine the in-depth interview questions and clarify the researcher observations.

4. The individual interviews were conducted one person at a time during the month of August 2009. It was the researcher's intention to wait one month to allow for personal reflection and processing for the participants. The participants were introduced to the study via email correspondence from the Center for Whole Communities and were invited to volunteer to participate in the study following the workshop. A total of 5 participants were individually interviewed, three of which also attended the focus group, therefore, there were a total of 7 research participants. Before the interview started, the researcher asked that consent forms be signed for participation. The interviews were conducted via phone, where the participants were allowed to be in a setting comfortable to them. These

interviews were scheduled for 90 – 120 minutes. Rapport was established

through the researcher's prior role as a participant in the workshop. The

researcher asked open-ended questions in reference to the the participant's

background and their experience at the workshop. The interviews provided

insight into themes of factors and/or activities that emerge as effective for

facilitating paradigm shifts as experienced by the participant.

Data Analysis

The process of qualitative data analysis and interpretation is inherently

problematic, as the data is affected by the researcher (Atkinson, 1992 as cited by Miles

and Huberman, 1994). Data triangulation was employed by collecting from multiple

sources as an attempt to provide objectivity to the data anlaysis process. In addition, field

notes and transcriptions of interview meetings were written in effort to capture the

objectivity of the experiences (Miles & Huberman, 1984).

The transcription is the beginning of the coding process, however, according to

Weiss (1994), coding continues at any time while reading the transcripts and perhaps not

until the final report is completed. Coding is the process of organizing data into themes

and categories (Creswell, 1998) After typing the transcription, the researcher wrote a

brief summary of the interview to obtain a general sense of the information and reflect on

its overall meaning, and the emergence of potential working definitions of key concepts

(Creswell, 2003). The researcher followed phenomenological data analysis methodology

originally developed by Colaizzi (1978, as cited by Creswell, 1998). The procedural

steps include (1) read and re-read all transcriptions in order to acquire a general sense, (2)

develop significant statements from each participant, condensing statements by

40

eliminating the same or nearly the same statements, (3) formulate the meanings of

significant statements, and (4) organize clusters of common themes from the formulated

meanings (Creswell, 1998). The qualitative NVivo software was used to identify and

organize significant statements from each participant, and assist in the coding of themes.

Additionally, the results of the study were shared with the workshop facilitators in order

to confirm accuracy of researchers' interpretations, and to offer a chance for the

facilitators to provide feedback.

CHAPTER FOUR: FINDINGS

Introduction

A qualitative approach was used in this exploratory study to understand the phenomenon of the Whole Thinking Workshop. The Whole Thinking Workshop aimed to engage the participants in an experience designed to foster expanded values and new goals for professionals in their given areas of discipline. This study sought to explore how paradigm shifts can occur in a workshop setting and understand the meaning of the experiences of the Whole Thinking Workshop participants. The purpose of this research was to examine the experiences of individuals who attended a workshop aimed at shifting thinking, identify specific factors and activities that can foster a paradigm shift, and provide insights to building visionaries as to how to engage building professionals toward a new paradigm. The interviews yielded insights to answer the research questions: (1) Do workshop participants perceive that they experienced a shift in thinking because of their experience(s) at the 2009 Whole Thinking Workshop? (2) What are the specific activities used in the Whole Thinking Workshop that helped to facilitate shifts in thinking in a workshop setting for the research participants? (3) What insights can be gained for building professionals to begin the work of shifting paradigms?

Participant Profiles

Of the 18 workshop attendees observed during the workshop, 7 attendees participated in the further research for the study, in addition to the 2 facilitators. The 7 workshop attendees made a personal choice to participate in the workshop. For the purposes of anonymity, the names of the workshop attendees have been changed. The

facilitator names are real, as there was no need for their names to be anonymous. A few general themes are present in the background and current mindset of each of the workshop participants, including (1) a sense of environmental responsibility, (2) a commitment to social justice work, and (3) motivation to continually develop personally and professionally. While the workshop participants attended with a generally high level of understanding of environmental and social issues, the intention of the workshop was to expand and shift their perspectives on how their work relates to the whole by expanding and adding new perspectives to consider. This study explored the Whole Thinking Workshop because the leaders that participated, like building professionals, are generally entrenched in their thinking and professional approach, and the workshop aims to guide individuals through a personal process in order to bring underlying assumptions into question and achieve shifts in thinking.

<div align="center">Workshop Facilitators</div>

Peter Forbes

Peter Forbes is the co-founder of the Center for Whole Communities. He admits that he "grew up with [the Center] as much as it grew up with him." As a professional photographer, he has learned to see things just as they are. When he found his way as a professional in the land conservation movement, he began to notice that something was missing. In all corners of the United States where he worked on land conservation projects, he was working with the same group of people – white privileged men. He came to understand that in order for land conservation to be effective, the underrepresented citizens of the United States needed to be connected to this work, too. As he put it,

<div align="center">43</div>

I remember being in Sociology 101 and reading Maslow's hierarchy of needs. That is a neat way of explaining what I was observing…that you need to have a little bit of time, money and comfort to think about things that are environmental. I have since come to learn that that is a framework, or a paradigm, of the dominant culture. In truth, everyone needs nature. Everyone needs a connection to land. They need it in the same way that they need food and a [place to live] and so the [purpose of the Center for Whole Communities] is to try to help those that are concerned with people and the land to see that their work is connected. To really come to grips with the things that divide us, which center around class, privilege, race, gender and these things that keep us from helping one another.

In summary, Peter envisions a world where people understand that they need a connection to nature and each other, just as they need a place to live, and food to eat. He hopes that leaders of social and environmental movements will seek to rekindle a connection to this need in all people. Peter envisioned the Whole Thinking Workshops to serve as a way to create bridges between disparate movements in social equity and environmental stewardship, and he has the highest hopes that these bridges will eventually bring the movements together. He envisions the achievement of "a process that allows people to get some place on their own" and is dedicated to "creating the context where people can be open to the land and be open to themselves and others in ways that they haven't been before. Our theory of change is that those two things are linked." He explained, "For us, transformation is revealing the relationships that exist and turning…unhealthy relationships into positive relationships."

Stephanie Kaza

Stephanie Kaza has been a practicing Zen Buddhist student for the past 35 years. Stephanie is also Professor of Environmental Studies at the University of Vermont. She teaches and advises undergraduate and graduate students with a concentration in the environmental humanities. The Center for Whole Communities invited her to co-facilitate workshops because of her work in contemplative practice and meditation, her professional environmental work, and her long commitment to issues related to class, race, sexual preference, and gender. She explained that she has mostly taught herself how to teach and facilitate groups through trial and error during almost 40 years of teaching. She asserts that, while intuition has a small role in her facilitation work, "it is actually a skill that you try to improve upon, based on the situation, the context, and what is called for." She explained:

> I consider the time limits, the goals, and the attention span of the
> audience…Really tailoring things to get enough feedback during and after the
> activity to make sure it works. It requires skills in listening openly to that
> feedback and not being personally identified with it, and taking a role where you
> are not directing everything with your own opinions, but making it possible for
> other people's ideas to be expressed…It requires a tremendous amount of
> intention and clarity about what are you doing, right now…You do the best you
> can when you don't really know the outcome.

Stephanie explained that during a Whole Thinking Workshop, she works to facilitate the group to increase "our humanness," and encourage the group to use each other as "teaching tools to help cement the learning that does happen." She explained

that people might experience paradigm shifts, but that it may not happen by the time they leave. She explained, "It is much more nuanced. [The workshop] is more about planting seeds...You don't know if the seed will stay dormant for a while or sprout immediately." Stephanie used a metaphor to describe what one might experience by attending a Whole Thinking Workshop:

> It is like going through some weather for a weekend. For example, the way a [storm] goes through an ecological community, some [trees] will bend over and then bounce back. Some will bend over and have a new bend in the truck as they grow back…It is like a flavor that moves through everybody all at once, for a certain period of time, that affects the organisms differently depending on how they came into it. We are putting out the sameness [piece] of it, they are bringing to it the different-ness; and how they go through it and come out the other side depends more on their different-ness.

Workshop Participants

"Rosana"

Rosana is a university professor who started asking herself, "How does our relationship with nature effect how we are when we are talking with each other?" As part of this question, she envisions bringing natural resources and natural systems ecology into a career of bioethics, which has been a more clinically, or even policy-oriented career in years past. She has been a professor of ethics and ecology for many years and would like to find a connection between these two worlds. She would consider, however, a new direction if that is what it takes to cultivate a deeper understanding of our connection to the natural world. Rosana began asking her friends and colleagues of

46

known connections that she might consider in order to explore her question further. One of her friends recommended the Center for Whole Communities, and Rosana made a choice to attend the Whole Thinking Workshop as a way of exploring her burning question. She was drawn to the workshop, additionally, because at this point in her career, she is seeking new and better ways to "keep the inner fire going." As the elder of the group at the Whole Thinking Workshop, she brought wisdom and experience to the participants, but had great receptivity to learning from her experience and from the others. She envisioned a world of people that participate with the natural world because, "If your work doesn't allow a richer relationship with the natural world, and with each other, than it's no good." For Rosana, it was refreshing to hear of an organization "walking the talk" and she wanted to know more about how this organization was doing just that.

"Margaret"

Margaret was born and raised in a suburban town and during the beginning years of her adulthood she began to recognize a general disconnection between society and environmental stewardship. Margaret grew up with three siblings, each of whom she feels see her as "different." While she often feels concerned that her family sees her as different, and therefore cannot relate with her, she deeply values family and community, and longs for a "sense of freedom and beauty, and a sense of nurturing and sharing with others." Through her studies in higher education, she has developed a deep sense of responsibility for an environmental stewardship. Often she feels isolated from her family, as they do not share this environmental responsibility. She longs to be accessible to others and to find a way to communicate with people who have not developed a sense

47

of environmental responsibility. She was drawn to the Center for Whole Communities and their mission, and began working as an employee for the Center. Through her employment, she was invited to attend the Whole Thinking Workshop. She was especially drawn to the Center's work in social equity and justice, including power, privilege, difference, race, and gender issues.

"Gordon"

Gordon grew up with easy access to the natural world. He was raised with a sense of freedom to explore and experience the outdoors. As an adult, he attributes his career path in environmental science and ecological design to "a few quiet moments spent in between mucking and canoeing" with family and friends, especially with two family friends who were committed to teaching Gordon about the natural world. He considers his freedom and education as a young child to be a great privilege. At an early age, he understood environmental responsibility to be protecting the environment *from* people. His thinking has since evolved and he is dedicating his career to participating *with* the natural world in a way that is harmonious. While he holds a master's degree in Leadership and Sustainability, he still considers himself on the learning path. He has extensive education and experience in ecological design, but is coming to realize that it's time to unlearn some conventions, in order to tap into some old wisdom about how humans and the natural world could interact. As he is acquiring new knowledge of this wisdom, he is seeking new tools and techniques to facilitate this concept. At this point in his life, he is dedicated to working for change and to helping people recognize their true potential and the potential that exists when working from a place where the human world and the natural world are completely interconnected. As Gordon put it,

I value a compassionate world. Compassion always comes to mind for me,

especially more as I get older and experience [compassion], but I value

relationships and connection and I see this all through this entire workshop. I

never used to see that before. Again, I was very much in a silo of facts and

figures and science and now I am [interested] in the 'fluffy' category more, which

I think is so important…I am aligning…my value system.

To this end, Gordon was looking forward to a train-the-trainer format in the Whole

Thinking Workshop. He wanted to understand the tools and techniques used to facilitate

the group at the workshop.

"Jenifer"

Jenifer has spent her career in mental health and land conservation. She currently

lives in a very small town, and often feels a sense of isolation from her community. She

is very concerned about societal consumption patterns in the United States and does not

feel that she can talk to anyone in her community about her concerns. While she has

worked many years in the land conservation movement, she has recently come to realize

that she needs to spend more of her time and money elsewhere. When she was working

in land conservation, she felt strongly about conserving land to keep it from being

developed so that future generations could have access to wilderness areas. In recent

years, she has found herself more interested in the *Transition Movement*, or the efforts to

encourage communities to be more self-sufficient, resilient, and committed to local food,

energy, and material resource production. Jenifer explains,

At the time I was doing [land conservation work], it made a lot of sense to

conserve land, set it aside and keep it from being developed so that future

generations could have wilderness areas. but when I started to get involved in this other stuff and I became aware of the threats that civilization was facing from running out of resources and increasing CO_2 levels…I did a lot of reading about that and decided…what I was doing was kind of meaningless.

The Whole Thinking Workshop offered an opportunity to talk with others about her concerns. The impetus for her attending the workshop was to begin to share thoughts and ideas with others and she was hoping for a safe place of like-minded people to delve even deeper.

"Sara"

Environmental stewardship has always been logical to Sara, based on numbers and science. Sara received an undergraduate degree in Environmental Sciences and early in her career she became an environmental educator. In general, her educational tactic has been based on facts and figures.   Recently, Sara has been seeking rejuvenation. She had a rough year personally, which has made her professional engagement difficult, leaving her feeling "drained." The logical, data-driven approach was also leaving her feeling exhausted. In the last year, Sara started practicing meditation and incorporated it routinely in her life. Her experience with meditation has been transformational and through these experiences, she is recognizing the need for more qualitative or "emotional" components to education. In her work as an environmental educator, she continually strives to find new ways to inspire people and attending the Whole Thinking Workshop served as a way to learn new ways to reach and teach people. Sara was also hoping the workshop would encourage her to grow personally and in a way that will help

her professionally. Her ultimate goal, however, was to rejuvenate and recharge so that she can bring inspiration and enthusiasm to her students. As Sara put it,

> I hope to learn here, and experience here, to help me in my [professional work]. I found myself…coming back to the personal reasons why I came here. I do a lot of teaching, a lot of educating and…inspiring people to action. I am always trying to look for new ways to inspire people. I used to [take the approach] of getting facts and information and [present] a doom and gloom of what is happening. More and more I realize that doesn't work and people don't shift paradigms or change based on that…I am always looking for new ways to move in the other direction. I reach people on an emotional level and a hopeful level. In a way, I came here looking for new ways to teach and to grow personally which will help me professionally.

"Jacklyn"

Jacklyn was raised in a mid-sized town and considers her mother's "perception on an agrarian lifestyle" and her "sense of living on the land, living by your work…self sufficiency, independence and interdependence associated with that lifestyle" as what shaped her "longstanding interest" in sustainability. She began to articulate her interests in sustainability during her undergraduate degree, particularly through one memorable experience. Jacklyn explains,

> There was a particular time when I visited a friend's project. She was building a strawbale home and a solar outhouse…that was made out of cement and soda cans and was doing a lot with the natural landscape and the drainage, and had planned to plant an orchard. There were a number of things that were inspiring

51

and it made me think about how we might be able to live differently on the land, more in accord with nature and natural systems. It was very striking to me, her vision. That turned into a course of study for me at the university. I did a self-directed study and started to learn about concepts and philosophies of environmental studies, science and business.

Years later Jacklyn earned a master's degree in Sustainable Building and has been working as a green building consultant. Jacklyn explains her vision for the world,

…I value life and protecting our options as far as sustaining human life. It is a core survival instinct. I think there is some value in the human experience; I value that experience. I feel discomfort, sadness and pain when I see us being destructive to the land and to each other. I value and idealize a world that isn't hurtful.

Jacklyn's vision and appreciation of interdependence drew her attention to the Center for Whole Communities and the Whole Thinking Workshop. To Jacklyn, "it seemed like they are really connecting into…the next generation of thinking…about sustainability. Her main goal in attending the workshop was to deepen her practice and further her ability to be effective in her work as a facilitator and practitioner.

"Tasha"

Tasha has a diverse background of personal and professional experiences. She was also one of the few participants in the workshop of diverse ethnicity. Being a minority in the United States of America has lent a different way of seeing things for Tasha. At a young age, her mother encouraged her to be politically aware and active and to understand civil rights due to their familial history. She explains,

I am third-generation…American and my parents and grandparents were

incarcerated during World War II in United States concentration camps. As a

result of that experience, which my mother made me aware of at a fairly early

age, she had me read a book called, Farewell to Manzanar…because she wanted

me to be aware of it. As a result of that experience, she was politicized as an

adult and so it is from her that I developed a political consciousness and a sense of

social justice.

As a young girl, Tasha wondered about what the world would be like in order to be better

for everyone. Early in her adulthood, she recognized the role of education and came to

believe that education is the most effective way to effect social change. In addition,

because of her early experience in thinking about social change, she has pushed herself to

know and understand different or opposing perspectives. Tasha studies Buddhist

teachings, is a civil rights investigator, a graduate level management and leadership

educator, facilitates social change and conflict resolution for non-profit organizations,

and is active in environmental initiatives specifically affecting her local community. To

her everything is connected, and the way that she engages with and contributes to the

world exemplifies this philosophy. She works from a place of continual learning and

expansion. In her role as an educator, her tendency to see different perspectives serves

her and her students well, as she encourages her leadership and management students to

consider "systems thinking" by encouraging them to expand their perspectives and

background knowledge. As Tasha has been incorporating systems thinking in her

teaching curriculum, she has also been committed to implementing this view in her

personal life. As she said, "It all blends together very nicely for me."

Tasha was looking to have a different kind of workshop experience, and the Whole Thinking Workshop stood out as having the potential to provide something different. "The most intriguing and encouraging aspect was the fact that the workshop marketing material acknowledged the issue of privilege and racism," she said. Tasha is obviously immersed in these societal challenges and felt impressed to see people attempting to openly address them. Additionally, she was looking for more training and understanding of how whole thinking would tie into her environmental, social, and political work.

Summary

The research participants are leaders of their respective fields. The Whole Thinking Workshop provided a framework for leaders to explore their own biases and achieve a shift in thinking for how their work relates to the *whole*. Therefore, while the participants came to the workshop with a high level of understanding and knowledge in environmental and social issues, they perceived to experience a shift in thinking in the realm that was intended for the workshop. The research participants are akin to building professionals, because, like other professionals, they are generally entrenched in their thinking and professional approach in their respective movements. Hence, understanding the factors and activities that encouraged the workshop participants to reconsidered their worldviews is significant and will relate to the work of shifting paradigms in the building industry.

Focus Group and Individual Interviews

The researcher interviewed participants through one focus group and several individual in-depth interviews. The focus group was held at the Center for Whole

Communities, immediately following the closing of the workshop, and was scheduled for 120 minutes. The focus group yielded insights about the experiences of the workshops and allowed the researcher to clarify questions for the individual interviews.

The participant interviews were conducted one person at a time during the month of August 2009. The interviews were conducted via phone, where the participants were allowed to be in a setting comfortable to them. The individual interviews were scheduled for 90 – 120 minutes. Rapport was established through the researcher's role as a participant in the workshop. The researcher asked open-ended questions in reference to the participants' background and experience at the workshop. The individual interviews provided insight into the factors and/or activities that the research participants perceived as effective for faciliating a shift in thinking during the workshop.

The first part of the focus group and interviews were structured around building rapport between the researcher and participant, and was a time for the participant to share information about their background, perspectives, and visions. After the participant shared their background and current mindset, each participant was asked questions specifically related to the first two research questions: (1) Do workshop participants perceive that they experienced a shift in thinking because of their experience(s) at the 2009 Whole Thinking Workshop? (2) What are the specific activities used in the Whole Thinking Workshop that helped to facilitate shifts in thinking in a workshop setting for the research participants? The following is a summary of the research participants' answers to the questions asked during both the focus group and the individual interviews.

Question 1: What changes has the Whole Thinking Workshop brought about in your

thinking?

Contemplating this question was not straight forward for the participants. As Jacklyn explains,

> I think my shifts in thinking have been more incremental than transformative in nature…So, I would say it is probably a mini revelation…I mean, it is hard to know at this point how profound things will really end up being.

Each participant expressed some level of change in thinking through their experience in the Whole Thinking Workshop, though the level or type of change in thinking varied among the participants. Just as Stephanie, one of the workshop facilitators suggested, the workshop serves as a way to plant "seeds." Similar to Jacklyn, Rosana explained that her shift in thinking was "more incremental than transformational." She explained that she recognized that "there is more to this [work] than I was paying attention…I think that I had a paradigm shift…in that there is a much wider range of environmental work. The categories are broader," she told me; "…I have compartmentalized it in a different way." Jacklyn explained that she "learned new things," and Gordon expressed that he "gained new awareness." Sara described her new thoughts in response to specific activities as "a revelation." Sara continued to explain how she told herself, "Wow, I never thought about that. It was always in my subconscious frame [of mind], but I never really articulated it to anyone." When asked if she experienced a shift in thinking, Jenifer answered,

> Maybe. I am more likely to actually take some local action after going to that workshop than I was before it. I think before I went to the workshop, I was more

isolated and I had not really talked about these ideas with anybody and it never

occurred to me that anybody would care whether or not I did anything. That

never occurred to me before. After the workshop, I realized that it actually

probably did make a lot of difference to people if I did something. That was quite

a revelation.

Tasha answered the question by saying,

To a certain degree, there might have been a certain degree of affirmation of the

work that I already do…it enabled me to have a different perspective in a sense of

being a participant. As I said to you before, often times, because I am in the

position of being the facilitator of processes like this, my mindset is completely

different when I am facilitator as opposed to a participant. To be able to

experience the group dynamic of participant is very different. It is great because

it means that I get to listen differently to people.

Other participants explained the type of change that they saw in their lives since

the workshop. Sara explained,

I tend to operate more in a 'specifics' world, like when I am doing my daily work,

it is specifics of actions and action steps and when I had to sit down and ask

myself, in 30 to 40 years, what do I want my life to look like? It turned out to be

very general and values-based, and all those 'squishy' things. We talked about

compassion and kindness…I don't know what that means exactly, but I feel

like… that was a big shift in thinking for me.

Sara described another shift in thinking that was on a personal level, but directly

connected her professional life. She explained that "the importance of restorative

practices… restoring yourself and sustaining yourself, to also give back," was a profound

shift for her. She expands on that thought by saying,

> I realized how much I need it for myself but also for my [profession]…we talk
>
> about problems and solutions, but we don't always try to help people reconnect
>
> with... their spiritual awareness and reasons for getting involved with the
>
> environment…Especially in minority and low income communities, we will raise
>
> awareness about the problems and take action on the problems, but we don't
>
> necessarily help those people restore themselves in their own community. That
>
> was a big shift for me…I suddenly realized that we really are harping a lot on
>
> problems and solutions and not on healing ourselves and reconnecting within our
>
> own communities.

She even began to explain how she thought of ideas for implementing a change in her

teaching curriculum based on her shift in thinking. "I actually want to go back [to my

organization] and come up with some activities and programs to do just that."

Gordon expressed similar sentiments regarding the importance of restorative and

meditative practice in his life now. He said, it "was reinforced for me…that this is not

just important for me, it is important for my work as well."

In response to Question 1, all of the participants expressed a heightened

awareness of their own humanity, the value of community and quality relationships, and

the meaningful roles each of these play in their personal and professional lives.

Question 2: What activities helped you to think differently?

Each participant acknowledged many factors and activities that influenced their

receptivity for a shift in thinking during the workshop. The factors, such as the land, the

food and meals, and the sleeping arrangements, set the stage for receptivity to the activities. The activities, such as listening, meditation, appreciating difference, and dialogue, engaged their shift in thinking. In the interview with Peter Forbes, he outlined 7 skills that he considers essential to shifting thinking including: (1) awareness practice, (2) speaking one's truth, (3) listening to other's truth, (4) dialogue, (5) personal creativity, (6) leading from the center or the behind, and (7) building allies. In order to facilitate large groups through learning these skills, he considers a couple necessary conditions, including safety and organized conflict.

When asked about the factors and activities that influenced their experience, each of the participants acknowledged the land and the setting. For some, it was difficult to identify one activity specifically as having the most impact, explaining that it was the whole experience. Jacklyn responded by saying,

> It was that bigger construct, the location, the setting, the way they did things there and the way they facilitated it and the environment that they created. To me, I think it is the whole that really created the experience for me.

Jenifer reflected on the "physical location, the scenery, and the quiet" as being influential to her thinking. The element of consistency was also a factor for some of the participants. Jacklyn explained how she recognized that "being in a beautiful place that was really living the ideals that they have put forth." She explained,

> It is connected to the community. There is a connection to the food. There is a connection to people. There is a connection to the weather, and the place that you are sleeping, and you are engaging in a series of thoughtful, contemplative,

conversations with people and in some part, it is the sum of that experience that I think creates it.

Gordon, Margaret, Sara, and Jenifer each expressed that the "privilege walk" was profound in awakening their minds to new thoughts. At the start of the privilege walk activity each person stands side-by-side. The facilitator begins to ask a series of questions and the participants respond by taking one step forward or one step backward based on their answer to the question. Backward steps were underprivileged responses, and forward steps were privileged responses. In the end, the participants looked around to physically see who is standing where. Gordon described the impact of the experience,

> I think to me [the impact] has to do with the experiential nature of it, as well as the deep personal nature of it. Personal in the fact that it is with the people that I am here studying with. [The privilege walk] is a very introspective thing to go through. It triggered some very deep, scarred emotion that I hadn't expected.

Sara explains a similar experience in response to the privilege walk,

> That was a big one for me. I have never done that before…it was the first time really that I had a chance to think that I have been privileged [in areas] that I hadn't necessarily given credence to.

For these participants, the privilege walk awakened them to consider something new in themselves. This activity is intended to open receptivity, as Peter Forbes described based on his experience as a change facilitator, "When you consider something new inside yourself, you are much more willing to consider something new in somebody else."

The participants also had a strong response to the open dialogue and listening activities. Jenifer explained that for her, she would not have changed her mind on how to

interact with her community if she had not opened up and expressed her thoughts to the group, and given the opportunity for someone else in the group to respond to it. Gordon recognized that the open dialogue gave the opportunity to process and articulates his experiences more clearly. For Jacklyn, the open dialogue and intentional focus on actively listening opened her mind to appreciate "other people's stories," and she explained that she developed a greater appreciation to learn to "tell my own story and to use that as a way to bring [people] together." Jacklyn realized that "if we can connect to our own humanity and reveal that in a more vulnerable way…we may give others permission to do the same."

For Sara, open dialogue and awareness practices, such as meditation, were equally important. She recognized new thoughts during open dialogue, but she needed time alone to reflect in order for her thoughts to progress. Most of the other participants recognized the importance of the awareness practices, and expressed a new level of commitment to awareness practice in their lives as an effort toward being effective in their work. Jacklyn described awareness practice as a way of balancing her work and home life. She explained, "I need to take more time to nurture my own well-being, which ultimately…is better for my work, my family, and my [own well being]."

In response to Question 2, each of the participants acknowledged several factors and activities that engaged a shift in thinking. The factors set the stage for receptivity to the activities and the activities opened the participants' minds and hearts to consider something new within their self.

Question 3: Which activities would you omit?

While there was some variation in the participants' responses to this

question, each participant responded strongly to omitting the quadrant map activity. The quadrant map was originally developed by Van Jones to illustrate the four quadrants of work in environmental and social responsibility and stewardship. Each quadrant is meant to illustrate the work that one might tend towards based on their upbringing, and whether the upbringing included privilege or not, and a connection to nature, or not. During this activity, the facilitators asked the participants to place themselves in one of the quadrants and interact with one another while representing the visions of that particular quadrant. While this activity was least favored, the concept of the quadrant map was well received with each participant. Because there was frustration and confusion with the activity, the intended experience did not come through for the participants. Jacklyn explained that during the activity she was caught up in asking herself, "What is it? Is it now? Is it future? Is it me? Is it not me? Are we speaking for the quadrant? Am I speaking for us?" Pondering these questions distracted her from the intended experience. Rosana acknowledged that during the quadrant map activity, "there wasn't a way to expand my issue." Gordon explained that he is "trying to reach people outside the map, within the whole of the community, [though] were not on the map." In response to Question 3, most of the participants agreed that more explanation, set up, and unpacking of the activity as a group would have helped to engage with the activity as intended.

Question 4: How is the Whole Thinking Workshop different from other workshops?

The participants found that the Whole Thinking Workshop was different from other workshops, conferences, and retreats that they had attended before by being more focused on personal development, specifically as it relates to their professional lives. In their experience, professional development workshops are generally more focused on

facts and information, however they expressed that this workshop was more about considering personal biases and personal perceptions as a way to continue to develop professionally. Gordon explained that having the opportunity to "focus on the softer sides of self and [our] relationships" made this workshop different. "It was different in that it is focused on this issue of communication between groups that don't usually communicate," Jenifer said. She continued by explaining that other professional development workshops are usually "more information and less emotion." Sara's recollection was similar, acknowledging that "connecting with people on an emotional level made this workshop different from the other, more educational workshops" that she had attended. According to Jacklyn, this workshop was different due to the "intent on being inward and contemplative and opening [for] the personal exploration."

In response to Question 4, the participants acknowledged that the Whole Thinking Workshop was indeed a professional development workshop; however it was different than other workshops and conferences that they had attended because they engaged in a more personal and introspective process with other professionals.

Question 5: What was the most important part of the Whole Thinking Workshop?

Each participant identified the components of the Whole Thinking Workshop that made it different from other workshops and what made it different were also the most important parts of the workshop. Tasha's monologue about what is most important about the workshop summarizes the general response of the other participants.

> The location is primary…the connection to the land...The intention of wanting to create a connection between people, the food we ate was…as local as possible…all of us participating in cleaning up or preparing for meals, and

63

sharing living spaces. Even though we all had our own places to sleep, we had a

shared bathroom…spending time together in the circle, the silence, the

meditation, reading together during the meals.…That was so powerful in ways

you can't even quantify. It just sinks in, in a way, as opposed to a straight,

academic, intellectual [experience]…which doesn't have the same

impact….Planting the tree together at the end. Seeing the relationships between

the staff and…the value they place in each other regardless of what their position

was at the Center. All those things may seem really small, but are very important.

Jacklyn also talked about the space and security to "reveal your humanity and…

help reveal that in others." Additionally, Jacklyn and Gordon acknowledged the

importance of being away from their home life and from their comfort zone. In response

to Question 5, the participants felt that the most important part of the workshop was the

deeply personal nature of the days spent on the land.

Question 6: From your experience, how much is the shift in thinking a result of the

collective experience?

Each of the participants acknowledged that the collective experience, or actively

and openly interacting with each other, was crucial to shifting thinking. Jenifer openly

admitted that if she had not put herself out there and said something that was difficult to

say, she would not have had the opportunity to hear another participant's response, which

in turn resulted in her paradigm shift. Gordon expressed that he did not have an "original

revelation," or a revelation that came to him independent of anything someone else said,

because the shifts in his thinking were always catalyzed by something that someone else

said, or in response to one of the activities. Jacklyn explained,

It seems impossible to not have…that connection with everyone. That is integral

to the fabric of what is being done here, learning to see others in our own

humanity and respect differences, and similarities, and get in touch with our

humanity and ourselves through compassionate listening…and presence.

Sara expressed that the collective experience with others was integral to shifting

her thinking because "hearing different perspectives is key," but the meditation activities

were also an important component for her shifts in thinking. Tasha recalled,

Without [the collective experience], it is hard for [a shift] to take place. You need

to have the opportunity to talk with other people about what you are thinking and

what you are feeling…I don't think any kind of significant social change can

happen without dialogue. We can't do this in isolation…I think book learning

certainly allows for more [reflection], but you also need to practice and engage in

dialogue.

In response to Question 6, the participants expressed that the collective

experience, or openly engaging with each other was a crucial element to their shifts in

thinking.

Phenomenological Analysis of Data

 The researcher followed phenomenological data analysis methodology originally

developed by Colaizzi (1978, as cited by Creswell, 1998). The results were derived from

the following procedural steps. The researcher (1) read and re-read all transcriptions in

order to acquire a general sense of the data. Then, the researcher (2) extracted significant

statements from each participant, condensing statements by combining like statements

and eliminating the same or nearly the same statements. For instance, the researcher

tracked a total of 133 statements from the participants regarding factors that were useful in shifting paradigms. The researcher chose to combine and/or eliminate like statements without losing meaning in order to condense the list to the essential statements. The final list of significant statements regarding factors useful in shifting paradigms was condensed into 36 statements (see Appendix A). Furthermore, there were 22 statements condensed into one statement called "Being encouraged to explore our own humanity with one another." Statements that were condensed into this statement included "I began feeling like I could talk to anyone because I was more in touch with my own humanity," and "Exploring human to human relationships draws me to this place," and "A sense of humanity and interest in other peoples stories was a shift for me." From the significant statements, the researcher (3) formulated the meanings of significant statements. For instance, the researcher read and re-read the list of the different statements and thought long and hard about the content of the different statements to understand the meaning. Finally, the researcher (4) organized clusters of common themes from the formulated meanings by distilling the meaning down to a few words. When the researcher had a list of themes from the meanings, she clustered them into 3 categories so that they are more easily digestible for the reader. The results of each of these steps are presented in Appendix A and are discussed in the following paragraphs.

Dimensions of How Paradigm Shifts Can Occur

The goal of the research was to understand and describe the specific activities and factors of the workshop that facilitated a shift in thinking for the workshop participants. Participants in this study have lived and experienced the phenomenon of the Whole Thinking Workshop in a variety of ways. It is clear that a *paradigm shift* is a complex

phenomenon and the experiences vary for different people, depending on place in life, past experiences, current mindset and receptivity.

While the occurrence of paradigm shifts is complex, there were several commonalities that emerged in this study. The term *dimension* is used to acknowledge that the themes discussed by the participants in this study emerged in varying degrees or strength depending on the person and their experience. Originally, the researcher sought to identify specific workshop activities that were effective for shifting paradigms. While analyzing the data, the researcher realized that, while the activities were important, there were several dimensions of how paradigm shifts occur. As shown in Table 1, several themes emerged in the study, which were clustered into three categories: time, systems, and humanity. The themes were clustered into 3 categories helps to provide organization to the results, which may provide direction for future research. The common themes that emerged in the study demonstrate the dimensions of how paradigm shifts can occur based on the participants' experiences.

Table 1. Clustered Themes

1.   Time
   a.   Uninterrupted and appropriate amount of time
   b.   Time away from regular responsibilities
2.   Systems
   a.   Shared understanding of expectations and objectives, and clear direction
   b.   Diversity
   c.   Safety
   d.   Consistency
   e.   Engaging activities
3.   Humanity
   a.   Spirituality
   b.   Contemplative Practice
   c.   Aligning values
   d.   Storytelling
   e.   Open dialogue

Time

The notion of time was discussed universally by all participants as a key influential factor in the workshop. The following themes organized in this category are the factors of time emphasized by the participants. For some, there could have been more dedicated time to go deeper; some wished that the workshop was longer to allow for more time to engage in activities and with their fellow participants; others expressed an appreciation for being given extensive amount of time to practice actively listening; and some appreciated simply having the time away in a safe place, and to engage with each other and themselves in a variety of ways. The participants shared thoughts and experiences around the need for uninterrupted time to process and explore. The participants also acknowledged the general need to be allowed the appropriate amount of time to process, converse, reflect, and contemplate.

Uninterrupted and Appropriate Amount of Time

One of the first activities during the workshop was focused on truly listening to others, or "active listening." This activity is intended to illustrate the importance and value of listening. It was deliberately at the start of the workshop, so that the participants would cultivate the skills and insights of active listening to be used throughout the workshop. Therefore, in the spirit of this activity, the participants often found themselves having intentional focus on listening during open dialogue activities. Jacklyn explained that a dimension of her own paradigm shifting was connected to "having to spend a lot of time in a large group and a lot of intentional focus on listening." An element of listening was silence and uninterrupted time to allow for others to process at their own pace to finish their thoughts without others changing the direction. Similarly, the facilitators

allowed for uninterrupted time during periods of group silence, allowing for the group to mentally process at their own pace. The facilitators managed the group by encouraging the outspoken participants to listen more, and the soft spoken to find the courage to speak. They also managed interruptions from other participants while someone was speaking. During the Whole Thinking Workshop, the researcher noted that the facilitators did not interrupt this time of silence, and it became clear that this time was essential for the participants in the group.

While an important component of the workshop was to practice listening, some participants needed a more appropriate amount of time to verbally process before they could get to the essence of their understanding or discovery. Gordon stated,

> With 15 people talking, there is pressure to get it right, get whatever you want to say right; because it might be the only chance you have to speak up. So, you have to get out what you want, right off the bat.

Gordon expressed that we would have liked "to increase the amount of small group or one-on-one discussion we were doing with each other." Jenifer also expressed that it "would have been more valuable for me if we had more open discussion time and a lot less structured time."

Tasha observed that there just was not an appropriate amount of time in the workshop for the group to work from a deeper place. She recognized that the group needed "to get deeper, and in order to get deeper, you need a lot more time." She stated,

> I actually think the workshop should be longer. I am not sure that two days is enough to really get into…those deeper spaces. I am a very intense person who likes to dive very deeply into thinking and feeling into the issues and I would

have wanted to have more time on everything that we did and then some. There were some things that we didn't talk about…I wish we had the opportunity to debrief more with each other.

Time Away from Regular Responsibilities

Many participants acknowledged that having the time away from regular responsibilities of their daily lives was an important dimension of their experience. They expressed appreciation for time in a safe place to explore, listen, and discover. They expressed that they find themselves regularly too busy to take time to reflect and contemplate. Tasha explained that the Whole Thinking Workshop "gave me time to work on the spiritual aspect of my work, which I don't often have enough time [for]." While considering this element of the workshop, Tasha asked, "How many of us actually take the time to just sit and learn to calm the mind?" She recognized that this is a "very precious practice," but that too often we don't "do enough of." Tasha expanded her thought by acknowledging that this time is an important element of continual learning and growing, personally and professionally. Similarly, Jacklyn explained,

> [The workshop] cultivated a very receptive, open space and time for thoughtful contemplation away from the typical roles and responsibilities of the rest of my life…This was a really nice opportunity to take a break and be cared for and nurtured for in a kind of way, to be nurtured not just on a physical level but on a spiritual and personal level…and to be given the opportunity to do some exploration that was ultimately very healing and very nurturing. I don't find that kind of time or dedication to that in the rest of my life.

The Time Theme documented that time was a factor in facilitating paradigm shifts in two ways including an uninterrupted and appropriate amount of time during activities, in silence and during open dialogue, and time spent away from regular responsibilities and distractions.

Systems

The following themes organized in this category are explicit, interrelated elements that contributed to making overall conditions conducive for shifting paradigms at the Whole Thinking Workshop. While they are each considered a system, they are not considered in isolation of each other, as they were interrelated and interconnected in this study. These themes were categorized as systems because they are a set of interrelated elements that create an integrated whole and suggests the notion that a systematic approach is necessary for shifting paradigms.

Shared Understanding of Expectations and Objectives and Clear Direction

A common experience shared by the participants was the need for more direction, or explanation of the concept or activity. Gordon stated that it would have been beneficial to have a little more explanation of the purpose of the workshop at the beginning. He said, "…not just what we are doing and how we are doing, but why we are doing it." He also expressed that he would have like to hear the facilitators explain why the workshop is important and how it could be applied to his profession.

As stated above, that the participants expressed discontent with the Four Quadrants activity, mainly due to a lack of understanding of its context, purpose, and application. The activity felt forced and did not resonate with the participants, and therefore they were not able to fully engage with the intent of the activity. Jenifer recalled

71

that the four quadrants activity was "not useful" and was too "theoretical" for her. Margaret postulated that perhaps "putting it in context" might have helped her understand the purpose. Jacklyn reflected on a couple of the activities and recalled not understanding the intent, and therefore recalled having a hard time engaging with the activity. For example, workshop participants were to take part in a music meditation activity. Jacklyn stated,

> The music meditation, I don't know if it was the way it was framed…it just…was awkward…Frankly, I am not quite sure what the intention was. I don't know what purpose it was supposed to serve.

Additionally, the participants acknowledged that they had different expectations for what they may experience during the workshop. Gordon thought that it would be a format more like "training-the-trainer," which is a more linear program of study compared to this workshop, and therefore he found it difficult to engage in intended experiences at the start of the workshop.

Diversity

Diversity was acknowledged by a couple of the participants as a dimension of paradigm shifts. In this study, diversity refers to inclusivity of diverse backgrounds and perspectives including, social class, race, ethnicity, religion, language, ability, race, gender, age, and sexual orientation. While the ethnic diversity of workshop participants was minimal, there was diversity between age, religion, social class, and gender. The participants acknowledged that diversity ensures a variety of perspectives are being considered and they acknowledged that perspectives different than their own challenged them to consider something different in themselves. Rosana acknowledged that while

72

there was a lack of ethnic and gender diversity, there was age diversity, which played a vital role in her "eureka moment." Tasha explained that because of her ethnicity and background she is always aware of the racial, ethnic, and gender diversity in a group. She expressed that a lack of diversity could have unfavorable effects on the group dynamic. She explained that while she "didn't feel unsafe…there were…things that I [didn't] say with the group…I don't think I was as open with the group as I might be with…people that I know well."

Safety

The participants acknowledged safety as an important dimension to paradigm shifts. Participants expressed that when they felt safe and secure, they were more likely to open up. Likewise, when they felt insecure, they were less likely to allow themselves to be vulnerable. Most participants acknowledged that the workshop was generally safe and secure. Jacklyn explained,

> As a whole, I would say that the way that [the facilitators] created the environment was very effective…through creating a space where people can be vulnerable, where people can be quiet, where people can really listen and share.

Gordon explained that the most important part of the workshop was "having that time and space for a few days…and being able to have that safe space." While the participants acknowledged that there was a general sense of safety during the workshop, participants expressed insecurity with particular workshop activities, keeping them from engaging with the group. Sara explained that during the storytelling activity she did not speak up and engage with the group because, while she is curious about the notion of storytelling

in her work, she was insecure about her ability to tell stories and did not feel "safe" enough to try.

The notion of safety as a dimension of paradigm shifts was additionally represented during one of the open dialogue activities. During the interviews and focus group, each participant recalled a tense conversation between two participants during one of the open dialogue activities and acknowledged the importance of sharing oneself and offering feedback to others. The heated conversation was between two of the workshop participants, Jenifer and Tasha. Jenifer shared with the group her overwhelming sense of despair toward creating change in her community and in the world. Tasha responded with an elevated tone, expressing frustration, not directly at Jenifer, but toward that kind of thinking. As a person of color, Tasha is sensitive to people that get stuck in a place of despair while sitting on so much privilege. Because Jenifer felt safe to share a personal feeling and Tasha could respond, Jenifer achieved a greater understanding of her assumptions and Tasha experienced a renewed sense of compassion, empathy, and connection to those that are different from her. Jenifer reflected with the researcher on this experience by explaining that she realized by sharing herself on a deeper level and accepting feedback from others "is how you learn," even though it can be "slightly scary," she said.

Consistency

The participants expressed strong appreciation for the level of consistency displayed throughout the workshop. For example, a general premise of the workshop was working for a more sustainable future. The Center has made a commitment to this ideal by utilizing photovoltaic panels that provide most of the energy for the Center's

operational needs, practicing organic farming on the land and selling their fruits, vegetables, and meat to neighbors, exchanging responsibly harvested goods with other craftspeople and farmers in neighboring communities, by honoring a sense of spirit through practicing Center-wide silence in the mornings, and displaying a high and equal level of care for one another between the staff and employees of the Center. Participants acknowledged that the overall consistency contributed to a general sense of safety and nourishment. Jacklyn expressed that being "cared for," in a sense, allowed her to be more present in the activities. Jenifer and Gordon both acknowledged that it felt like a privilege to be there. Tasha reflected on how the connections between the food, the relationships of the employees, and the meals aligned with the values of the Centers' mission. Sara and Rosana appreciated that they felt that the Center was genuinely "walking the talk." Jacklyn recognized that the Center "was really living a lot of the ideals" that they are putting forth for the workshop participants to consider. She further explained,

> [The Center] is connected to the community. There is a connection to the food.
> There is a connection to people. There is a connection to the weather and the
> place that you are sleeping, and you are engaging in a series of thoughtful,
> contemplative, conversations with people…it is the sum of that experience that I
> think creates it.

Tasha expressed similar sentiments to the value of consistency that was apparent throughout the workshop. She explained, that seeing "all those things may seem really small, but are very important…to see it in practice is wonderful."

Engaging Activities

Throughout the workshop, the participants engaged in a variety of activities that were intended to heighten the participants' awareness, recognize mental patterns or assumptions that guide their actions, and process through general barriers that keep people from being effective in their work.

According to the participants, some activities were effective and some were not as effective. It was the engaging activities, or the ones that were genuine, relevant, applicable, and meaningful to the participants, that encouraged the participants to consider something new in their own thoughts. The privilege walk activity, for example, was personal for some of the participants. The participants whom had a strong reaction towards this activity expressed that they had never considered their privilege prior to this activity. Gordon explained that this activity was "eye opening" and Sara explained that she experienced a "revelation." Similarly, the open dialogue and contemplation activities were favored because of the relevance and meaning. Most of the participants acknowledged that they appreciated having both active dialogues with one another, in addition to time for individual reflection. Sara explained that they were equally important to her. Jacklyn acknowledged the opening and closing activities, which were activities where the workshop participants shared a personal story, as being particularly engaging for her. Margaret acknowledged her shift of seeing the importance of being an ally through the privilege walk activity. During the focus group, the participants acknowledged a prevailing discontent with one of the activities, the four quadrants, and proceeded by brainstorming ways that the activity would have been more meaningful and relevant for them.

The Systems Theme documented the elements that created an environment conducive for shifting thinking, including shared understanding, diversity, safety, consistency, and engaging activities.

Humanity

Humanity became a constant over-arching theme throughout the study. The following themes organized in this category emerged as dimensions that brought the participants to realize their own humanity, or in other words, to cultivate the quality of being human. The activities and factors that drew the participants to acknowledge their own humanity also drew the participants out of old paradigms or assumptions. Sara realized that she wants to reach people "on an emotional level, and a hopeful level." Tasha acknowledged that her experience at the workshop brought greater awareness to "listening, compassion, learning, humility, gratitude, violence, [and] relationship." Tasha recognized that "the power of compassion" was renewed for her. She explained,

> In my day to day life, at times, I struggle with my capacity to have compassion for others and I think that is a reflection of the fact that I am too busy and don't have enough time for…meditation or just contemplative rest time.

Jacklyn explained:

> Afterwards I felt…I was more in touch with my own humanity, and therefore I could talk to almost anyone and I saw people in a somewhat different way. I saw people as not quite so threatening, but as each person just having their story and being more interested in knowing what their story is, and that interest, and that sense of humanity, would allow me to interact with people in a way that maybe I was scared to do before…If we can connect to our own humanity and reveal that

in a more vulnerable way, by doing that, we may give others permission to do the same.

The participants acknowledged the following themes that effectively enhanced awareness of the interconnectedness found within each other and their mind, heart, and spirit.

Spirituality

The participants acknowledged that openly honoring spirituality during the workshop was an important component in connecting to their humanity. Each one of the participants acknowledged some level of spiritual practice, and shared that they greatly appreciated that this workshop honored the spirit. For the purposes of this research, spirituality refers to a path that leads to deeper connection to the larger reality and greater awareness of self. Through spending a couple nights on the land, and by having set group rules for times of silence, the participants experienced several moments of time that provided space for the participants to connect with something deeper and greater within themselves. Jacklyn explained that she deeply appreciated being "cared for and nurtured for…not just on a physical level but on a spiritual and personal level," and that this nourishment "was ultimately very healing." Sara explained that she regularly strives to "understand the importance of restorative practices." She further explained,

> It's more than the mindfulness piece; it is all about restoring yourself and
> sustaining yourself, to also give back. That was big for me…I realized how much
> I needed it for myself, and my organization. [Our organization] talks about
> problems and solutions, but we don't always try to help people reconnect with,
> even though we are an interfaith group, we don't necessarily help people

78

reconnect with their spiritual awareness, and the spiritual reasons for getting

involved with the environment. In minority and low income communities, we will

raise awareness about the problems and take action on the problems, but we don't

necessarily help those people restore themselves in their own community…I

suddenly realized that we really are harping a lot on problems and [incomplete]

solutions and not on healing ourselves and reconnecting within our own

communities.

Jacklyn also discussed the need for spiritual practice in order to be effective in her work:

You will do better if you are grounded in your core and you are not getting

thrown around by your own emotions and fears and all that, so if I can

maintain…my own centeredness, then that is a better place to come from for

everyone involved.

Tasha explained that the Whole Thinking Workshop gave her "time to work on

the spiritual aspect of my work…in a non-religious sense." She explained,

I think it is an important part of all the work in all our lives, yet, as Peter said, 'it's

what we neglect the most'. Often, when we do pay attention, it is in superficial

ways and it doesn't really deeply inform the work we do, and so that is why I

think the compassion, the humility and the gratitude are pieces, for me, that are so

important to cultivate, [spirituality] is like the invisible glue that pulls everything

together.

Contemplative Practice

Each participant acknowledged the importance of contemplative practice and their

appreciation for this activity in the workshop. The participants discussed various levels

of contemplative practice as a dimension of how paradigm shifts occurred for them. The participants recognized the importance of contemplative practice in their daily lives and as a way to honor and connect with their humanity and, therefore, be more effective in their work. The participants acknowledged several factors and activities that incorporated contemplative practice during the workshop, including meditation, listening, periods of shared silence, and time for individual reflection and writing. Most of the participants had some experience with contemplative practice; however, there were a couple participants that had not formally meditated. Those with experience recognized that the workshop renewed or reinforced the importance of it in their daily life, and those without previous experiences acknowledged the value in meditation. Gordon explained that he has a tendency of "being on the verge of workaholic status" and that the workshop reinforced the importance of slowing down for reflection on a regular basis. He also acknowledged that making time for contemplative practice aids in his effort to continue to develop as a person, which is necessary for his work. Sara recalled that her shifts in thinking generally came "during times of silence," and were reinforced and supported during open dialogue activities. Jacklyn used the metaphor of building a puzzle to describe the role of contemplative practice and learning as she experienced in the workshop:

> It is like a puzzle that is slowly emerging. As you put the puzzle together and the picture is revealing itself, it is those big pieces that open up a little bit and…It allows you to see the picture in a new way. So you are learning about one of those pieces or a section of that puzzle and it becomes clearer to you through this [contemplative] practice of seeking and trying to understand. That kind of

80

learning doesn't really shift your behavior or your approach…It is just something

to be used…when it is appropriate…it is a deeper learning that is more ongoing

and it is changing the way you are framing yourself, your work, your relationship

with yourself and others and what you do.

Tasha explained that the workshop reminded her of the importance to find an

"opportunity to engage in self reflection, contemplation, which is a very precious practice

to have in one's life." She said,

It is hard to learn if you don't have that opportunity [to reflect]. The whole notion

of practice is you go out and do and also need time to reflect before you go back

and do again. It is just a cycle of learning, doing, thinking and reflecting…I really

appreciate the fact that they bring meditation, silence and space to the process

because I think that is so important.

Aligning Values

The participants found themselves wanting to make a stronger connection

between their personal values and their professional work, acknowledging that being

more connected to their own humanity might make them a more effective leader in their

respective movements. Rosana explained her response to one of the activities where the

importance of her values became clear:

There was a critical moment…when we were answering the questions 'What will

you take back to your organization?' and 'What is your vision for a Whole

Community?' That is when it started. It was about core values…when [Peter]

read it back to us, I was about in tears. That list [of our answers] was remarkable.

It was radical. That list was radical.

81

Sara talked about her experience of the same activity:

> The only response I came up with was very values based; not at all specific…I
> have never been asked that question before, nor have I thought about it really. I
> had to think…subconsciously and not consciously and when I had to articulate it,
> I realized how much I wanted my work…and how I operate my life to be based
> on those values. It was the first time it struck me to make that connection. I tend
> to operate more in a 'specifics' world like when I am doing my daily work, it is
> specifics of actions and action steps and when I had to sit down and [ask myself]
> 'what do I want my life to look like,' it turned out to be very general and values
> based and all those 'squishy' things.

In reflecting about her experience at the workshop, Sara acknowledged that she
"found myself [considering] the personal reasons why I came [to the workshop]." Sara
also explained that she had already began to change the way that she handles situations
and problems at work, and that she had been thinking about how to incorporate this new
awareness in her life. Gordon reflected on his thinking after the workshop and realized
that a balance between his personal and professional life "is not just important for me, it
is important for my work as well…to be effective in my work." Jacklyn explained that
she had been pondering how to implement an alignment of her values at work. She
admitted that she has to remind herself "to not just slip into old habits, but to retain some
of those changes in perception or some of those lessons that were available [at the
workshop]." She further explained why this alignment is important:

> It is important because I need to represent more of what it is that I believe in…I
> can't run around depleting myself and talk about rejuvenating things…It doesn't

have a functional purpose. That energy doesn't help me get my work done. It is only making me feel worse. Letting go of that frees up my energy…so I can take the time to just relax and do something that is restorative and not worry about it, not feel guilty about it…and take more time to nurture my own well-being, which ultimately I think is better for my work, my family and myself.

Storytelling

The workshop included activities that were intended to acknowledge the power of story, including deep listening, open dialogue, and storytelling activities. The participants recognized the importance of stories in honoring their humanity, as well as an important dimension of shifting paradigms. Jacklyn explained that she has "an appreciation for, and a greater capacity for, listening" and has been considering ways to encourage and implement more "personal stories in a professional setting" in order to deepen the dialogue between her colleagues. Margaret recognized that the workshop was aimed at turning the group of "leaders into listeners." She reflected that leaders are more effective [as leaders] when they cultivate listening as a practice in their work. For Jacklyn, honoring others' personal stories was directly tied to acknowledging the sense of humanity. She acknowledged that she has become "very interested in other people's stories, in learning how to tell my own story, and to [implement] that in a way that brings us together." "If we can connect to our own humanity and reveal that in a more vulnerable way, by doing that, we may give others permission to do the same," she said. Tasha acknowledged that everyone has a story, and that it is important to allow people to share their story and to afford people compassion for doing so. She reflected on a tense conversation that she shared with another workshop participant during one of the

83

activities. She explained that she could have allowed herself to get mad at what the other person said, but by instead having compassion for that person's story, she was able to bridge their differences and become allies. What came out of this interaction was productive, she explained, because her compassion gave permission for the other to "move beyond her despair."

Open Dialogue

Open dialogue was described by the research participants as an important dimension of paradigm shifts and as an important activity for connecting to one's humanity. Rosana described her "eureka moment" as a direct result of the open dialogue activities. Gordon explained that there "was not a moment where I had an original revelation." He noticed shifts in his own thinking, but they were the result of dialogue between the group and other individuals.   He recalled the tense conversation between two workshop participants as "a pretty important moment." Jenifer asserted that the open dialogue sessions were beneficial for her. She asserted,

> If you don't put yourself out there and say things that are slightly scary, you will never get the chance to receive any feedback….[a] lack of discussion, lack of openness, really hampers people's energy.

Jenifer explained that other workshops "don't result in any change…because everybody goes on thinking their usual thoughts. There is no real opportunity for facilitative dialogue." Jenifer acknowledged that creating a safe space was paramount for people to begin to share their thoughts and ideas. Tasha asserted that no amount of "significant social change [could happen] without dialogue." Many of the participants acknowledged that they would have liked even more unstructured time focused on open

dialogue because this kind of processing resulted in greater clarity and deeper discovery. Both Tasha and Sara acknowledged that reflection is important, but actively practicing and engaging in dialogue is essential in progressing one's thinking and ideas.

The Humanity Theme documented elements that facilitated a shift in thinking by cultivating the quality of being human, including spirituality, contemplative practice, storytelling, aligning values, and open dialogue.

Summary

The research questions sought to explore and describe dimensions of how paradigm shifts can occur according to those who attended the Whole Thinking Workshop. This chapter documented the participants' profiles and reasons for attending the workshop, individual interviews, the focus group interview, and themes that emerged from the study.

This research originally sought to understand specific workshop activities that were effective for facilitating paradigm shifts. Had the researcher designed a quantitative study around this understanding, true understanding of the phenomenon would have be missed. The exploratory phenomenological qualitative study allowed the researcher to gain deeper understanding of the phenomenon as told by those that have lived and experienced the phenomenon offering tremendous insight into the phenomenon of the Whole Thinking Workshop and foundations for further research.

While the participants were from different geographic locations, they are all leaders in social and environmental fields. The participants voluntarily attended the workshop and had some expectations of their experience, however, each participant recognized that their experience was different than they expected and they perceived to

85

experience a shift in thinking in the realm that was intended for the workshop. The research participants are akin to building professionals, because, like other professionals, they are generally entrenched in their thinking and professional approach in their respective movements. This study provided insights for building professionals by revealing factors and activities of the Whole Thinking Workshop that facilitated shifts in thinking for the research participants, therefore expanding understanding in how paradigm shifts *can* occur. While paradigm shifts may not happen in one workshop, the research participants showed that a workshop of this nature can engage the shift to begin and the factors and activities in this workshop were effective for starting the process of shifting paradigms. Three major themes emerged in the data and are characterized as *dimensions* of how to facilitate paradigm shifts in a workshop setting, and include: (1) Time, (2) Systems, and (3) Humanity. The Time Theme documented that time was a factor in facilitating paradigm shifts. The Systems Theme documented the elements that created an environment conducive for shifting thinking. The Humanity Theme documented elements that facilitated a shift in thinking by way of cultivating the quality of being human. A summary of the themes and how they relate to literature will be discussed in the following chapter.

CHAPTER FIVE: DISCUSSION

This study was focused on answering the following questions: (1) Do workshop participants perceive that they experienced a shift in thinking because of their experience(s) at the 2009 Whole Thinking Workshop? (2) What are the specific activities used in the Whole Thinking Workshop that helped to facilitate shifts in thinking in a workshop setting for the research participants? (3) What insights can be gained for building professionals to begin the work of shifting paradigms? There were three themes that emerged in the findings of the study and are characterized as *dimensions* of how to facilitate paradigm shifts in a workshop setting, and include: (1) Time, (2) Systems, and (3) Humanity.

The results of this study show that the participants' perceived to experience shifts in thinking as a result of participating in the workshop. The participants did not explain their shifts to be as Kuhn (1962) defined a paradigm shift or as Senge et al. (2005) described profound change; however some of the participants did describe their experience with an activity as "profound" or that they experienced a "revelation" during the workshop, acknowledging that even along the path of a champion, new information and perspectives are gained, with the potential to lead to paradigm shifts. Kuhn and Senge et al.'s definitions describe a process that takes more time than allowed in one workshop. An intimate exploration of the participants' experiences revealed factors and activities of the Whole Thinking Workshop that facilitated a shift in thinking for the research participants, therefore expanding understanding in how paradigm shifts can occur. When compared to the literature on human change, commonalities exist between the dimensions of paradigm shifts found in this study and dimensions found in other

research. Additionally, much of the results align with the 7 essential skills that Peter

Forbes shared during his interview, including (1) awareness practice, (2) speaking one's

truth, (3) listening to other's truth, (4) dialogue, (5) personal creativity, (6) leading from

the center or the behind, and (7) building allies. In *Presence: exploring profound change*

in people, organizations, and society (2005), Joseph Jaworski asserts that "the only

change that will make a difference is the transformation of the human heart" (p. 26),

suggesting that the paradigm shift needs to begin internally, at the individual level.

　　While the activities of the workshop were effective for facilitating a shift for

many participants, several other factors played an equally important role in the

phenomenon of The Whole Thinking Workshop. The results of this study cannot be

generalized; yet, groups such as building professionals and visionaries interested in

facilitating paradigm shifts may begin to use the results to lead the change in a workshop

setting. Below are summarized themes that emerged and a comparison of the results to

the literature.

<div align="center">Summary of Themes and Literature</div>

<div align="center">*Theme One: Time*</div>

　　The results show that time is essential for paradigm shifts to occur. While a few

authors have discussed time as an important component in workshops, no research has

shown the importance of time in the way that this study found, implying that there needs

to be more consideration in this dimension of shifting paradigms. In the study, the

participants acknowledged that there were two significant ways that time was a factor in

facilitating paradigm shifts in the workshop: (1) in having an uninterrupted and

appropriate amount of time during activities and open dialogue and for silence, and (2) by

<div align="center">88</div>

providing time spent away from regular responsibilities. During the workshop, there was enough time for the participants to acknowledge the value and importance of actively and deeply listening. The act of practicing listening cultivated a heightened awareness of the participants' thoughts, as well as an opportunity to take a deeper look into one another's position. Due to the brevity of the workshop, however, some participants acknowledged that they needed more time to openly process with each other to discover a deeper level of understanding. Additionally, participants acknowledged that a sense of safety was related to time. Had the workshop been longer, and more stories been shared, the sense of safety and vulnerability would have likely increased.

During the Whole Thinking Workshop, the researcher noted that there were many long periods of silence during open dialogue activities. The facilitators did not interrupt this time of silence, and it became clear that this time was essential for the participants in the group. The researcher noted that there were even times when it seemed like no one had anything else to say, and just then, a new conversation would spark. Time is essential and the needs for time are diverse; some are processing their thoughts quietly, some are developing the courage to speak, and others are contemplating something that someone has said. The issue of time is validated by what Hogdin (2008) found while in a workshop setting; one of the most significant limiting factors was time. In her research, there was a short amount of time for small groups to discuss complex issues and answer multiple questions and the appropriateness of the solutions was limited by the amount of time allotted for the group to work together. Other research has remotely addressed the issue of needing an appropriate amount of time. As Laszlo (2008) and Senge et al. (2005) found, beginning the work of confronting old paradigms often requires a

89

significant amount of inner growth and the process of working from a deeper wisdom

takes time; however when the truth is uncovered, putting the truth into practice is done

"with natural flow" (Laszlo, 2008; Senge et al., 2005, p. 95). Laszlo (2008) asserts that

society often lives "in our heads, with little time and inclination to live in our whole

bodies" (p. 61). The participants of this respective study acknowledged that the

workshop provided a framework to spend time to "live in their bodies," as Laszlo puts it.

The Whole Thinking Workshop offered a safe place to take a break from

responsibilities and find silence. The following research confirms that this approach is

important for deeper learning. Krishnamurti, a world-renowned thinker and teacher,

taught that "real communication can only take place when there is silence" (Senge et al.,

2005, p. 79). Senge et al. support that spending time in a sacred place full of life is

important for finding connection, and finding connection is important for paradigm shifts.

Thompson and Madigan (2005) confirmed that rich and wild settings promote brain

development, while bare and isolated experiences limited learning and development.

While the setting was important, in this respective study, the time away in the rich setting

is confirmed to be significant for providing the space for the participants to acknowledge

a deeper wisdom within themselves.

Providing the "right" amount of time for a group is undoubtedly a challenge for

facilitators and educators. Timpson and Doe (2008) confirmed that actual amount of time

that students are engaged in successful learning is brief compared to the length of time

allotted for a working or learning session. It takes a considerable amount of time to

develop a sense of presence in a group, and when this is established, there is efficiency in

remaining in that moment before this space is interrupted again. The amount of time is

dependent upon the setting and context. In some settings it could be minutes, while other

settings would need hours. In the case of this study, there was an intentional focus on

allowing the participants to develop this sense of presence by providing several moments

of time for the opportunity to become present. Through spending a couple nights on the

land, and by having set group rules for times of silence, the participants experienced

several moments of time that provided space for the participants to connect with

something deeper and greater within themselves without typical distractions of

conversations and responsibilities. Because there was a lack of literature on the role of

time in shifting paradigms, and specifically on how much time is enough time, the results

of this study add to a better understanding of time by revealing elements of time that are

important for engaging paradigm shifts. While time is an important dimension of

paradigm shifts, the results of this study also show that establishing suitable systems to

create an conducive environment so that the participants could be efficient with their time

was a critical dimension to paradigm shifts.

<center>*Theme Two: Systems*</center>

The participants acknowledged explicit, interrelated elements that were part of

creating an environment conducive for shifting paradigms. While the research originally

sought to understand the specific activities that were effective for facilitating a paradigm

shift in the Whole Thinking Workshop, the study revealed that context and systems are

important to the effectiveness of a given activity or experience. The way that an activity

is presented to the group may or may not create a shared understanding of expectations

and objectives and clear direction. In addition, concepts such as diversity of participants,

the feeling of safety within the group, and a sense of ideological consistency will

<center>91</center>

influence how a particular activity is received. Furthermore, the participants acknowledged that engaging activities helped to ground abstract concepts lead to considering something new.

The participants' experiences revealed the importance of shared understanding of expectations and objectives through their experiences with uncertainty during the workshop. While the participants' overall experiences were positive, because they walked into the workshop with expectations that were not further clarified, they were viewing what the facilitator was presenting through the lens of what they expected to experience. When set in the context of education and learning theories, there is considerable amount of literature to support the importance of shared understanding. In *147 Practical Tips for Teaching Sustainability* (2006), the authors suggest that while planning ahead and providing preparation materials to the group ahead of time is helpful, having an open discussion with the group is still necessary, confirming that complex concepts and ideas are often difficult to communicate (Timpson and Doe, 2008). Research supports that it is important to open the dialogue to assess the level of understanding in the group and facilitate conversations that bring out different viewpoints to help the group achieve clarity (Timpson et al., 2006; Timpson and Doe, 2008). Additionally, research suggests that, inevitably, there are occasions when a group is not working well together, or there is a lack of understanding around the concept, and therefore it is important for the facilitator to be receptive to the general energy level of the group and adjust accordingly (Senge et al., 2005; Timpson et al., 2006; Timpson and Doe, 2008). This was clear in this respective study, as the participants did not engage with activities and concepts when there was a lack of shared understanding. Conversely, when the participants felt safe to

engage with the group and facilitators openly, the opportunity for shifting thinking arose. Taking the time to ensure shared understanding in a group is of paramount importance, especially when time is confined.

Diversity, safety, and consistency were closely interrelated and somewhat interdependent themes in this study. For the purposes of this research, diversity referred to inclusivity of diverse backgrounds and perspectives including social class, ethnicity, language, ability, race, gender, age, religion, and sexual orientation. As this workshop was an open invitation, the level of diversity in the group was not coordinated by the workshop organizers. As it turned out, ethnic diversity was limited, but diversity in age, gender, social class, and religion were well represented in the workshop group. While one of the research participants of a minority ethnicity expressed some insecurity in speaking about issues due to the lack of ethnic diversity in the group, the overall level of diversity in the group promoted rich conversation and considerations. An extensive body of research in peace and multicultural education, and the promotion of social justice in education, confirmed the results of this study pertaining to diversity and safety. Nieto (2004) asserts that one's identity frames how one experiences the world. Bringing diversity into a group is important in the work of shifting paradigms because the possibility of perpetuating the dominant paradigm and reproducing old assumptions would be present otherwise (Nieto, 2004). As one of the ethnic minorities of the research group expressed a minor level of insecurity due to the lack of ethnic diversity, one could question whether it would be more productive to have a group of people of ethnic homogeneity. Research confirms, however, ethnic homogeneity would still likely be multicultural when considering differences in gender, ability, age, religion, and sexual

orientation (Nieto, 2004). Therefore, diversity should be optimized on all levels and safety be established in other ways. Nieto (2004) appropriately clarifies multiculturalism to be about creating a more accurate understanding of who we are as Americans, that of all types of diversity.

The results of the study reveal that the sense of safety can be complicated for some, while being nurtured for others. As mentioned in the discussion above on diversity, the ethnic background of at least one participant contributed to a feeling of insecurity in sharing personal thoughts and feelings. However, the participants genuinely considered different and opposing views that were shared during the workshop, which suggests that the workshop promoted a sense of safety and space for vulnerability. Further, the participants considered their thoughts differently in response to comments from other participants. The exchange of personal stories and the overall willingness to listen to others implies an important component of feeling safe within the group. The literature confirms that the work of shifting paradigms is difficult because paradigms are deeply entrenched and people need to feel safe to question their own assumptions and beliefs (Laszlo, 2008; Senge et al., 2005). If a sense of safety in a group is not established, there are no grounds for considering underlying assumptions and differences, and therefore a paradigm shift cannot occur. Additionally, literature on the significance of safety in learning environments confirms that safety is critically important when exploring sensitive topics, assumptions, and paradigms (Brantmeier, Aragon, and Yoder, 2009; Ndura, 2007; Nieto, 2004; Timpson and Doe, 2008). When safety is achieved, we can begin to face painful truths (Ndura, 2007). Senge et al. (2005) acknowledge that safety is vital for one to allow him or herself to be vulnerable, and vulnerability

inherently allows openness to discovering oneself. In *147 Practical Tips for Teaching Diversity* (2005), the authors note the importance of safety in a classroom when sensitive issues arise:

> The value of free and open interactions needs to be balanced against the requirements for safety. A positive classroom environment enables students to discuss and challenge ideas without fear of personal attack by other students or retaliation by an instructor…Everyone should be heard and differences should be accepted while the students and instructor are probing the cohesiveness of underlying arguments (p. 47).

Consistency, or harmony of the parts to the greater mission and vision, was acknowledged as a critical component of shifting thinking by the research participants. While the level of consistency throughout the workshop was a universal contribution to the sense of safety for the participants, the data revealed that the participants could let their guards down as they aligned with the setting, context, and ideology. As the participants felt comfortable in this setting and felt comfortable with the people of that setting, they could allow themselves to question stories within themselves. If the participants began to feel uncomfortable with how the facilitators worked with one another or with the food that was served, for example, they would not have been open to the message of the facilitators. The importance of consistency as a dimension of shifting thinking has not been acknowledged in existing literature and research, yet the research participants did, which implies that there needs to be more consideration to this dimension in the work of shifting paradigms.

Shared understanding, diversity, safety, and consistency in both the group and the setting contributed to the individual opening receptivity to considering something new within oneself. The engaging activities, such as the privilege walk, acknowledging difference, and active listening, provided an experiential opportunity to develop the language on issues that are difficult to speak about. The workshop activities that were genuine, relevant, applicable, and meaningful to the participants helped to ground abstract concepts and lead to considering something new. For example, the notion of privilege was not clear to the research participants until they experienced the privilege walk; during this activity they saw the physical position of their peers and the notion of privilege became very personal. Overall, the activities heightened the participants' awareness of an issue and provided anecdotal experience to draw from. Research confirms that engaging activities are helpful for providing a foundation of understanding and anecdotal experience to draw from, and for initiating dialogue to better understand the abstract viewpoints (Timpson et al., 2006; Timpson and Doe, 2008). Timpson et al. (2006) confirm that activities are also effective for coordinating groups to work well together, as the research participants acknowledged with the privilege activity during the Whole Thinking Workshop. McNight (2004) found that "life analysis" activities that were facilitated in a safe space are effective for exploring one's own perceptions and stories. The data in this study revealed engaging activities as an important dimension of the participants' shifts in thinking. The work of paradigm shifts is complex and multi-layered. Literature supports the notion that explicit and interrelated systems that cultivate an environment conducive for shifting paradigms need to be in place.

Theme Three: Humanity

This study revealed several interconnected and interrelated elements that cultivated a sense of humanity, or the quality of being human, including spirituality, contemplative practice, aligning values, storytelling, and open dialogue. Furthermore, this study revealed that cultivating a connection to humanity is the most important dimension of how paradigm shifts can occur. Specifically, the elements that connected the participants to their own and to others' humanity brought about the change in mindset. Where time and systems create an environment conducive for paradigm shifts, connection to one's humanity facilitates the actual shift.

The activities and factors that drew the participants to acknowledge their own humanity also drew the participants out of old paradigms or assumptions. The participants achieved a greater connection to themselves, others, and their surroundings during the Whole Thinking Workshop. In the *Educating for Wisdom* chapter of *Spirituality, Religion, and Peace Education* (2010), Miller confirms that developing a sense of connection is important for becoming aware of independencies. The participants of this study acknowledged that space was provided for tapping into a greater purpose and cultivating connection. Miller (2010) acknowledges that a lack of connection with our own bodies inevitably leads to a lack of connection with the land and earth. During the workshop, spirituality was important for recognizing a greater purpose. Contemplative practice, including meditation, moments of silence, listening, and reflecting, provided an avenue for exploring spirituality. The participants acknowledged that periods of silence, especially while in the company of the land or with others, slowed the pace of time and allowed thoughts to come into focus. Drawing from interviews with

97

more than 150 scientists, and social and business entrepreneurs that have undergone

profound change in their lives, Senge et al.'s (2005) Theory of U Movement offers

context for this study. Senge et al. confirmed through deeply spiritual, personal, mindful,

and open processes, people achieve dramatic change. Senge et al. confirm that meditation

and contemplative practices were useful in building capacity to slow down and gradually

become aware of one's thought stream. By becoming aware of one's thought stream, he

or she can begin to hold the thoughts, instead of being had by the thoughts. Additionally,

Miller (2010) confirms that "seeing how our thoughts impact ourselves and others is an

insight that can eventually change our behavior so that we live more wisely" (para. 4).

Senge et al. (2005) found that when their participants actually stopped habitual thinking,

they began to see reality differently. Furthermore, they confirm that the shift began to

take place when the participants recognized their connection to that reality. Miller (2010)

confirms the role of meditation in developing a greater sense of one's thoughts and

therefore building the capacity to change mindset in his study with teachers. He found

that after he introduced the practice of meditation, the teachers felt that the practice gave

them (1) permission to be alone and enjoy their own company; (2) increased listening

capacity; (3) more energy; and (4) the capacity to be less reactive to situations and

generally experience greater calm and clarity (2010, para. 24). The workshop

participants acknowledged that contemplative practices, such as meditation and listening,

helped in developing the capacity to listen, and allowed necessary time to process new

ideas, considerations, or perspectives.

Another dimension of paradigm shifts that the participants of this respective study

acknowledged through revealing humanity was a process of aligning personal values with

professional and career choices, or otherwise achieving a better work/life balance. Through particular awareness practices and open dialogue the participants acknowledged that there were discrepancies between their ideal future vision of themselves and their current career choices. Most of the participants were in careers they felt deeply passionate about and that contributed to the common good, but when they projected into the future to envision where they wanted to be in ten or twenty years, some realized that the path they were on was not necessarily leading them to their desired future state. For the participants, this was an exercise of valuing their heart, or otherwise their "softer" side and making choices that were more in line with their heart. Miller (2008, as cited by Miller, 2010) confirms that a healthy individual learns to think with their heart and civilizations develop wisdom through a "thinking heart."

Contemplative practices helped bring awareness to participants by allowing the time to be mindful of thoughts that arose. While cultivating the quality of being human was achieved through individual, introspective activities, openly sharing and group dialogue were acknowledged by the participants as another dimension of cultivating a sense of humanity; the participants insisted that both were necessary. For example, through the activity of storytelling, participants acknowledged newfound connections between each other. Typically, differences between two people are emphasized, but sharing stories bridged differences. Through their experience of sharing stories in the workshop, some of the participants became curious about the power of story in a professional setting, suggesting that teams could work together more effectively through sharing personal stories and thus becoming vulnerable to each other. Similarly, open dialogue activities were important for making human connections. The dialogue aided in

99

acknowledging old assumptions and paradigms and revealing fresh perspectives and ideas. Senge et al. (2005) confirmed this theory of sharing stories and assert that scenario planning was highly effective for developing a connection to the greater reality. Senge et al.'s participants found it easier to recognize underlying assumptions in their thinking when they began to talk openly about them with each other. In Senge et al.'s research, it became clear that what kept the participants from experiencing awareness was a profound sense of separation. In the Whole Thinking Workshop, the research participants acknowledged that through storytelling and open dialogue, they developed a sense of connection with each other, thereby allowing themselves to be vulnerable and consider something new within him or herself. Senge et al. confirmed that storytelling allows people to hold and consider different stories and see a connection to each other. They confirmed that the other critical component to storytelling is the need to be vulnerable. Senge et al. confirmed that allowing oneself to be vulnerable and share stories is an indication of letting go of the perceived need to control. Letting go allows something truly new to emerge. As the study participants acknowledged, open dialogue can be a very personal activity. The key for the Whole Thinking Workshop is that group trust was established and individuals were able to share themselves honestly, while being receptive to other participants' perspectives. Miller (2010) confirms that "as we see how we are interconnected and how we are part of a dynamic process of change, we lose the sense of self-importance that our egos crave" (para. 5). The literature confirms that elements that cultivate a sense of humanity, or the quality of being human, including spirituality, contemplative practice, aligning values, storytelling, and open dialogue facilitate shifts in thinking for individuals.

Recommendations for Further Research

The results of this study suggest several dimensions of how paradigm shifts can occur and each of these dimensions could be further analyzed in different settings and context. The following recommendations are presented based on the analysis and interpretations of this study:

1. As this was an exploratory qualitative study, the results could be used to develop a more thorough and complete qualitative and quantitative study for a larger sample to further analyze and refine dimensions of how paradigm shifts occur. The quantitative study could be in the form of a survey that is administered to the hundreds of workshop and retreat participants who have experienced the Center for Whole Communities' Workshops and Retreats. The survey could also measure impact of the participants' experiences specifically related to paradigm shifts to gain further insight of the level of effectiveness and appropriateness of dimensions of paradigm shifting.

2. The Center for Whole Communities organizes a number of retreats and activities. One of the retreats is a longer version of the Whole Thinking Workshop, called the Whole Thinking Retreat, lasting 6 days. Usually, the retreats are invite-only and the participants are asked to go by the organization for whom they work. The level of receptivity of the retreat participants would vary much more than the Whole Thinking Workshop of this study. A qualitative study of a Whole Thinking Retreat that is composed of invite-only participants would offer insight into the experiences of people that were asked to be there as opposed to voluntarily attending, as was in this study.

3. Future generations increasingly need to understand how to work from an interdisciplinary and systems thinking perspective. Higher education needs to appropriately prepare students for developing a capacity to think systematically. The results of this study could be used to develop a program for an undergraduate academic setting. Further research could determine the effectiveness of the program, specifically as it relates to shifting paradigms.

4. The results of this study could be used to develop a longitudinal study designed specifically for building industry professionals. A more refined and systematic study approach could be applied to persons associated with the building industry specifically seeking insights about how they shifted paradigms from traditional building to a more regenerative model.

5. This study confirmed dimensions of paradigm shifts for people. A quantitative study could assess whether some dimensions are more important than others and reveal their significance in relationship to each other.

Conclusions

Daniel Quinn, in *Ishmael* (1992), offered a profound question to the reader. In the introduction, the narrator acknowledges the gorilla's sign which reads: "With man gone, will there be hope for gorilla?" Ishmael's question to the man does not seem to make sense; how could another species actually need man, especially considering man's contribution to environmental degradation? Could gorilla actually need man? Because the dominant paradigm no longer considers an interconnected relationship with other species, we no longer see ourselves as a part of the ecosystems that we inhabit. The environmental movement, and the green building movement therein, has been focused on

being 'less bad,' which has remotely slowed the unsustainable rate of consumption. What would the world be like if humans actually sensed a greater purpose, worked from a different paradigm that focused on giving to the environment rather than simply slowing down the inevitable consumption of it?

The building industry is uniquely positioned in the context of contemporary societal trends as it was one of the industries hardest hit by the financial recession of 2007 and is one of the most environmentally unsustainable industries in the United States. The green building movement has been a necessary path of incremental improvement, but so far the pace has been too slow. In order to appropriately respond to the looming environmental and social problems and pressures of the near future, the building industry needs a paradigm shift, or a leap from an anthropocentric viewpoint to one that values and understands the interconnectedness between human developments and the natural world. Regenerative design focuses on replacing linear processes with cyclical ones, allowing for continuous replacement, renewal, and rebirth in which both human and natural systems are sustained, nurtured, and enhanced. Not unlike the building industry, there is an opportunity for citizens of the United States to awaken to a new measure of health, one that values harmony between the financial economy, thriving ecosystems, and societal well being. Leaders and facilitators in the building industry need to begin to guide professionals through a personal experience that connects people to their own humanity, so that they may have the opportunity to begin to connect with this greater purpose and achieve a transformational shift in thinking and in practice.

As was illustrated in this study, 3 major dimensions were effective for facilitating paradigm shifts according to the participants in a workshop setting, including time,

systems, and humanity. The work of confronting old paradigms often requires a significant amount of inner growth; therefore during programs aimed at expanding knowledge and shifting paradigms, allowing an appropriate amount of time for this process is paramount. In addition, by providing breaks from typical distractions of conversation and responsibilities, people are allowed to connect with something deeper and greater. Because there are great hindrances to change in all individuals, a systematic approach that cultivates space conducive for change is critical and can be effective in evoking small scale change that has the potential to lead to large scale change. Additionally, change initiatives need elements that develop a greater sense of our own humanity, or the quality of being human, including opportunities to renew connection to ourselves, to others, and to our surroundings. Developing and cultivating a sense of connection in human beings is the most important factor in this research. A lack of connection with one's self inevitably leads to a lack of connection with others, and one's surroundings. Cultivating connection brings people to see underlying assumptions and offers an opportunity see the implications and desire to change.

These interrelated themes and their sub themes provide useful and meaningful direction for change leaders on criteria necessary for developing programs that foster paradigm shifts in the building industry. The results are particularly relevant to building professionals because, like the participants in this study, building professionals are entrenched in their thinking and professional approach, therefore the process needs to be deep and personal. Additionally, building professionals are human beings who have a deep passion for their work and are capable of connection, the key ingredient to fostering paradigm shifts in human beings.

REFERENCES

Adler, P.A. & Adler, P. (1987). *Membership roles in field research*. Thousand Oaks, CA: Sage Publications.

Altes, T. K. (2008). Biomimicry guild, HOK in alliance. *Environmental Building News, 17:12.* December 1, 2008. Retrieved from http://www.buildinggreen.com

Baxter, P. & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559.

Benson, D. & Darracq (2001). Integrating multiple contexts for environmental education. In Field, R., Warren, R.J., Okarma, H., & Sievert, P.R. (Ed.) *Wildlife, land, and people: Priorities for the 21st century* (pp. 273-276). Bethesda, MD: The Wildlife Society.

Berkebile, B. & McLennan, J. (1999). The living building. *The World and I Magazine*. Washington, DC: Washington Times Publication.

Berg, B. L. (2006). *Qualitative research methods for the social sciences*. Boston: Pearson.

Berns, M., Townend, A., Khayat, Z., Balagopal, B., Reeves, M., Hopkins, M., & Kruschwitz, N. (2009). *The business of sustainability: Findings and insights from the first annual business of sustainability survey and the global thought leaders' research project.* Hollywood: Massachusetts Institute of Technology. Retrieved from http://sloanreview.mit.edu/special-report/the-business-of-sustainability/

Brantmeier, E., Aragon, A., and Yoder, B. (2009). Multicultural peace education: Empowering pre-service teachers toward a paradigm of social justice beyond colorblindness. In Ndura-Ouedraogo, E. and Amster, R. (Ed.) *Building cultures of peace: Transdisciplinary voices of hope and action* (pp. 8-28). Newcastle upon Tyne, UK: Cambridge Scholars Pub.

Buraway, M. (1991). Teaching participant observation. *Ethnography Unbound: Power and Resistance in the Modern Metropolis.* Berkeley: University of California Press.

Bureau of Labor Statistics (2009). Employment situation summary. *Economic News Release.* October 2, 2009. Retrieved from http://www.bls.gov/news.release/empsit.nr0.htm

Butts, M. (2007). Global consumers vote Al Gore, Oprah Winfrey and Kofi Annan most influential to champion global warming cause: Nielsen Survey. *Neilsen*. July 2, 2007. Retrieved from http://nz.nielsen.com/news/GlobalWarming_Jul07.shtml

Center for Whole Communities. (2009). About Us. Retrieved from
http://www.wholecommunities.org/about/history.shtml

Cole, R. (2005). Building environmental assessment methods: Redefining intentions and
roles. *Building Research & Information*, 33(5), pp 455-467.

Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five
traditions.* Thousand Oaks, CA: Sage.

Creswell, J.W. (2003). *Research design: Qualitative, quantitative, and mixed methods
approaches*. Thousand Oaks, CA: Sage.

Crotty, M. 1998. *The foundations of social research*. Thousand Oaks, CA: Sage.

Denzin, N. K. (2000). *Handbook of qualitative research*. Array Thousand Oaks, Calif.:
Sage Publications.

Dunphy, D., Griffiths, A., & Benn, S. (2003). *Organizational change for corporate
sustainability: A guide for leaders and change agents of the future.* New York:
Routledge.

du Plessis, C. (2003). Boiling frogs, sinking ships, bursting dykes and the end of the
world as we know it. *International Electronic Journal of Construction, Special
Issue on Sustainable Construction*. Vol. 14.

du Plessis, C. (2006). Thinking about the day after tomorrow: new perspectives on
sustainable building. *Rethinking Sustainable Construction 2006: Next Generation
Green Buildings, 12th Rinker International Conference.* Sarasota, Florida.

Edwards, A. R. (2005). *The sustainability revolution: Portrait of a paradigm shift.*
Gabriola Island, BC, Canada: New Society Publishers.

Emerson, R. M. (2001). *Contemporary field research: perspectives and formulations*.
Prospect Heights, Ill.: Waveland Press.

Ensinger, D. (2008). Obama's long road to recovery. *Economy in Crisis*. December 18,
2008. Retrieved from http://www.economyincrisis.org/articles/show/2221

Florida, R. (2009). How the crash will reshape America. *The Atlantic.* March 2009.
Retrieved from http://www.theatlantic.com/doc/200903/meltdown-geography

Gardner, H. (2006). *Changing minds: the art and science of changing our own and other
people's minds.* Boston, Mass.: Harvard Business School Press.

GreenerBuildings (2009a). Corporate America's adoption of green practices doubles,
study says. *GreenerBuildings.* September 17, 2009. Retrieved from
http://www.greenbiz.com/news/2009/09/17/corporate-americas-adoption-green-
practices-doubles-study-says

Guiterrez, C. (2008). It's official: U.S. in recession. *Forbes.* December 1, 2008. Retrieved from http://www.forbes.com/2008/12/01/manufacturing-retail-consumer-markets-econ-cx_cg_1201markets18.html

Hallsmith, G. (2003). *The key to sustainable cities: meeting human needs, transforming community systems*. Gabriola Island, BC Canada: New Society Publishers.

Hawken, P., Lovins, A. B., Lovins, L. H. (1999). *Natural capitalism: creating the next industrial revolution.* Array Boston: Little, Brown and Co..

Hampton, K., Sessions, L., Ja Her, E. & Rainie, L. (2009). *Social isolation and new tecnhology: Personal networks and community survey*. Pew Internet & American Life Project. November 4, 2009. Retrieved from http://www.pewinternet.org/Reports/

Heffner, T. (2009). The high cost of neglecting manufacturing. *Economy in Crisis*. March 24, 2009. Retrieved from http://www.economyincrisis.org/articles/show/25

Hodgin, S. (2008). *Living built environments: Getting to the next generation of green buildings* (Unpublished master's thesis). Colorado State University, Fort Collins.

Horgan, J. (1991). Profile: Reluctant revolutionary: Thomas S. Kuhn unleashed 'paradigm' on the world. *Scientific American*, May 1991 pp. 40-49.

Isidore, C. (2009). The Great Recession. *CNNMoney*, March 25, 2009. Retrieved from http://money.cnn.com/2009/03/25/news/economy/depression_comparisons/index.htm

Ivry, B. (2008). U.S. foreclosures double as house prices decline. *Bloomberg.* June 25, 2008. Retrieved on from http://www.bloomberg.com/apps/news?pid=20601087&sid=adFFhHtUhCLY&refer=home

Kibert, C. J. (2005). *Sustainable construction, green building design and delivery*. Hoboken, New Jersey: John Wiley & Sons, Inc.

Kibert, C. J., Sendzimir, J., & Guy, B. (2000). Construction ecology and metabolism: Natural system analogues for a sustainable built environment. *Construction Management and Economics, 18*(8), 903-916.

Kirk, J., Miller, M. L. (1986). *Reliability and validity in qualitative research*. Beverly Hills: Sage Publications.

Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.

Kuhn, T. S. (1987). *Black-body theory and the quantum discontinuity, 1894-1912*. Chicago: University of Chicago Press.

Laszlo, E. (2008). *Quantum shift in the global brain: how the new scientific reality can change us and our world.* Rochester, Vt.: Inner Traditions.

Louv, R. (2005). *Last child in the woods: saving our children from nature-deficit disorder.* Array Chapel Hill, N.C.: Algonquin Books of Chapel Hill.

Lyle, J. T. (1994). *Regenerative design for sustainable development*. New York: John Wiley & Sons, Inc.

Marshall, C. & G. B. Rossman. (2006). *Designing qualitative research*. Thousand Oaks, CA: Sage Publications.

McDonough, W. (2006). Tower of tomorrow. *Fortune.* November 9, 2006. Retrieved from http://money.cnn.com/magazines/fortune/fortune_archive/2006/11/13/8393126/index.htm

McDonough, W. & Braungart, M. (2002). *Cradle to cradle: Remaking the way we make things.* New York: North Point Press

McGraw Hill Construction (2010). *New construction starts in December climb 5%; Annual total for 2009 drops 26% to $412 billion.* Retrieved from http://construction.com/ResourceCenter/forecast/2010/Jan.asp

McLennan, J. F. (2004). *The philosophy of sustainable design*. Bainbridge Island, Washington: Ecotone Publishing Company.

McKnight, A. (2004). Historical trauma, the persistence of memory and the pedagogical problems of forgiveness, justice and peace. *Educational Studies Journal of the American Educational Studies Assoc*, *36*(2), 140-158. Retrieved from ERIC database.

Merchant, B. (2008a). The green issue: Can environmentalism still sell magazines? *TreeHugger.* December 20, 2008. Retrieved from http://www.treehugger.com/files/2008/12/the-green-issue-environmentalism-sell-magazines.php

Merchant, B. (2008b). In dark financial times, Americans still willing to fight climate change. *TreeHugger.* November 2, 2008. Retrieved from http://www.treehugger.com/files/2008/11/financial-times-americans-willing-fight-climate-change.php

Miles, M.B & A.M. Huberman (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage Publications.

Miller, J. P. (2010). Educating for wisdom. In Brantmeier, E.J., Lin, J., Miller, J. (eds). *Spirituality, religion, and peace education*. Greenwich, CT: Information Age Publishing. (In production).

Miller, W. R., C'de Baca, J. (2001). *Quantum change: when epiphanies and sudden insights transform ordinary lives.* New York: Guilford Press.

Moos, K. (Producer). (2008, December 11). *Repossessing virtue: Rachel Naomi Remen and economic crisis as spiritual journey* [Audio Podcast]. Retrieved from http://blog.speakingoffaith.org/post/64320951/repossessing-virtue-rachel-naomi-remen-and

National Environmental Education Foundation (2010). *The business case for environmental and sustainability employee education.* Retrieved from http://www.neefusa.org/business/index.htm

Ndura, E. (2007). Calling institutions of higher education to join the quest for social justice and peace. *Harvard Educational Review, 77*(3), 345-350.

Neff, J. (2009). Green-marketing revolution defies economic downturn. *Advertising Age.* April 20, 2009. Retrieved from https://adage.com/article?article_id=136091.

Nieto, S. (2004). *Affirming diversity: The sociopolitical context of multicultural education.* Array Boston: Pearson/Allyn and Bacon.

Nutting, R. (2008). Four years of gains in home prices wiped out. *MarketWatch.* June 24, 2008. Retrieved on from http://www.marketwatch.com/story/four-years-of-home-price-gains-wiped-out-case-shiller-data?dist=msr_13

Obama announces Arne Duncan as education secretary. (2008, December 16). *CQ Transcripts Wire.* Retrieved from http://www.washingtonpost.com/wp-dyn/content/article/2008/12/16/AR2008121601325.html

Plaut, J. (2006). *Pivotal experiences and the championing of sustainability in the building industry.* (Unpublished master's thesis). Colorado State University, Fort Collins.

Robertson, R. (2007). A brighter shade of green: rebooting environmentalism for the 21st century. *What is Enlightenment?* Vol. 38. October/December 2007.

Reed, W. (2006). Shifting our mental model: Sustainability to regeneration. *Rethinking Sustainable Construction 2006: Next Generation Green Buildings, 12th Rinker International Conference.* Sarasota, Florida.

Senge, P. M., C. O. Scharmer, J. Jaworski, & B. S. Flowers (2005). *Presence: exploring profound change in people, organizations, and society.* Array New York: Doubleday.

Sharrock, W. & R. Reed (2002). *Kuhn: Philosopher of scientific revolution.* MA: Blackwell Publishing Co.

Siemens Industry, Inc. & McGraw Hill Construction (2009). *Report on the 2009 greening of corporate america.* Retrieved from http://construction.com/market_research/

Socialnomics. (Producer). (2009, August 11). *Social Media Revolution* [Video file]. Available from http://socialnomics.net/2009/08/11/statistics-show-social-media-is-bigger-than-you-think/

Stauffer, N. (2005). Climate change poorly understood, MIT survey finds. *MIT News.* March 16, 2005. Retrieved on from http://web.mit.edu/newsoffice/2005/climate-0316.html

Talberth, J., Cobb, C., & Slattery, N. (2006). *The genuine progress indicator 2006: A tool for sustainable development.* Retrieved from Redefining Progress website: http://www.rprogress.org/sustainability_indicators/genuine_progress_indicator.htm

Thompson, R. F. & Madigan, S. A. (2005). *Memory: the key to consciousness.* Washington, D.C.: Joseph Henry Press.

Timpson, W., Dunbar, B., Kimmel, G., Bruyere, B., Newman, P., & Mizia, H. (2006). *147 Practical tips for teaching sustainability: connecting the environment, the economy, and society.* Madison, WI: Atwood Pub.

Timpson, W. M., Doe, S. (2008). *Concepts and choices for teaching: meeting the challenges of higher education.* Madison, WI: Atwood Pub.

USGBC (2009). Green Building Research. *Green building facts.* Retrieved from http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1718

Ward, A. (2009). LEED projects doubled in 2008. *Environmental Building News.* March 1, 2009. Retrieved from http://www.buildinggreen.com/auth/article.cfm/ID/4148/

Watson, R. (2008). *Green building market and impact report 2008.* Greener World Media 2008. Retrieved from http://www.greenerbuildings.com

Watson, R. (2009). *Green building market and impact report 2009.* Greener World Media, 2009. Retrieved from http://www.greenerbuildings.com

Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies.* New York: The Free Press.

Wendt, A. (2009). Building for people: Integrating social justice into green design. *Environmental Building News, 18:10.* October 1, 2009.

Von Dietze, E. (2001). *Paradigms explained: Rethinking Thomas Kuhn's philosophy of science.* Westport, CT: Praeger.

APPENDICES

Appendix A: Tables of Results of Data Analysis

Table 2. Significant Statements: Factors Useful in Shifting Paradigms

1. It was the whole that created the experience for me

2. The intention that went into to connecting all of the pieces - food, place, setting, relationship between workers, shared living spaces, reading together at meals, being in silence together

3. Actively engaged with group activities through non-traditional means such as listening, sharing stories, playing music, etc.

4. Being encouraged to explore our own humanity with one another helped me understand the significance of vulerability

5. Being encouraged to explore our own humanity with one another helped me appreciate each person's personal story

6. The land and the setting brought new awareness for me

7. Quadrant map activities initially helped me to visualize the imbalance of my emphasis on environmental and social work activities

8. Spirituality helps me with compassion, humility, and having gratitude in personal and professional settings

9. Mindfulness activities brought new awareness for me

10. Actively listening to each other

11. Contemplation and open dialogue were equally important for bringing new awareness for me

12. Having to practice listening during the workshop allowed me to open my eyes to different views and perspectives

13. Open dialogue brought new awareness for me

14. I felt that my spirit and health were nurtured which allowed me to open my heart

15. The sense of safety in the setting allowed me to open my heart

16. The silence of the setting allowed me to open my heart

17. Being away from daily responsibilities and obligations made this workshop different and allowed me to deepen my participation

18. Privilege activity brought new awareness for me

Table 3. Significant Statements: New Thoughts Based on Experience

1. Difference can be what separates us from each other

2. I realized the importance of bridging differences after they are made aware

3. I recognized the social movement happening across generations, especially the younger generations

4. We all have the power to be an ally for somebody

5. I realized that my work needs to focus more on restoring the health and spirit of humanity

6. I realized that I want to encourage connecting to being on the level of humanity in my work

7. I recognized that being humble takes time and courage

8. Through the listening activities, I developed a deeper appreciation for the role of compassion

9. I realized that mindfulness practice is integral to my continual professional development

10. I am working on carrying the inner peace that I felt during the workshop with me in my work

11. I recognized that I was more privileged than I thought I was

12. I have a new understanding of how privilege plays into our work and our society

13. I felt privileged to be there

14. I felt great relief after expressing something that weighed heavy on me

15. I recognized that my vision for the world was values based as opposed to metrics based

16. I realized that I want to align my personal values with my professional work

Table 4. Significant Statements: Undesirable Factors of the Workshop

1. With the meditation, there could have been more unpacking of why we are doing this
2. The workshop felt fragmented at times
3. The music meditation was awkward
4. The storytelling activity needed more set up
5. More unpacking of the activity would have been helpful in engaging with the purpose of the activity
6. Wasn't sure why we did the overused words activity
7. Was intimidated by the storytelling activity
8. Would have liked more of a train the trainer's format
9. When I expressed a desire for more engagement, it wasn't well received
10. We did all that talk about visioning but we didn't really actualize a new vision as a group
11. I would have like to roll up my sleeves and work through some of my professional challenges together with the group
12. I would have like to know more about how and why
13. I would have like to create my own vision and get feedback on it during the quadrant activity
14. I left wanting to know a lot more
15. We didn't have enough time to recognize connections between the different quadrants
16. The dialogue activities were too short and much of the wisdom in the room wasn't tapped into
17. It was difficult to have difficult conversations
18. I would have liked more time to verbally process

19. I think the workshop should be longer
20. When I didn't relate with the map, I began reorganizing it as how I would like to see it, which kept me from engaging with the group
21. There wasn't a way to expand my issue in the quadrant activity
22. The quadrant activity didn't speak to me
23. Quadrants were very environmentally focused and I didn't relate with it
24. It would have been helpful for me to know where the quadrant map originated when it was presented
25. I would have liked to hear the quadrant map in the context of how it was created
26. I think there was a better way to get the objective of the quadrant activity across
27. I have some resistance to the words have and have not
28. I don't see the separations between humans and nature that is represented on the map
29. I am trying to reach people outside of the map
30. I don't think many people in the workshop put themselves out there
31. I wish we had spent time on understanding how to build ally relationships during the privilege activity
32. The story telling piece didn't really speak to me
33. Some of the discussions felt irrelavent in the big picture of potential environmental consequences of our future
34. I found almost no value in the privilege activity
35. Because of lack of racial diversity, I felt reserved to talk about my perspectives
36. I was very aware of other people's privilege

Table 5. Formulated Meanings: Factors Useful in Shifting Paradigms

1. Participants valued the consistency of interconnections between the different components of the entire workshop.
2. Participants gained insight and understanding through the land and setting
3. Open dialogue was a strong component of recognizing new awareness
4. The racial and ethnic diversity of the group influenced participants level of engagement
5. Participants valued the non-traditional activities for group engagement
6. The participants felt a strong affinity for the consistent connection to the health of spirit and humanity
7. Some participants recognized other participants' privilege
8. The participants valued times of vulnerability
9. Participants felt safe to express their thoughts and found relief in doing so
10. Many activities encouraged the participants to open their hearts
11. Being away from responsibility and obligation allowed the participants to open their hearts

Table 6. Formulated Meanings: New Thoughts Based on Experience

1. Difference can separate, but bridges draw connection between differences
2. The age diversity was eye opening and refreshing
3. Participants valued the non-traditional activities for group engagement
4. The need for connection to spirit and humanity in the workplace
5. Being humble takes time
6. Participants gained insight and understanding through the land and setting
7. Mindfulness, contemplation, and active listening activities brought greater awareness to consciousness
8. The privilege activity was eye opening
9. Some participants recognized other participants' privilege
10. To align personal values with professional work

Table 7. Formulated Meanings: Undesirable Factors of the Workshop

1. Needed more unpacking and set up before the workshop activities
2. Were expecting more of a 'train the trainer' format
3. Time was too short during the workshop
4. The quadrant activities were the least favorable of the workshop
5. Some participants felt that the group was playing it safe and could not open up more deeply
6. Would have like more activities around building ally relationships
7. Some participants didn't gain much from the story telling activities and / or the privilege activity

Table 8. Clustered Themes

---

1.   Time
   a.   Uninterrupted and appropriate amount of time
   b.   Time away from regular responsibilities
2.   Systems
   a.   Shared understanding of expectations and objectives, and clear direction
   b.   Diversity
   c.   Safety
   d.   Consistency
   e.   Engaging activities
3.   Humanity
   a.   Spirituality
   b.   Contemplative Practice
   c.   Aligning values
   d.   Storytelling
   e.   Open dialogue

Appendix B: Observation Script

Verbal script

My name is April Wackerman, and I am a graduate student in Construction Management at Colorado State University. As part of my master's thesis, under the guidance of Dr. Mary Nobe, I am participating in the Whole Thinking Workshop as an active and contributing participant, just as you all. In addition, I will also be observing the potential occurrences of paradigm shifts as a result of the activities and experiences of the Whole Thinking Workshop led by Center for Whole Communities. The purpose of my observations is to gain perspective on the workshop, in order to further study the experiences of a sample of participants through a focus group and interviews. I am not collecting any personal identifiers during the observation and individual identity will not be documented. I will only be writing down shared expressions and experiences that relate to personal mindsets. While I will not document identity with the expressions, I will track progression and/or evolution of thought and mindset throughout the workshop. I will recruit individuals to participate in a focus group and/or in-depth phone interviews to explore perceptions and experiences of the workshop, specifically related to the effectiveness of shifting thinking.

Internet Survey Script

The following script will be used to introduce the study and recruit participants via an internet survey that is sent by The Center for Whole Communities for their own purposes prior to the workshop. They have agreed to add the below script and questions to their existing internet survey for my research.

We [The Center for Whole Communities] are coordinating with a graduate student at Colorado State University, April Wackerman, who is conducting research on paradigm shifts and is using the Whole Thinking Workshop as a case study for part of her thesis under the guidance of Dr. Mary Nobe. As a part of the study, she would like to engage participants in a focus group after the workshop to explore experiences and perceptions of the activities of the Whole Thinking Workshop, specifically related to the effectiveness of shifting mindsets. The focus group will take between 60 to 90 minutes of your time, on the evening July 9, 2009, immediately following the closing of the workshop. There is no cost to you for your participation in this study. In reciprocation for your time and input, there will be a dinner for the participants of the focus group afterwards.

If you agree to participate in this project, please understand that your participation is completely voluntary and you have the right to withdraw your consent or discontinue participation at any time. Anything that you share in the focus group will be kept confidential. We will ask everyone in the focus group to keep the discussion confidential, but this can't be guaranteed. In addition, your individual privacy will be maintained in all written and published data resulting from this study.

If you would like to hear more about this study and are interested in possibly participating, please contact April at awackerman@gmail.com, and she would be happy

to provide you more details about the research project.
Would you be willing to participate in the focus group?

- o Yes

- o Perhaps, but I'd like more information

- o No, thank you

If Yes or you would like more information, please email April at awackerman@gmail.com with your request for information or your intention to participate. Please allow a few hours on Thursday night for the focus group and dinner (optional). Additionally, there will be time to opt in or opt out of the focus group at the workshop.
April would also like to individually interview participants about their experiences and perceptions of shifting mindsets after the workshop over the phone. The phone interviews will be held at a mutually agreeable time, during the month of August 2009. The interviews will last about 60 minutes.
If you are interested, please email April at awackerman@gmail.com to schedule a time. Additionally, there will be time at the workshop to sign up for the phone interviews.

Appendix C: Focus Group Consent Form

Title of Study: A Phenomenological Study in Understanding How Paradigm Shifts Can Occur

April Wackerman, Colorado State University

Participant Informed Consent Form for Focus Group

You are being asked to take part in a research project conducted by:

Principal Investigator:	Co-Investigator:
Dr. MaryEllen Nobe	April Wackerman
Department of Construction Management	Department of Construction Management
Colorado State University	Colorado State University
970-491-5215	970-980-1883
mary.nobe@cahs.colostate.edu	awackerman@gmail.com

You are invited to participate in a research study about activities that foster paradigm shifts. I would like to talk with you because you are a participant of the Whole Thinking Workshop. You will be asked to answer questions about your experiences at the Whole Thinking workshop. The focus group will take between 60 to 90 minutes of your time. There is no cost to you for your participation in this study, and you will not receive anything for participating.

There are no known risks associated with this study. It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown risks. The Colorado Governmental Immunity Act determines and may limit Colorado State University's legal responsibility if an injury happens because of this study. Claims against the University must be filed within 180 days of the injury. There is no known benefit in participating, but I hope this will provide insight to the green building industry as to how to effectively engage paradigm shifts in the building industry.

Your participation in this research is voluntary. If you decide to participate in this study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled. You have the right to refuse to answer any question(s) for any reason. You also have the right to refuse to be audio taped.

The focus group will be held in a mutually agreeable, private location. Anything that you share during the focus group will be kept confidential by the researcher. In the focus groups confidentiality will be asked of all the participating members as well, however it cannot be guaranteed. In addition, your individual privacy will be maintained in all written and published data resulting from this study. I will use fake names in place of real names and will change things about your life. Audiotapes will be stored in a secure location and will be marked with an interview number separate from your name. At the end of the study, all audio files will be erased and all other research materials will be permanently stored in a secure location.

Page _1___ of __2__ Participant initials_____   Date_____

If you have any questions about this study, you should ask the researcher before you sign this consent form. If you have questions regarding your rights as a participant, any concerns regarding this project, or any dissatisfaction with any aspect of this study, you may contact Janell Barker, the Human Research Administrator at Colorado State University at 970-491-1655. A signed copy of this two-page consent form will be provided to you at the time of the interview. I have asked for your address below so that I may contact you again. If you are willing, I may want to conduct another interview with you in the future.

I agree to be audio taped for this interview:

     Yes   Please Initial _____   No   Please Initial _____

I am willing to be contacted again to participate in similar studies related to The Whole Thinking Workshop:

     Yes   Please Initial _____   No   Please Initial _____

I have read this paper about the study or it was read to me. I know the possible risks and benefits. I know that being in this study is voluntary. I choose to be in this study. I know that I can withdraw at any time. I know that it is my choice to be audio taped. I have received, on the date signed, a copy of this document containing two pages.

Signed:_____   Date:_____

Name:_____   Phone:_____

Address:_____   Email:_____

_____

Name of Person Providing Information to: _____   Date: _____

    Researcher Signature: _____

April Wackerman, Department of Construction Management
Colorado State University, Fort Collins, CO 80523
970-980-1883

Page __2__ of __2__   Participant initials_____   Date_____

Appendix D: Interview Consent Form for Individuals

Title of Study: A Phenomenological Study in Understanding How Paradigm Shifts Can Occur

April Wackerman, Colorado State University

Participant Informed Consent Form for Individuals

You are being asked to take part in a research project conducted by:

Principal Investigator:	Co-Investigator:
Dr. MaryEllen Nobe	April Wackerman
Department of Construction Management	Department of Construction Management
Colorado State University	Colorado State University
970-491-5215	970-980-1883
mary.nobe@cahs.colostate.edu	awackerman@gmail.com

You are invited to participate in a research study about activities that foster paradigm shifts. I would like to talk with you because you were a participant of the July 2009 Whole Thinking Workshop or you facilitated the July 2009 Whole Thinking Workshop. You will be asked to answer questions about your experience with the Whole Thinking workshop, particularly regarding the occurrence of paradigm shifts. The interview will take between 60 to 90 minutes of your time. There is no cost to you for your participation in this study, and you will not receive anything for participating.

There are no known risks associated with this study. It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown risks. The Colorado Governmental Immunity Act determines and may limit Colorado State University's legal responsibility if an injury happens because of this study. Claims against the University must be filed within 180 days of the injury. There is no known benefit in participating, but I hope this will provide insight to the green building industry as to how to effectively engage paradigm shifts in the building industry.

Your participation in this research is voluntary. If you decide to participate in this study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled. You have the right to refuse to answer any question(s) for any reason. You also have the right to refuse to be audio taped.

The interview will be held in a mutually agreeable, private location. Anything that you share during our interview will be kept confidential. In addition, your individual privacy will be maintained in all written and published data resulting from this study. I will use fake names in place of real names and will change details about your life. Audiotapes will be stored in a secure location and will be marked with an interview number separate from your name. At the end of the study, all audio files will be erased and other research materials will be permanently stored in a secure location.

Page __1__ of __2__   Participant initials_____   Date_____

120

If you have any questions about this study, you should ask the researcher before you sign this consent form. If you have questions regarding your rights as a participant, any concerns regarding this project, or any dissatisfaction with any aspect of this study, you may contact Janell Barker, the Human Research Administrator at Colorado State University at 970-491-1655. A signed copy of this two-page consent form will be provided to you at the time of the interview. I have asked for your address below so that I may contact you again. If you are willing, I may want to conduct another interview with you in the future.

I agree to be audio taped for this interview:

      Yes   Please Initial _____   No   Please Initial _____

I am willing to be contacted again to participate in similar studies related to The Whole Thinking Workshop:

      Yes   Please Initial _____   No   Please Initial _____

I have read this paper about the study or it was read to me. I know the possible risks and benefits. I know that being in this study is voluntary. I choose to be in this study. I know that I can withdraw at any time. I know that it is my choice to be audio taped. I have received, on the date signed, a copy of this document containing two pages.

Signed:_____   Date:_____

Name:_____   Phone:_____

Address:_____   Email:_____

_____

Name of Person Providing Information to: _____ Date: _____

     Researcher Signature: _____

April Wackerman, Department of Construction Management
Colorado State University, Fort Collins, CO 80523
970-980-1883

Appendix E: Focus Group Guide

1. Describe your mindset walking into the Whole Thinking Workshops.

   Spend a few minutes to walk me through your ideals, insights, perspectives, and experiences that have shaped who you are today

2. Describe how you were drawn to the Whole Thinking Workshop.

3. What were your goals in attending the Whole Thinking Workshop?

4. Did you experience a shift in thinking during the Whole Thinking Workshop? If so, describe.

5. What was your overall experience of the Whole Thinking Workshop?

   What changes has the Whole Thinking Workshop brought about in your thinking? How?
   What activities helped you most to think differently?
   If we needed to condense the workshop, which activities would you omit? Why?
   Have you attended other retreats or workshops of this nature? If so, how is the Whole Thinking Workshop different from other workshops?

6. From your experience, how much is the shift in thinking a result of the collective experience?
   Describe interactions that shifted your thinking.

7. Is there anything more about the Whole Thinking Workshop that you would like to tell me? Anything that I should have asked? Anything important that I missed?

Appendix F: Interview Guide for Facilitators

1. Tell me a little about yourself and your background with the Center for Whole Communities
   How long have you worked for the Center for Whole Communities as a facilitator for the Whole Thinking Workshops?
   Describe relevant experiences that have prepared you to be a facilitator for the Center for Whole Communities.
   Describe relevant training that has shaped you as a facilitator.

2. Spend a few minutes to walk me through the Whole Thinking Workshop from your perspective. Talk about the activities, anticipated issues, expectations, perceptions of the participants' experiences, etc.

3. What are the main workshop goals?

   Is one of the goals to engage a shift in thinking?
   Describe your process in preparing the Whole Thinking Workshop curriculum to meet those goals.

4. Now moving to your roles as a facilitator, what are your goals as a facilitator?

5. If I asked you to choose a key experience that shaped(s) your approach as a Whole Thinking Workshop facilitator, a book, an experience, a person, what would it be?

6. Describe how you facilitate the group to engage in an activity

   What are important components of the curriculum that facilitate a shift in thinking?
   What are important components of the group dynamic?

7. Does one activity stand out as the most significant for the workshop? If so, please describe your perspective on this.

8. How might the Whole Thinking Workshops be a useful element in shifting thinking? How do you see that these workshops are effective in shifting thinking? Could these elements be used outside of the workshop setting?

9. From your experience, how much is the shift in thinking a result of the collective experience?

10. Do any participants from this past workshop stand out as students that have indicated a shift in thinking due to their participation in the Whole Thinking Workshop? If yes, what indicates to you that they have experienced a shift in thinking? Describe some of the changes that stand out.

11. Do lessons learned come to mind that you would offer to other people working to shift thinking? If so, please describe.

12. Is there anything more about the Whole Thinking Workshop that you would like to tell me? Anything that I should have asked? Anything important that I missed?

Appendix G: Interview Guide for Workshop Participants

1. Describe your mindset walking into the Whole Thinking Workshops.

    Spend a few minutes to walk me through your ideals, insights, perspectives, experiences, that have shaped who you are today

2. Describe how you were drawn to the Whole Thinking Workshop.

3. What were your goals in attending the Whole Thinking Workshop?

4. Describe your overall experience of the Whole Thinking Workshop?

    What changes has the Whole Thinking Workshop brought about in your thinking? How?
    What activities helped you want to think differently?
    Which activities would you omit? Why?
    Have you attended other retreats or workshops of this nature? If so, how is the Whole Thinking Workshop different from other workshops?

5. What was the most important part of the Whole Thinking Workshop?

6. From your experience, how much is the shift in thinking a result of the collective experience?
    Describe interactions that shifted your thinking.

7. Describe the criteria you use to determine you have experienced a shift in thinking.

8. In your experience, what was the best activity of the Whole Thinking Workshop? Worst? Describe your experience that made these activities fall into each category.

9. Is there anything more about the Whole Thinking Workshop that you would like to tell me? Anything that I should have asked? Anything important that I missed?

CENTER FOR WHOLE COMMUNITIES

May 6, 2009

On behalf of the Center for Whole Communities, I, Helen Whybrow, confirm that April Wackerman has permission to attend one of our Whole Thinking Workshops both as a participant and a researcher to study the process of the workshop in its entirety. The dates for the workshop she will attend are July 7-9, 2009. April also has our permission to solicit information from other participants before and after the workshop, should they be willing, and with our input. We understand that this study will be independent of our own research and data collection.

Sincerely,

Helen Whybrow
Communications Director