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ECOLOGICAL WORLDVIEWS

A MISSING PERSPECTIVE TO ADVANCE GLOBAL SUSTAINABILITY LEADERSHIP*

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Abstract. Since the corporate sustainability movement emerged more than 20 years ago, much has been written about how multinational corporations must play an important role in solving the planet's ecological challenges. However, while corporate sustainability research has focused extensively on environmental impacts, strategies, and best practices at the organizational level, not enough attention has been paid to sustainability leadership at the individual level. As a result, little is known about the psychological motivations of corporate sustainability executives and how this may relate to their behavior as change agents. Based on insights from social science disciplines, including ecopsychology, integral ecology, and developmental psychology, this article presents findings from a large sample study of the ecological worldviews of global sustainability leaders. Specific findings include five experiences that shape ecological worldviews over the lives of the participants and five ways that ecocentric worldviews are expressed. Based on the findings, the author proposes that participants in the study have developed advanced ecological worldviews that underlie their motivation and capacity for effective sustainability leadership, and makes specific recommendations for education and practice.

*Although written in a different first-person narrative and citation style, elements of this article will appear in *A New Psychology for Sustainability Leadership: The Hidden Power of Ecological Worldviews*, to be published by Greenleaf. Specifically, many of the quotations presented herein are presented in Chapters 3 and 7, with the methodology presented in Appendix B, of the aforementioned book. Various updates and additions, however, were made in this article.

Keywords: sustainability; corporate social responsibility; ecological worldviews; ecopsychology; ecological self; integral ecology; environmental leadership; developmental psychology; deep ecology

INTRODUCTION

As human beings dependent on the earth's ecosystems for survival, we now face the most serious and complex set of ecological problems in our history. Driven by our ecologically unsustainable way of life, these problems include an increasingly less predictable climate and a wide range of interrelated environmental concerns. When these are added to social and economic pressures caused by the increase in our global population, the path toward prosperity for everyone, both in this generation and in the future, appears more tenuous than ever (Finn, 2010).

That we have been saturated with scientific information describing the ecological crisis has not significantly altered the behaviors responsible for the serious problems which we face. It appears that more information from the natural sciences is not enough. Perhaps the social sciences can now make a vital contribution by reframing ecological issues, especially for sustainability leadership (Brown, 2012; Esbjorn-Hargens & Zimmerman, 2009; Hedlund de-Witt, 2012; Rimanoczy, 2014; Rogers, 2012).

Since the last decade, the sustainability position in multinational corporations has grown in influence. It has moved from the managerial level to Director to Vice-President to, beginning with a first appointment in 2004, Chief Sustainability Officer (Weinreb, 2011). Today there are senior sustainability executives in hundreds of the world's largest multinational companies. In many cases, the Chief Sustainability Officer now reports directly to the CEO. These are highly influential individuals inside highly influential global organizations.

Although the sustainability literature has explored how multinational corporations can play an important role in solving the planet's ecological challenges, not enough attention has been paid to sustainability leadership at the individual level. As a result, little is known about the psychological motivations of sustainability leaders and how this may relate to their effectiveness and capacity to lead transformational change (Brown, 2012; Visser & Crane, 2010).

A FOCUS ON ECOLOGICAL WORLDVIEWS

This study was based on theoretical insights from several social science disciplines including ecopsychology, integral ecology, deep ecology, and developmental psychology. At the intersection of these disciplines lies a phenomenon known as *ecological worldview*, which can be thought of as the cognitive and perceptual capacity to see the world through the lens of ecology, which is essentially the relationship between species and their environment. It can also be thought of as comprising the deep mental patterns and habitual ways of seeing our relationship with the natural world. As relates to sustainability leadership, ecological worldviews can enable and enhance our perception of our interdependence with the earth's planetary ecosystems.

Ecological worldviews have been described as early as the 13th century by St. Francis of Assisi (who said that all humans were responsible for protecting nature as part of their faith in God), the 19th century through the transcendentalism of Emerson and Thoreau, and the early 20th century by Thomas Merton (Devall, 1995). In the second half of the 20th century, philosophers including White (1967) and Naess (1995) explored the larger spiritual implications of ecological worldviews by describing them as a root cause for the ecological crisis. In the 21st century, ecological worldviews have been described as a primal care for the earth and an essential element of integral human development (Barrera, 2010).

THEORETICAL FRAMEWORK BASED ON TWO KEY ECO-PSYCHOLOGICAL CONSTRUCTS

After extensive review of ecological worldview literature, two eco-psychological constructs were selected as theoretical lenses for this study. These two constructs are (1) the *ecocentric worldview* and (2) the *ecological self*. Each of these two psychological constructs can be considered as a core component of an ecological worldview.

The Continuum Between Anthropocentric and Ecocentric Worldviews

Over the last 50 years, social science researchers from numerous disciplines have characterized the worldviews of most people as predominantly anthropocentric, reflecting a belief that human beings can ultimately control nature through technological and economic advances. Such a worldview is based on a belief that human beings are at

the center of the universe and are the most significant species on earth. It assumes that all phenomena in the world should be interpreted in terms of human values and experiences. A person with an anthropocentric worldview generally has a more instrumental view of nature.

On the other hand, a person with a worldview weighted more toward ecocentricism expresses a more explicit belief that human beings are dependent on, and literally embedded in, the earth's ecosystems. A predominantly ecocentric thinker sees the earth's biosphere at the center, with humans as one of many thousands of species that have arisen and are dependent upon the earth's living systems for survival. An ecocentric worldview involves a basic understanding of non-human organisms and planetary ecosystems. It requires that we apply what we learn about how human activity impinges on ecosystems in order to do less harm and live sustainably in our ecological niche (Goleman, 2009). A person with an ecocentric worldview generally maintains a more intrinsic and spiritual view of nature.

As pertains to sustainability leadership, anthropocentric worldviews can act as blinders that lead to resistance to environmental initiatives. They can limit approaches to technology and affect the policies of multinational corporations, governments, and NGOs throughout the world. Given these implications, a better understanding of the continuum between ecocentric and anthropocentric worldviews in the minds of multinational corporate executives holds the potential to make an important new contribution to the field of sustainability leadership.

The Ecological Self

Norwegian philosopher Arne Naess made the first reference to the ecological self in 1972 as part of the philosophy of deep ecology. Since then, the concept of the ecological self has been explored by at least three primary disciplines: deep ecology, ecopsychology, and integral ecology.

Among deep ecology scholars, Naess (1995), Shepard (1973), Devall (1995), and Bragg (1996) have written about the ecological self from a developmental perspective. Building on the concept of many-sided maturity, Naess (1995) observes that a person can be mature in social relations but have an adolescent ecological self. Shepard (1973) describes the potential to comprehend our ecological selves such that the epidermis of our skin is like the surface of a pond with a felt sense that nature is continuous within us; such a capacity to embody the ecological self

may signal a more advanced stage of ecological worldview. Devall (1995) highlights that we underestimate our self-potential by not appreciating our ecological self and that the ecological self, rather than being static, is a search for an opening to nature. He contends that the ecological self is part of the transforming process that is required to heal ourselves in the world. He explains that as human beings we limit our identity to our religion, our gender, and our occupation, to the exclusion of our ecological self.

Australian environmental psychologist Elizabeth Bragg (1996) explores the concept of the ecological self through the lens of constructive developmental psychology. She proposes that an expanded self-concept through the ecological self can affect the functioning of an individual in the environment and explores how self-constructs can be changed. Eco-psychologist Sewall (1995) supports the idea that the ecological self matures through the recovery and development of our sensory systems, which she calls “exquisitely evolved channels for translating the *in here* and the *out there*” (p. 203). She recommends five perceptual practices for perceiving our ecological conditions. Through these practices, inner and outer worlds become arbitrary and the mature ecological self perceives its permeability. Empathy for and identity with the broader ecosystem are outcomes of these changes in perception.

From the discipline of integral ecology, Esbjorn-Hargens and Zimmerman (2009) introduce a theoretical framework of ecological selves based on the capacity to take in additional perspectives and identify with increasingly complex levels of the natural world. As part of their model, they provide detailed descriptions of the ecological selves and associated worldviews that individuals can hold. Their integral model also provides descriptive patterns of how individuals interpret the natural world and how each pattern affects what an individual can be aware of, reflect on, and act on.

By elucidating a developmental perspective of the ecological self, and the implications for action in the world, the above scholars suggest a new relevance for the ecological self to be applied to sustainability leadership. For instance, the integral framework of ecological selves and associated worldviews offered by Esbjorn-Hargens and Zimmerman holds the potential to help sustainability leaders better communicate with stakeholders that hold a variety of worldviews. This in turn may help sustainability leaders be more affective as change agents and overcome long-standing psychological resistance to the sustainability initiatives they champion.

A MISSING PERSPECTIVE IN SUSTAINABILITY LEADERSHIP RESEARCH

Despite the potential for empirical research about ecological worldviews to be applied to human development in the context of sustainability leadership, very few studies have attempted this integration. Although recent pioneering studies by Brown (2012), Hedlund de Witt (2012), and Rimanoczy (2014) have explored psychological and developmental aspects of sustainability leaders, their studies were based on small samples and not focused specifically on ecological worldviews.

Developmental psychology researchers including Cook-Greuter (2004), Kegan (1994), and Torbert (2004) have accumulated an immense body of work that explores the development of self, although it has focused mostly on the relationship of human beings with themselves and each other, and not enough on our relationship with nature. Kahn and Hasbach (2012) and Louv (2008) have reported extensive research on the human relationship with nature, but focused primarily on childhood development, ecotherapy, and education.

Within the sustainability leadership literature, there has been only one small-scale empirical study focused specifically on the ecological worldviews of corporate sustainability leaders. Rogers (2012) used the ecological selves framework to explore the worldviews and motivations of executives inside a single European company. She found that executives were able to identify specific moments that led to a different way of thinking about the environment. While some executives characterized these changes as epiphanies, and others described a more gradual evolutionary shift, all of them reflected on these shifts as being a permanent change in the way they thought about and approached their work.

Rogers also reported that those executives who experienced explicit changes in their leadership behavior toward sustainability demonstrated ecological worldviews that appeared to be on the more advanced end of the ecological selves spectrum. Specifically, she found that these executives demonstrated a more highly developed sense of complexity, systems thinking, and interdependence. Rogers thus speculates that further research into ecological worldviews and ecological selves could lead to a deeper understanding about how leaders develop advanced capacities as change agents within their companies and their roles within the ecological crisis.

Based on this gap in the literature and the lack of large-scale empirical research as described above, this study was designed to interview a

robust sample of global sustainability leaders about the ecopsychological motivations for their work, the origins of their ecological worldviews, and how their ecological worldviews may influence approaches to leadership and change in service of sustainability.

RESEARCH METHODOLOGY

An exploratory and descriptive qualitative survey was deployed in the study (Creswell, 2009). Utilizing a 10-question interview guide (see Appendix A), semi-structured phone and face-to-face interviews with 65 corporate sustainability leaders were conducted using principles of naturalistic inquiry (Lincoln & Guba, 1985). The interviews typically lasted from 30 to 45 minutes and were transcribed during or after the interview.

In order to analyze and interpret the qualitative data, a multi-step thematic analysis process was then utilized (Braun & Clarke, 2006; Creswell, 2009). First, an inductive thematic analysis process was conducted to get a general sense of the information being conveyed and uncover initial themes from the interviews. Second, deductive analysis based on the two key eco-psychological constructs from the literature review was utilized to analyze the qualitative data. After several rounds of both inductive and deductive thematic analysis, the collective findings were organized under two major themes, each supported by five groups of diverse interview quotations as evidence; these are presented below.

DESCRIPTION OF SAMPLE

A purposive sampling strategy focused on senior sustainability executives at multinational companies was deployed (Babbie, 2002). Participants for the study were recruited by attending national and international corporate sustainability conferences over a period of 3 years. The sample consisted of 65 senior corporate sustainability executives and consultants. Of these 65 participants, 45 held senior-level positions in multinational companies at the Chief Sustainability Officer, Vice President, Director, or Manager level. There were 2 CEOs of public companies, 6 presidents of private companies, 6 senior executives, and 6 sustainability consultants. A partial list of the companies included Hewlett-Packard, Microsoft, Clorox, Miller-Coors, Sprint, AT&T, Motorola, AMD, Waste Management, 3M, Mattel, Starbucks, Nike, SC Johnson, Seventh Generation, Coca-Cola, Ford, GE, Price Waterhouse Coopers,

Sun Microsystems, Green Mountain Coffee, and Ben and Jerry's, which is a subsidiary of Unilever.

Each of the participants had at least five years experience coordinating and communicating sustainability-related initiatives with a broad range of internal and external stakeholders, including their employees, supply chains, NGO partners, and customers. Many of the participants had been working closely with corporate sustainability initiatives for more than 10 years and had held multiple senior positions in more than one multinational corporation. Many had worked in both the private and public sector.

MAJOR THEMES AND SUPPORTING FINDINGS

Theme 1: Experiences that Shape Ecological Worldviews Across the Lifespan of Participants

Based on thematic analysis of the interview narratives, the first major theme that stood out was comprised of personal experiences described by the majority of participants and which they attributed to having shaped their *ecological* worldview. These were: (1) from their family of origin and early childhood experiences in nature; (2) through environmental education and memorable teachers and mentors; (3) from seeing poverty and environmental degradation in developing countries; (4) from the perception of capitalism as a vehicle for environmental activism; and (5) through spirituality and a sense of service.

These experiences were generally described when the participants were asked about their backgrounds and motivations concerning sustainability. Most of them traced the origins of their worldviews back to specific points in time, people, places, or events that made a significant impression on their lives. They shared stories at length and with little prompting, with many of them becoming animated when telling stories about their childhoods, their families, and their travels abroad to developing countries in Central and South America, Africa, and Asia.

Family of Origin and Early Childhood Experiences in Nature

In response to initial background questions, phrases such as *growing up*, *how I was raised*, *ever since I can remember*, and *when I was a kid* appeared in many of the interview transcripts. The following first three interview excerpts all point to how early childhoods particularly in rural environments influenced worldviews. Each of these three

mid-career senior sustainability executives attributed their early environmental worldview and eventual career path in sustainability to their childhood:

Growing up my family had a very sustainability-minded approach. My parents were composting and reusing grocery bags before it was mainstream. My parents were much ahead of their time. I grew up that way. I also spent a lot of time outdoors and developed a deep appreciation for nature So I think it influenced me to become an environmentalist.

When I was a kid my grandfather had an apple orchard. We would spend summers going from one grandparent to the other. We just played outside in the apple orchard that was maybe sixty acres or something. There were all these cows around. You just kind of learned about the role of growing food in a way that just kind of enveloped me ... That was just how I was raised.

I was raised in a rural, small town in Vermont and was like most boys in rural America at the time. I was outside all the time. I also did a lot of fishing and hunting when I was young. My father's family influenced my upbringing. We gardened a ton. I did canoe trips with scouts and all that sort of thing.

As a final example of this first finding, here is a quotation from the president of a national consumer foods company. In it he describes an unforgettable experience in middle school:

I grew up in West Nyack, New York along the banks of the Hudson River, less than an hour north of Manhattan. The teachers at the middle school I went to had a mission to get more environmental awareness into the classroom. So they taught us about why the Hudson was so dirty, told us about all the industrial dumping from factories up the river. Then one day they took my class out on the Clearwater, Pete Seeger's sailing vessel that was dedicated to cleaning up the river. I remember how they used nets to dredge up and remove garbage from the river. I saw stuff like old tires, pieces of cars, old luggage, and lots of scary stuff ... seeing all the junk in the river made a big impression on me.

Environmental Education, Teachers, and Mentors

The next finding that emerged from the data was drawn from a number of executives who reflected on experiences in college or graduate school. For instance, a vice president at a global consumer foods company remembered one particular class he took that was based on the systems thinking work of Thomas Lovejoy, a widely respected tropical biologist:

I went to Kenyon College. I remember that I had to take at least one natural science class. There was a class on systems thinking based on Thomas Lovejoy's work and the value [of] standing forests ...

Another participant, the president of a consumer products company, spoke at great length about his discovery of ecopsychology while an undergraduate:

I was a psychology major at Stanford. My senior year I heard about the field of eco-psychology. There wasn't anyone who taught it at Stanford but I found a professor at UC Berkeley who had edited an anthology. So I got together with him and did an independent study. I lived in a cooperative on campus. They had a big garden outside the house and that is when I first became really interested in how to build soil and grow food ... My perspective was being shaped by the time I was spending with the farmers and became the impetus for my work in sustainability.

Another participant, an executive with a global NGO, described how his senior thesis opened up what he referred to as his theme of the integrated nature of disciplines:

I went to Brown and studied environmental science. Part of the curriculum was to write a senior thesis. My thesis explored what it would be like if ranchers were ranching native animals instead of cattle on western rangelands. I explored what that would look like. For me it was the beginning of blending ecological science with culture and economy. Since then it has been a real exploration into that blending of disciplines.

Seeing Poverty and Environmental Degradation in Developing Countries

Many of the participants shared stories about their experiences in developing countries. Several executives, for instance, worked in the Peace Corps or other volunteer organizations in South America and Africa. They reported how seeing poverty and environmental degradation firsthand had a significant impact on their worldview. For instance, one participant described how a volunteer experience in South America changed his life:

I went to Paraguay in the summer of 1991 in between my junior and senior year in high school ... I lived with a family in a very rural part of the country ... Every few kilometers there were tiny shacks where families lived beside their fields. Mostly they were growing single crops like soy

and cotton. There were big open fields for cattle created by clear cutting. In the distance you could see a stand of old-growth forest but it felt like it was always in the distance. The deforestation was depressing. I remember feeling a lot of sadness about what I saw.

The next quotation is from a long-time executive with a large coffee company. As part of his company's policy, employees are selected to attend immersion trips to the countries of origin where the coffee is grown. Here is how he described his experience:

When I first went to Costa Rica in 1992 I did not see any poverty. Then I took a week's vacation in 1995 and travelled to northern Guatemala and southern Mexico and saw all the poverty. I used my own vacation time and paid for the trips myself. I lived with families, took a total immersion language course, and became more and more passionate about these issues. I came to understand the struggles and became so committed that I did a lot of this on my own time.

Another participant spoke along similar lines about how his travel and work in Central and South America allowed him to formulate new thoughts about sustainable development, social justice, and the environment.

I was able to get to the developing world early in college through an internship. I think this is where my interest about poverty and inequality issues in the United States pivoted to become more global ... I became aware of how environmental and social justice issues went in tandem. Then it prompted travels in Bolivia for my senior thesis research and later living and working in Nicaragua for half a year right after college ... I learned more about the questions that I needed to be asking more than getting answers ... realizing that people and the environment are very much intertwined.

Perceiving Capitalism as a Vehicle for Environmental Activism

One very surprising finding that emerged from the interviews was the number of senior sustainability executives at multinational companies who had extensive prior experience working in either environmental NGOs, the public sector, or both. These executives narrated similar versions of stories wherein they started their careers motivated to work on a combination of social justice or environmental issues. Then, after a number of years, they intentionally decided to move into the private sector as a way to leverage their experience and have what they perceived to be a bigger impact on the world. For example, a widely respected senior sustainability executive who had worked for two multinational corporations and pioneered many

corporate sustainability practices described how he went between the public and private sectors earlier in his career:

I started my career working for Bernie Sanders on national budget and defense issues. Then I went to work for Ben Cohen and Jerry Greenfield. We were able to figure out how we could take a peace dividend ... Later I went on to Green Peace with a clear focus on global warming ... I ended up deepening my understanding of corporations and developing a new model of corporations as a more positive force in the world ... I came to the conclusion that being part of a corporation was how I could have the biggest impact.

Another participant, a senior sustainability executive at a multinational consumer products company with one of the largest global supply chains, described how he spent more than two decades in the public sector before moving into his role in corporate sustainability:

I went to college in Colorado and was involved in the protest to shut down the Rocky Flats Nuclear Power plant. I went to work for Senator Tim Wirth and wanted to help end the nuclear arms race ... I remember Tim saying not on his life was he going to compromise. He said he was going to fall on his sword before he ever let nuclear weapons continue. When the Berlin Wall fell, Tim kind of pivoted from the east to west political military issues to the north to south environmental and social issues and I pivoted with him. It was a turning point for me in terms of commitment to the environment.

A Sense of Spirituality and Service

The final finding under this theme emerged from participants who evoked a sense of spirituality and service when describing their motivation for sustainability. For example, a senior sustainability executive at a global communications company told a story about how she grew up with nature in her backyard:

I believe this whole area of environmental corporate activism also involves spiritual development. I grew up on a creek in Sioux City, Iowa and just that experience gave me a love of nature. Ever since I was a child I wanted to serve and give back to the community. At this point in my life, I can't imagine having a more satisfying career because my spiritual aspect is being addressed through my work in sustainability.

Another participant, an executive at a global wood products manufacturing company, shared this very personal reflection of his spirituality during his interview:

I am very much of the view that we are all parts of a very interconnected, interdependent whole. All species, or natural features as Joanna Macy puts it, are all important; we all have our place; we are all worthy of respect. However, humans have set themselves apart and above nature to everyone's detriment. Technology has only increased this divide My spirituality is nature-based ... it is definitely tied with respect, awe and gratitude for nature. In nature is where I am more at home. I was fortunate to have had access to nature in my childhood. I've always had a deep connection and humility. My work in sustainability has only enhanced and deepened my perspective.

Another participant, an executive at a national waste management firm, shared along the same lines how his experience with transformational shadow work helped deepen his sense of the connection between spirituality and sustainability:

I suppose that I've been working at the intersection of spiritual development and sustainable business practice ever since. At this stage of my career, spirituality, sustainability, and work are interwoven.

An executive at a global footwear and apparel company shared her awakening environmental consciousness in the following way:

I read the Ecology of Commerce and listened to Paul Hawken speak. I also came across the Natural Step. It became apparent to me that we were operating against Nature's rules.

Theme 2: Expressions of Ecocentric Worldviews

The second major theme that emerged from the thematic analysis consisted of five distinct ways in which sustainability leaders expressed ecocentric worldviews during the interviews. These were through an awareness of (1) their ecological embeddedness; (2) the fragility of planetary ecosystems; (3) a belief in the intrinsic value of nature; (4) an enhanced systems consciousness, and (5) planet-centric circles of identity and care.

Phrases such as *ecological context within which we live, learn from natural systems, inherent value in nature, interconnectedness of humanity and the natural world, and truly seeing other species* are just some of the examples that appeared during the interviews that are indicative of an ecocentric worldview and, to an extent, the ecological self (Abram, 1996; Capra, 1996; Esbjorn-Hargens & Zimmerman, 2009; Naess, 1995). A detailed presentation of these findings follows.

An Awareness of Ecological Embeddedness

As part of their reflection on their ecological worldview, many participants demonstrated an awareness of the ecological embeddedness of human beings, one of the key characteristics of an ecocentric worldview. For example, a long-time sustainability executive at a major global apparel and footwear manufacturer described her ecological worldview in this way:

I've always understood at a fundamental level that the economy and society are within the context of the environment. So we really can't do anything without paying attention to the ecological context within which we live.

The senior sustainability executive at a company that produces natural household cleaning products reflected on the potential for bio-mimicry and industrial ecology to make the world better:

My awareness of just how much we can learn from natural systems has evolved over time. I continue to look more closely at how bio-mimicry and industrial ecology could reframe our industrial world and make it so much better. However I'm not so nature-centric that I don't think that there's a vital role for humans within all this. We possess the ability to control our processes and make them more efficient. However we have to sit within the natural system and learn from it.

Another participant, the president of a manufacturing company, spoke of "being of service" and "restoring ecosystems". He articulated a specific point in time when he expanded beyond thinking of himself as just an organizational leader to wanting a better understanding of ecosystems in this manner:

It was there that I realized I made a shift from being primarily interested in my own experience of being a leader and interpreter to actually understanding ecosystems better in order to be of service and in some way conserve or restore ecosystems.

An Awareness of the Fragility of Planetary Ecosystems

The next interview excerpts are also indicative of an ecocentric worldview. They demonstrate a heightened awareness of the relationship between social and environmental issues and the fragility of our planetary ecosystems.

One executive, the head of natural resources management at a major global food manufacturer, focused on how she sees her role as a sustainability change agent expanding beyond her own company:

We are at risk [of] losing an enormous amount of topsoil and people do not understand that. I am very concerned about water allocation, very concerned with mono crops. In Oregon GMO sugar beets are being grown right next to organic ... This is my passion and I am fortunate that the company allows me to look at agriculture.

Along the same lines, another participant reflected on his hopes and concerns for the future by highlighting the health of the oceans and carbon emissions during his interview:

I hope that the next stage is a broader understanding of social and environmental equity as the cornerstone I have had a bit of a shift in my thinking. There are so many reasons to limit the amount of carbon into the atmosphere. The health of the oceans is a major one. They are taking a big beating due to acidification to the point of dying.

A Belief in the Intrinsic Value of Nature

One of the key distinctions between anthropocentric and ecocentric worldviews is whether one believes nature is to serve man or if it has intrinsic value. This next participant reflected on this core philosophical question. Drawing on his background as a senior executive with a global environmental NGO, he described how the two sides of this debate are affecting his thinking:

There's a fascinating debate going on in the scientific circles right now. On one side is the value of the natural world to human beings that reduces it to economic value and human life, and risk reduction value ... On the other side is that we not only depend on nature, but there is an inherent value in nature ... This is the camp of the spiritual and intrinsic values ... the language is being reduced to a story of nature that serves humanity through economic and human wellbeing ... for many of us who have a broader view of the interrelationship and interconnectedness of humanity and the natural world that is problematic.

By describing the influence of *The Sand County Almanac* on the development of his ecological worldview, another participant illuminates an ecocentric worldview and the ecological self:

It comes from Aldo Leopold that we need to quit being the lord and master of the world and become a plain citizen of it. We need to truly get away from a human-centric to a more nature-centric, shall we say, view. I don't think we can completely figure out how complex life is. But I do think it is possible to relate to and connect to it. I think it's truly seeing other species at least on an equal plane with us.

The next quotation offers one final example of an ecocentric worldview and the ecological self:

I'm convinced that humans are an integral part of nature, not masters of or separate from nature, and that through our self-reflective capacities as human beings we can harmonize our actions with the natural movements of nature.

Enhanced Systems Consciousness

Another distinctive characteristic of an ecocentric worldview is the capacity to see oneself and one's organization within a complexity of planetary ecosystems. For example, the CEO of a corporate environmental NGO based in Washington, DC, said:

My personal view is that we've got to find a way to move from the goal of just understanding the natural environment to the realization that we ourselves are causing the environment to change drastically around us *for the first time in the history of man*. I think that changes the game.

Another participant, an executive at a national environmental coalition that focuses on working with members of Congress for progressive climate and energy policy, shared her perspective this way:

Environmental movements take a long time. We should not be surprised. What we see is a scaling up with more sectors, more brands. We were prepared for companies to back out, but we are actually getting more calls. The U.S. Chamber of Commerce and big oil and big coal are disproportionately influential. *If we really look at history, this is their last gasp*. We're seeing a crescendo of activity that will ultimately result in a long-term careful solution.

A senior sustainability executive at a major apparel and footwear manufacturer offered this reflection about her ecological worldview which demonstrates her systems consciousness:

I think probably that where I come from in terms of my ecological worldview is systems thinking and the interconnection of so much of what we do and our impact on the environment. I've spent a lot of time over the years around sustainability and been exposed to a lot of what's going on in the world.

When asked how he thought about the impact of his work, here is how another senior sustainability executive put it:

The next circle out there is the whole planet Quite often it breaks down to understanding yourself and your dependence on nature. There's an interrelationship obviously. It means taking yourself and your team out into the world and [becoming] aware of how you are impacting the bigger ecosystems and making linkages.

Another participant, the CSO at a global travel services company, described how the concept of waste had led her to a deeper appreciation of systems thinking:

When you step into a role like this what you think will inspire your changes. For example, I never thought I would be so excited about trash. However I realized that I was getting excited about systems thinking. In order to be a real change agent you have to understand the whole system. One day I put on my gloves and went through the trash in one of our buildings. When I thought about waste diversion, I began seeing the entire global waste system.

Another participant, when asked what some of his key takeaways were since he began his journey as a sustainability leader, replied:

First, that the more you work on sustainability you realize it is not just connected to other issues, but the same as other issues, like ethics, religion, business, family, education, health, poverty, respect, government.

An Awareness of Planet-Centric Circles of Identity and Care

The capacity to identify with a widening circle of human and nonhuman communities is another important characteristic of an ecocentric worldview.

There were numerous instances during the interviews where the participants indicated a heightened awareness of the entire global community. For instance, while reflecting on the issue of climate change,

this Chief Sustainability Officer highlighted a perspective that was missing from the political climate change debate in the following way:

Of course from a global perspective climate change is an enormous issue that we should be addressing. But I think one thing that is a little bit absent from these conversations is the outsourcing of our industrial processes to these other countries and our being ignorant of the effect of this.

Another participant, a Director of Sustainability, spoke of climate change being an issue of equity for people in underdeveloped countries throughout the world:

Ultimately climate is an issue of ethics and equity, and solving it seems like an obligation to our kids but also to poorer people around the world.

The following quotation from a long-time senior sustainability executive at a major apparel manufacturer reflected that our language and culture are still embedded in our patriarchal society:

I think we are honing our approach. It's an ever-widening circle of learning. The work we're doing on diversity and culture, recognizing what are the patterns and the artifacts in the culture, I continue to find it so helpful ... How do we lead going forward? We need to move towards a more matriarchal society from the dominant patriarchal societies. We continue to need to see that sustainability is embedded in the patriarchal and explore how we can move into a more feminine non-traditional approach.

DISCUSSION AND IMPLICATIONS

The interview quotations provided above suggest that sustainability leaders share at least five common experiences that have shaped their ecological worldview. The quotations also offer ample evidence that there are senior sustainability executives inside many of today's largest corporations that have developed ecocentric worldviews. Many appear to understand the distinction between ecocentric and anthropocentric worldviews, and the wider social and environmental implications of worldviews for their global organizations.

These findings are significant in several ways. First, the descriptions of how global sustainability leaders think about nature, and where these thoughts came from, indicate that they have developed *explicit* ecological worldviews from specific sources of origin. Second, sustainability leaders

appear to make a connection between their beliefs about the natural world and the motivation for their work in sustainability. Third, their beliefs about nature appear to have been formed throughout their lives. Fourth, these findings suggest that many sustainability leaders possess a high degree of ecological intelligence on a planetary scale and have a philosophical stance on their relationship with nature. Many of them appear to be not only highly educated in the complexity of global environmental science but also readily aware of bigger philosophical questions facing humanity with regard to our relationship with nature.

Lastly, the five groups of interview quotations that support the existence of ecocentric worldviews also suggest an awareness of the ecological self. This offers a new link between the development of the ecological self and deeper motivation for sustainability leadership. This may allow new ways for sustainability leaders to understand themselves, more effectively communicate with diverse audiences, and ultimately enhance their effectiveness as transformational change agents.

As described earlier, human development research from eco-psychology, deep ecology, and integral ecology suggests that the ecological self is part of an expanded self-concept that can significantly change how an individual acts in the world. Such research further suggests that as human beings we may be underachieving our self-potential by not embodying our ecological self.

Despite this potential, however, developmental and ecological scholars from diverse social science traditions do not appear to have offered a specific developmental model of how this development of the ecological self actually happens over the course of one's life. Given the potential for the ecological self to become a new type of interior psychological foundation for sustainability leadership, the following is an interesting proposition for sustainability educators and researchers to consider: *a new focus on the development of ecological worldviews and the ecological self in the context of sustainability leadership education and practice.*

DEVELOPING ECOLOGICAL WORLDVIEWS AND THE ECOLOGICAL SELF IN SUSTAINABILITY LEADERS

The life experiences of the corporate sustainability leaders in this study appear to have contributed to the formation of advanced *ecological* worldviews. Although the research was not designed to uniformly examine the biography of each participant, a chronological and possible developmental sequence did suggest itself within the interview narratives.

This developmental inference, however, is limited by the qualitative exploratory methodology and the specific interview questions used in the study. As a result, the suggestion that these experiences represent a hierarchical and developmental sequence is tentative and would need to be supported by further empirical research. This could be approached through additional semi-structured interviews focused on a developmental line of inquiry. Another approach could be to modify existing leadership assessment tools to explore a stage conception for ecological worldviews.

This possible developmental sequence should be of interest to ecological worldview, developmental, and sustainability leadership researchers in several ways. As noted above, there has been very little focus on the development of ecological worldviews and the ecological self by developmental or sustainability researchers. As described earlier, developmental theorists including Cook-Greuter (2004), Kegan (1994), and Torbert (2004) have conducted extensive research that explores the development of self. However, their research has taken place under the anthropocentric umbrella of Western psychology and has not focused enough on the human relationship with nature, thus posing a large gap in the effort to integrate the ecological self and worldviews with sustainability leadership development.¹

The empirical findings presented in this article serve to further ground ecological worldviews and the ecological self in sustainability practice. They suggest that existing research on how to cultivate ecological worldviews and the ecological self be integrated into sustainability leadership education and corporate training programs. Such initiatives could include new adaptations of the works cited above, including Sewall's *five perceptual practices* (1995), Macy and Brown's *Work that Reconnects* (2014), and Esbjorn-Hargen's and Zimmerman's integral model of *ecological selves* (2009).

A final way to think about these findings is the way they suggest a more holistic view of the sustainability leader. One can see in the interviews representations of both cognitive development through advanced ecological worldviews and emotional / spiritual development of the ecological self. Both form part of the motivation, resiliency, and effectiveness of these participants in their work as sustainability leaders.

¹Although the transformational workshops created and facilitated by Joanna Macy, John Seed, Molly Brown, and many others called *The Council of All Beings* and *The Work That Reconnects* have been widely spread over the last several decades, their work has not received enough attention within the corporate world or in academia.

CONCLUSION

For too long we have assumed that all multinational corporations, and by default all executives inside them, have the same worldview. If we are to advance the field of sustainability leadership beyond its current limitations, it is vital to understand how highly successful sustainability leaders think about their relationship with nature, how their ecological worldviews were formed, and how this influences their actions and effectiveness as change agents.

Human beings now face the most serious and complex set of ecological problems in their history. Multinational corporations must play an important role in solving the planet's great ecological challenges. During the last decade, the sustainability position inside multinational corporations has grown in influence. Today there are senior sustainability executives in hundreds of multinational companies. In order to reframe and advance sustainability leadership, there is much work to do. The findings from this study should be of interest to a wide range of social science researchers, leadership educators, corporate executives, environmental activists, and social entrepreneurs. New insights can be integrated into leadership curricula and programs in a variety of public and private institutions to support the development of the next generation of sustainability leaders.

FUTURE RESEARCH

In a recent study conducted by *MIT Sloan Management Review* and The Boston Consulting Group entitled *Sustainability's Next Frontier*, researchers explored the extent to which corporations are addressing sustainability issues. Based on a worldwide sample of corporate leaders, they found that although nearly two-thirds rate social and environmental issues as significant, less than ten percent report that their corporations are addressing these thoroughly. The researchers conclude by attributing this gap to a "disconnect between thought and action" (Kiron, Kruschwitz, Rubel, Reeves, & Fuisz-Kehrbach, 2013: 3).

By providing extensive evidence of the ecological worldviews of sustainability leaders and how these may relate to their motivation for sustainability and leadership, the present study starts to close the gap between thought and action in global organizations. Future studies with new sample populations and control groups could explore questions such as:

- How do ecological worldviews differ between sustainability and “non-sustainability” leaders?
- How can a better understanding of ecological worldviews and ecological selves enhance the effectiveness of sustainability leaders as transformational change agents?
- How do ecological worldviews of sustainability leaders vary across cultures, age groups, and/or gender?
- How do ecological worldviews correlate with the success of individual sustainability initiatives?
- How are ecological worldviews expressed at specific developmental stages?

In light of the above discussion, one final generative pair of questions emerges: Does the practice of sustainability catalyze the development of ecological worldviews and ecological selves, or do individuals with advanced ecological worldviews and a sense of their ecological selves self-select for work in sustainability? Either way, if through the practice of sustainability a new opening, or deepening, of ecological worldviews and selves is occurring, this represents new ways for the proposition that ecological worldviews and selves become a new focus for sustainability leadership research. Although a few studies have already been conducted in this area, our understanding of how the emergence of ecological worldviews and the ecological self can accelerate and enhance the field of sustainability leadership is just beginning.

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APPENDIX A: ECOLOGICAL WORLDVIEW / SUSTAINABILITY LEADER QUALITATIVE INTERVIEW QUESTIONS

1. Perhaps we can start with some general background. How, or why, did you become involved with sustainability within your organization?
2. How would you describe your ecological worldview? What comes up for you when you think about your relationship with nature?
3. Looking back, can you point to any transitions or events where you started to look differently at the world, yourself, and nature, or is this a worldview that you have held for a long time?
4. How do you think that your work in sustainability has had an impact on your worldview?
5. How do you perceive global environmental issues today and what you see as the source of many of the problems?
6. Can you think of a situation or a dilemma where your ecological worldview was in conflict with an action or activity you were involved in as part of your work? How did you resolve this?
7. What do you believe are some of the implications of ecological worldviews on sustainability leadership development in general?
8. Shifting to [a] more long-term view, can you describe any thoughts about the future role of business in society, especially in the context of ecological issues?
9. [With regard] to ecological worldviews, can you describe any differences between generations of leaders within your company or within cultures around the world?
10. Is there anything that we did not touch on or you would like to share before we wrap up?