TOWARD THE DEVELOPMENT OF A THEORY OF THE PHASES AND ELEMENTS INHERENT IN THE CREATION PROCESS

By

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Dissertation submitted to the Faculty of
Holos University Graduate Seminary
in partial fulfillment of the requirements
for the degree of

DOCTOR OF THEOLOGY
June 21, 2017

HOLOS UNIVERSITY
Unity, MO

DISSERTATION
Submitted in June, 2017

TITLE: TOWARD THE DEVELOPMENT OF A THEORY OF THE PHASES AND ELEMENTS INHERENT IN THE CREATION PROCESS

DATE OF APPROVAL: June 29, 2017

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DEDICATION

Dedicated to the most significant teachers of my life:

To my mom: Detroit city girl, former nun, Mystic, observer of human nature
A child's first form of prayer is to wonder.

To my dad: Michigan farm boy, engineer, Northwoodsman, observer of nature
By golly!

To Grandmother Keewaydinoquay: Ojibway Medicine Woman, teacher, ethnobotanist
Everything has a Purpose and spiritual guidance to help fulfill that Purpose.

To Yogi Amrit Desai: East Indian Yoga and meditation master, teacher
Be still and know you are God.

To Justine McDevitt: Mentor
Love, love.

To Teressa, Brandon, Malaika and Traven:
Love you too. Bye, momma

A Alexandra, mi hermanita ecuatoriana
Tengo chifles. Vamos, chica!

ACKNOWLEDGMENTS

The work reported in this dissertation is original and carried out by me solely, except for the acknowledged direction and assistance gratefully received from colleagues and mentors.

A special appreciation goes to my committee chair and advisor, Dr. Melinda Connor. Thank you for your high standards of academic excellence as well as your encouragement, support and insights.

I want to acknowledge my committee for their expertise and encouragement:
Dr. Suchinta Abhayaratna, Dr. Cay Randall-May and Dr. Katherine Hunter.

I'm grateful for the guidance of my academic advisor, Dr. Bob Nunley. Calling from the Andes or the Amazon thinking I should quit, he encouraged me to keep going when I didn't know what I was researching exactly. He reminded me following the Mystery of spirit is my research and that's what Holos University is all about.

Many thanks to my family of the Amazon jungle. Thank you for welcoming me into your home with open hearts. Muchas gracias a mi familia de Makita Kuy de la selva de Amazonia. Gracias por darme la bienvenida a su casa con los corazones abiertos.

A very special thank you to Alexandra, always ready for the next adventure, and to her daughters for managing without her whenever Onani showed up. It was really special to gather plants and make medicines together on the Equator, high in the Andes.

And big love to my children. Our connection kept me going.

ABSTRACT

Toward the Development of a Theory of the Phases and Elements Inherent in the Creation Process

PURPOSE: To determine the phases and elements inherent in the creation process

MATERIALS: National Library of Medicine database, Google Scholar database, journals, books, archival material and observation of the natural world.

METHODS: Using interdisciplinary materials and the Indigenous Perception Research Methodology, a critical analysis of the phases and elements involved in multiple levels of the creation process will be explored.

THEORY: There are common phases and elements of the creation process echoed at various levels on Earth.

CONCLUSION: The creation process has identifiable phases, each with its own elements, following the blueprint of creation energy.

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CHAPTER ONE

Introduction

To look at health and healing from a theological perspective means to examine this subject from the viewpoint of God, or creator. It is quite easy to see seemingly infinite expressions of creator's creation all around us. Understanding the process of creation is quite complex and extensive, beyond the boundaries of time and space. This critical analysis will be limited to life on planet Earth, a mere 3.5 billion years on a tiny blue dot in a vast Universe (Margulis & Schwartz, 1998, p. 17).

Creation follows an identifiable, methodical process. From pre-cellular microorganisms to complex, planetary ecosystems, there are phases of development within the creation cycle, each phase having their own common elements. By observing the physical Laws of Nature, the process of creation can be clearly defined and understood (Linquist et al., 2016).

Creativity within humanity works the same way. Just as in the rest of nature, chaos and confusion often occur immediately prior to a paradigm shift into integration and greater ease. By understanding the blueprint of creation energy, also known as source energy, pain and difficulty are seen not only as normal, but necessary aspects of growth and development. It is essential to gain the contribution chaos has to offer in order to move forward into a greater level of freedom, responsibility and personal expression.

To access the full potential of Energy Medicine, it is important for practitioners to have a foundational understanding of creation energy. Being able to identify the common characteristics of creation right before a paradigm shift occurs allows practitioners to guide and support clients more efficiently and effectively. This model can be applied to overcome typical barriers in relation to healing, conflict resolution, intimacy and creativity, all forms of shifting from the survival response to the expanded expression of inspired consciousness.

Background of Problem

Throughout history of life on this planet, we can see long periods of small, slow changes beginning with the very first microorganisms (Margulis & Schwartz, 1998). As these prokaryotes (simple cells) gradually adapted to their environments, they also altered their surroundings by their own metabolic waste products, such as a change of temperature, pH and gaseous composition (Margulis & Schwartz, 1998).

When the conditions became just right, the unexpected occurred. Two or more microorganisms that had been using some form of fight or flight reaction in relation to each other, formed a more efficient, integrated relationship, creating an entirely new complexity of life, such as the very first plant, animal or fungal cell, followed by speciation (Margulis & Schwartz, 1998). This unpredictable shift in creation is known biologically as endosymbiosis (Margulis & Schwartz, 1998).

This same process of long periods of slow evolution, whereby organisms continually adapt to their environments, thereby slowly affecting their environments, thus

creating conditions for an unpredictable shift in the trajectory of life, is repeated over and over throughout history and on every level of life, from the microcosm to the macrocosm, from microorganisms to complex ecosystems (Margulis & Schwartz, 1998). Mutually beneficial relationships within nature, called symbiotic relationships, are responsible for this shift through the creation of new possibilities (Zhokhov & Mikheev, 2015).

When survival behavior is prevalent, organisms protect themselves from others. There is a certain kind of risk involved when a life form first begins to negotiate new behavior, rather than be devoured, poisoned, hide or flee from another. This shift involves a change of vibration of some kind. This step of vulnerability is accomplished by releasing or letting go of something. (One symbiont gives up a molecule of phosphorous, the other magnesium, for example.) In return, they both receive something even greater. (Examples - Mushroom mycelium produce compounds in symbiosis with tree roots that are not produced on their own; butter made from free-range cows contain compounds essential for human brain function, not found in mass produced butter where cows are confined indoors and not living symbiotically within their environment; Vayssieres et al., 2015, Couvreur et al., 2006, Rahn, 2006, Robinson, 2000.)

On the other hand, not taking the risk when the time is right causes problems as well. Through the natural expansion of creation energy, what was once a comfortable, safe, nurturing environment for the organism eventually becomes painful in some way. The organism outgrows the very same environment that once gave it safety and security. Generally, toxicity from its own waste products, scarcity of local food, shelter or

potential for offspring and/ or the pressure of predation initiates the need for change. Interestingly, those very same toxic waste products of the current ecosystem often provide the fuel necessary for the new paradigm (Zehr et al., 2016, Zhokhov & Mikheev, 2015). (Example: anaerobic organisms excreting a toxic build up of oxygen into their surroundings creating the perfect environment for the endosymbiosis of aerobic organisms, which need the oxygen for metabolism; Margulis & Schwartz, 1998.)

When organisms are in survival mode, there is a fear of death, of losing one's self, and rightly so. When organisms shift to integration, they can actually expand and diversify their expression. For example, after almost 2 billion years as a single chloroplast, at some point another organism engulfed it, but did not devour it. The two organisms shared responsibilities; the chloroplast provided food, the other shelter. This became the first plant cell (Margulis & Schwartz, 1998). And now, after 2 billion years more, there are hundreds of thousands of plant species on Earth. By taking the risk of integration, it's quite easy to see the chloroplast did not lose itself, but in fact, expanded its expression in unimaginable ways capable of thriving in every ecosystem on the planet that receives sunlight (Margulis & Schwartz, 1998).

To be expected, this same process can be seen within human social systems as well. Humans adapt to environmental conditions, thereby affecting their environments. Just like in any ecosystem, human social systems often create new paradigms under crisis, survival conditions – toxic build-up of waste products, scarcity of resources, such as food, shelter, fuel and potential for offspring. Specific paradigm shifts can be identified when

human civilization took an unpredictable turn allowing for increased efficiency and complexity. (Example – development of writing and agriculture; Wright, 2009.)

In this timeline of expanding biological and sociological complexity, we can also identify the emergence of self-awareness. As self-awareness develops, individuation and personal empowerment give rise to personal expression and creativity (Wright, 2009). From the first separate colonies of prokaryotes to our current awareness of global interconnectedness, we can see the nature of creation follows a very specific pattern leading to more and more diverse expressions of creation (Wright, 2009). It's clear the creation of creation by a creative force is a constant communication, a continual relationship back and forth, between species and environmental conditions, one affecting the other, overall in support of life and the expanding creativity of creation (Grinspoon, 2016, Margulis & Schwartz, 1998, Wright, 2009).

It has always been based on responding to external, survival conditions - until now (Grinspoon, 2016). Especially since the Industrial Revolution, there are now pockets of social systems that are relieved from survival conditions, thus allowing the awakening of this subtle, yet profound creative force within, unconditionally (Grinspoon, 2016).

For the first time, we can now become truly conscientious about our behavior knowing that taking care of our self is intimately connected to our relationship to others as well as our relationship to the planetary ecosystem (Grinspoon, 2016). It is through quiet stillness that one can connect to the subtle creative force within. This force often

goes unnoticed and yet it is the most profound, most powerful, most life-supporting energy of the Universe (Desai, 2010).

Currently, most Energy Healing practitioners apply their modality (homeopathy, acupuncture, Reiki, past life therapy, shamanism, whatever it may be) to the disease model of survival consciousness – the client responds to external stimulus applied by an external authority to rid the client of the complaint, essentially adapting to and maintaining the situation (Nestoriuc & Martin, 2007, Ray-Coquard et al., 2009, Sahawneh, 2011, Zheng et. al., 2016). However, understanding the blueprint of creation energy, one sees pain and conflict very differently (Desai, 2010).

This is creator's way of guiding us back into alignment in harmony with an internal sense of expanding expression. Pain is a signal to relax, breathe and shift into a symbiotic relationship with the Universe, to expand into self-expression rather than feel confined and constricted (Desai, 2010). And yet, as we can see in Nature, expanded expression is a vulnerable, fearful step. Pain and fear are not only natural, but an essential experience in the process of awakening (Desai, 2010).

Statement of the Problem

That nature shows us how the process of creation works. Current practitioners of the Healing Arts can expand their effectiveness by understanding the creation process.

Purpose of the Study

To discover the common phases and elements of the creation process.

Research Questions

Specific Aim: To determine the integral phases and elements in the process of creation.

Hypothesis 1: That an integral theory of the process of creation, its phases and elements, can be determined based on observation of the natural world.

Hypothesis 2: That the elements involved in the process of creation are echoed at multiple levels within the construct of Earth.

Importance of the Study

Based on historical evidence of biological and cultural evolution, all the elements are in place for a global paradigm shift. Practitioners of the Healing Arts can apply knowledge of the creation process to help guide individuals and organizations to transform current social systems for the benefit of all.

Scope of the Study

To discover the process of creation seen from 3 perspectives: biological evolution, cultural evolution and spiritual transformation.

Definitions of Terms

Adaptation (biological context). Modification of an organism or of its parts or organs fitting it more perfectly for existence under the conditions of its environment and resulting from the forces of natural selection upon variation (Merriam-Webster's, 2009def 2:b, p 23).

Anthropocene. The period of time during which human activities have had an environmental impact on the Earth regarded as constituting a distinct geological age (Merriam-Webster, 2016).

Atisokanak. Living 'persons' of an other-than-human class (Harvey, 2002, p. 29).

Attraction. A force acting mutually between particles of matter, tending to draw them together, and resisting their separation (Merriam-Webster's, 2009, p. 80, def. 3).

Biosphere. part of the world in which life can exist including parts of the lithosphere, hydrosphere and atmosphere (Merriam-Webster's, 2009, p 219).

Cells. The structural units of organic life (Anderson & Silva, 2002, p. 247).

Calyx. The outer whorl of protective leaves (sepals) of a flower, usually green (Merriam-Webster's, 2009, p. 253).

Chlorophyll. The green photosynthetic pigment in chloroplasts (Anderson & Silva, 2002, p. 247).

Conflict. Competitive or opposing action of incompatibles; antagonistic state or action (as of divergent ideas, interests, or persons); mental struggle resulting from incompatible or opposing needs, drives, wishes, or external or internal demands (Merriam-Webster's, 2009, p. 261).

Create. To bring into existence (Merriam-Webster's, 2009, p. 293).

Creator. One that creates usually by bringing something new or original into being (Merriam-Webster's, 2009, p. 293).

Direction. The line or course on which something is moving or is aimed to move or along which something is pointing or facing (Merriam-Webster's, 2009, p. 353, def. 4).

Disputant. One that is engaged in a dispute (Merriam-Webster's, 2009, p. 362).

Endosymbiosis. Symbiosis in which a symbiont dwells within the body of its symbiotic partner (Merriam-Webster's, 2009, p. 412).

Energy. A fundamental entity of nature that is transferred between parts of a system in the production of physical change within the system and usually regarded as the capacity for doing work (Merriam-Webster's, 2009, p. 413, def. 3).

Enthalpy. The sum of the internal energy of a body or system and the product of its volume multiplied by the pressure (Merriam-Webster's, 2009, p. 417).

Entropy. Measure of disorder or randomness within a system (Merriam-Webster's, 2009, p. 417).

Epiphenomenon. A secondary phenomenon accompanying another and caused by it (Merriam-Webster's, 2009, p. 420).

Eukaryote. Organisms composed of one or more cells containing visibly evident nuclei and organelles (Merriam-Webster's, 2009, p. 430).

Evolution. Process of change in a certain direction (Merriam-Webster's, 2009, p. 433, def. 2a).

External. Capable of being perceived outwardly (Merriam-Webster's, 2009, p. 443).

Frequency. The number of repetitions of a periodic process in a unit of time (Merriam-Webster's, 2009, p. 500, def. 3).

Harmony. Pleasing or congruent arrangement of parts (Merriam-Webster's, 2009, p. 569, def. 3a).

Inspire. To exert an animating, enlivening, or exalting influence on (Merriam-Webster's, 2009, p. 648, def. 1b).

Integrate. To form, coordinate, or blend into a functioning or unified whole (Merriam-Webster's, 2009, p. 650).

Internal. Present or arising within an organism or one of its parts (Merriam-Webster's, 2009, p. 654, def. 4).

Life. An organismic state characterized by capacity for metabolism, growth, reaction to stimuli, and reproduction (Merriam-Webster's, 2009, p. 718, def. 1c).

Mediation. Intervention between conflicting parties to promote reconciliation, settlement, or compromise (Merriam-Webster's, 2009, p. 770).

Organism. Referring to an individual of any complexity (Merriam-Webster's, 2009, p. 874).

Paradigm. A philosophical or theoretical framework of any kind (Merriam-Webster's, 2009, p. 898).

Predation The act of an organism killing another organism for nutritional purposes. (Bengtson, 2002).

Prokaryote. Any of the typically unicellular microorganisms that lack a distinct nucleus and membrane-bound organelles (Merriam-Webster's, 2009, p. 993).

Purpose. Something set up as an object or end to be attained (Merriam-Webster's, 2009, p. 1011).

Reductionism. Explanation of complex life-science processes and phenomena in terms of the laws of physics and chemistry (Merriam-Webster's, 2009, p. 1044).

Repulsion. The tendency of objects to resist each other; the force between objects that drives them apart (Merriam-Webster's, 2009, p. 1058).

Respiration. The physical and chemical processes by which an organism supplies its cells and tissues with the oxygen needed for metabolism and relieves them of the carbon dioxide formed in energy-producing reactions (Merriam-Webster's, 2009, p. 1061, def. 2).

Survival. The continuation of life or existence (Merriam-Webster's, 2009, p. 1259).

Sustainable. Of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged (Merriam-Webster's, 2009, p. 1260, def. 2).

Symbiont. An organism living in symbiosis (Merriam-Webster's, 2009, p. 1266).

Symbiosis. The living together in more or less intimate association or close union of two dissimilar organisms (Merriam-Webster's, 2009, p. 1266).

Time. The measured or measurable period during which an action, process, or condition exists or continues (Merriam-Webster's, 2009, p. 1309).

Vibration. A periodic motion of the particles of an elastic body or medium in alternately opposite directions from the position of equilibrium when that equilibrium has been disturbed (Merriam-Webster's, 2009, p. 1393).

Delimitations and Limitations

This research is multi-disciplinary, only so much time could be committed to this particular paper. This model will continue to be refined over time. There are many valid ways to define life. For this paper, the conventional, Western, academic definition is used, limited to DNA and RNA based organisms (Gustavsson & Markovitsi, 2010, Lascano & Miller, 1996). The broader viewpoint of Indigenous cultures, in which life is defined by flow and relationship, thus including entities such as air, water, mountains, stars and the Atisokanak, such as healing drums, stories and dreams will not be included (Carver, 2013, p.19, Harvey, ed., 2002, Kawagley et al., 1998). In addition, there are many valid ways to view and experience time (Alcubierre, 1994, Herstien, 2006). This model uses the standard, measurable, linear viewpoint of time.

Current knowledge of the natural sciences (geology, physics, chemistry, biology, and astronomy) is limited; while at the same time, the world's knowledge of the sciences is continually changing due to the rapid growth of technology, global travel and shared information through the Internet. With the recent acceptance of symbiosis being central in the formation of speciation and the rapid growth of technology for DNA sequencing, there is no generally agreed classification of species (Cavalier-Smith, 2004, Margulis & Schwartz, 1998, Ward et al., 2004). This model uses a theological perspective, meaning a study of creator creating creation.

CHAPTER TWO
Review of Literature

Introduction

When reviewing the literature in the areas of biological evolution, cultural evolution and personal development, the same creation process can be distinguished. This creation process of evolution has a distinct pattern. As the research reveals, biological, cultural and personal evolution is often seen along the same continuum.

In order to understand the process of personal development more fully, it can be helpful to research other areas of study. Since personal development can be an internal, somewhat subtle process, insights can be gained from studying other evolutionary processes with more concrete evidence. Even though personal development is a unique process within individuals, there might be generalizations applicable to the process overall. The more understanding practitioners have of the process of spiritual transformation, the greater effectiveness they can offer, providing support to others and as a role models themselves. There needs to be a step taken which creates further and broader applications and integration of the material.

Biological Evolution

Central to this research on biological evolution is the work of Dr. Lynn Margulis. Margulis is considered a "visionary biologist" due to her theories on endosymbiosis, explaining the origin of eukaryotic cells, which contain mitochondria and chloroplasts for

energy metabolism (Knoll, 2012). Margulis (2006) states, "Eukaryotes have evolved by the inheritance of acquired genomes; they have gained all their new features by ingesting and not digesting whole bacterial cells with complete genomes." She explains the symbiotic process as an integration of prokaryotes to create a more complex eukaryote, "eukaryotic individuals can be analyzed as coevolved, tightly integrated, prokaryotic communities." Not only does Margulis apply her theory of symbiosis to the creation of new kingdoms, but to the creation of cell and tissue specialization as well. In Margulis & Chapman (1998) "review cases where initiation of morphogenesis, including the differentiation of specialized cells and tissues, has clearly evolved due to cyclical symbiont integration."

Dr. Margulis worked with interdisciplinary scientist, Dr. James Lovelock, an atmospheric chemist and a geophysiologist on his work of the Gaia Hypothesis, emphasizing the role of cooperation rather than competition in biological evolution (Ford, 1999, p. 268, Lovelock, 2008, Knoll, 2012). Lovelock's research contributes to the idea of the interrelationship of living organisms and their environment, the evolution of one affecting the evolution of the other. In Lovelock (1989) describes the need to view our planet from a multi-disciplinary perspective to understand how systems work together support life:

> There is growing recognition of the inadequacy of the separated disciplinary approach for the solution of planetary scale problems. To understand even the atmosphere, which is the simplest of the planetary compartments, it is not enough to be a geophysicist; knowledge of chemistry and biology is also needed. It might seem that research teams that include experts in each of the different disciplines

> would resolve the problem, but anyone who has attended gatherings of experts knows that each expert speaks but does not or cannot listen. What might help would be a broader-based general science, or a scientific operating system, that provides an environment within which the separate disciplines could interact.

The author further explains how organisms contribute a crucial role in shaping the evolution of Earth's environment, including its climate:

> Self-regulation of important properties, such as climate and chemical composition, is seen as a consequence of this evolutionary process. Like living organisms and many closed loop self-regulating systems, it would be expected to show emergent properties; that is, the whole will be more than the sum of the parts. This kind of system is notoriously difficult, if not impossible, to explain by cause and effect logic.

In Lovelock (2008), the interrelationship of biological and cultural evolution is described:

> If geoengineering is defined as purposeful human activity that significantly alters the state of the Earth, we became geoengineers soon after our species started using fire, for cooking, land clearance and smelting bronze and iron. There was nothing unnatural in this; other organisms have been massively changing the Earth since life began 3.5 billion years ago. Without oxygen from photosynthesizers, there would be no fires.

Symbiotic relationships within ecosystems can be further understood through the investigation of plant-fungal relationships (Simard, 1997). Darlene Southworth, a researcher on the bio-complexity of plant-fungal interactions, notes that although fungi exists within most every ecosystem on the planet and are essential components for habitat structure and dynamics, analysis of fungi within the fossil record is a relatively new branch of research for a number of reasons, including the importance of interdisciplinary efforts (Southworth, 2012, p. 5). She states, "Today, however, various levels of inquiry in paleobiology require collaborative efforts from multiple disciplines of expertise. This is especially true of questions that focus on ecosystem interactions and community

structure" (Southworth, 2012, p. 6).

Dr. Susan Simard is a forest ecologist and professor of forestry at the University of British Colombia in Canada. Her work shows symbiotic relationships exist within plant and soil communities through mychorrhizal fungi; these interspecies connections regulate energy and information flow (Tweig et al., 2007, Prescott et al., 2004, Simard et al., 1997). Simard's research is contributing to the understanding of the importance of diversity, inter and intra-species cooperation and communication, and sharing of resources within ecosystems to help maintain the health and resilience of ecosystems, broadening past views based solely on natural selection, competition and survival of the fittest (Jones, et al., 1997, Twieg et al., 2007, Prescott et al., 2004, Simard et al., 1997, Simard & Sachs, 2004).

Cultural Evolution

Cultural evolution is "the idea that human cultural change—that is, changes in socially transmitted beliefs, knowledge, customs, skills, attitudes, languages, and so on—can be described as a Darwinian evolutionary process that is similar in key respects (but not identical) to biological/genetic evolution" (Mesoudi, 2012).

Robert Wright (2000) points out how cultural evolution sustains the trajectory that biological evolution established. Wright applies game theory to cultural evolution stating, "First, it makes sense to me cultural evolution and biological evolution have the same machinery. Second, they have the same fuel; the energetic interplay between zero-sum and non-zero-sum forces has been similarly pervasive in the two evolutions. Third, the

two processes have parallel directions—long-run growth in non-zero-sumness, and thus in the depth and scope of complexity." He describes the process of symbiosis producing increasingly more complex life forms, first within microorganisms, which then form multicellular organisms, forming societies, eventually launching another form of evolution – cultural evolution. In Wright (2009), he emphasizes, "I see all of history since the primordial ooze as a single creative thrust."

Dr. Don Beck offers insight on cultural evolution through his work with Spiral Dynamics, a biopsychosocial systems concept. He and co-author Christopher Cowan outline how diverse social systems throughout history and currently throughout the planet have arisen in relation to the setting of diverse environmental and social conditions (Beck & Cowan, 2006). The authors describe the current state of planetary chaos "like migrating tectonic plates, several core ways of thinking -- paradigms, if you will – are grinding against each other. Ancient tribal and ethnic sores belching fires while transnational companies linked by satellites conduct their business above."

Beck's research shows how the growing complexity of social systems follows an identifiable pattern. Six conditions have been identified that must be met in order for an individual or an organization to obtain sustainable growth, including a "felt dissonance" within the current system. In Beck & Cowan (2006), "What biochemical genes are to the cellular DNA, memes are to our psycho-social and organizational DNA." Dr. Beck advises businesses, organizations and governments throughout the world. Past work includes working with Nelson Mandela in South Africa in the 1980's. He is currently

forming The Center for Human Emergence, to "help facilitate the conscious emergence of the human species using a synthesis of profound breakthroughs in human knowledge and capabilities, encompassing natural pattern coherence, mega-integration, unification, expanded whole mind capacity, deep intelligence and consciousness." (Center for Human Emergence, n.d.)

Jeremy Rifkin is another valuable source for understanding the process of cultural evolution. Rifkin currently advises the European Commission, the European Parliament and several EU and Asian heads of state on issues of economy, climate change and energy security. His foundation, The Foundation on Economic Trends, examines the economic, environmental, social and cultural impacts of new technologies introduced into the global economy. In his book, *The Third Industrial Revolution*, Rifkin (2011) points out how a shift of energy, transportation and communication were necessary for a shift toward greater cooperation within broader, more complex social systems. He begins with "Our civilization is at a crossroads." He continues:

> By the 1980's, the evidence was mounting that the fossil fuel-driven Industrial Revolution was peaking and that human-induced climate change was forcing a planetary crisis of untold proportions. For the past 30 years, I have been searching for a new paradigm that could usher in a post-carbon era. In my explorations, I came to realize that the great economic revolutions in history occur when new communication technologies converge with new energy systems. New energy regimes make possible the creation of more interdependent economic activity and expanded commercial exchange as well as facilitate more dense and inclusive social relationships. The accompanying communication revolutions become the means to organize and mange the new temporal and spatial dynamics that arise from new energy systems.

Rifkin (2011) describes how our planet, currently "powered by oil and other fossil fuels is spiraling into a dangerous endgame." He then offers the five pillars of the Third Industrial Revolution, based on renewable fuel sources, shared economics and global communication.

Dr. David Grinspoon is an astrobiologist, another interdisciplinary scientist with valuable research to contribute. Grinspoon, a consultant for NASA and inaugural chair of Astrobiology for the Library of Congress, uses the concept Anthropocene, the name of "a proposed new geological time period (probably an epoch) that may soon enter the official Geologic Time Scale. The Anthropocene is defined by the human influence on Earth, where we have become a geological force shaping the global landscape and evolution of our planet" (Martini, 2013).

In his recently published book, *The Earth in Our Hands*, Grinspoon (2016) explains how remarkable it is that life started with some chemical reactions evolving to the point where we can look out into the Universe, back into history and forward to the future. He points out the responsibility and the opportunity we have as the first species, not to radically change the planet, but to realize we are doing so. Unintentionally, we have altered our planet in dangerous ways and we need to develop a healthier relationship with our biosphere.

He examines critical questions such as, it is not enough to know what kind of future to avoid, but what kind of future do we want to create? Can we create a vision of where we want our world in 10,000 years? Grinspoon (2016) offers the suggestion, "We

have to see ourselves in collaboration with our future selves and future generations. To do so, we have to gain knowledge of both our planet and ourselves."

Spiritual Transformation

Dr. Bruce Lipton has done extensive research in stem cell biology and is now an internationally recognized leader in the field of epigenetics, the study of gene expression (Lipton, 1974, Lipton, 1980, Lipton et al., 1991, Lipton & Jacobson, 1974). Lipton recognizes the continuum of biologic evolution includes personal evolution from the beginning of life to cells of today. In his best-seller book, *The Biology of Belief*, he describes the evolution of the increasing complexity of life from microorganisms, to single-celled organisms, to multi-celled organisms, communities to multicellular communities. Lipton (2015) states:

> While the cellular communities appear as single entities to the naked eye – a mouse, a dog, a human – they are, in fact, highly organized associations of millions and trillions of cells. The evolutionary push for ever-bigger communities is simply a reflection of the biological imperative to survive. The more awareness an organism has of its environment, the better its chances of survival. In order to survive at such high densities, the cells created structured environments . . . It proved more efficient for the community to have individual cells assigned to specialized tasks . . . The function of the nervous system is to perceive the environment and coordinate the behavior of all the other cells into the vast cellular community.

Lipton (2015) compares the functioning of a single cell to the functioning of the human body. Within a single cell, the cell membrane is the interface of its internal and external environments. Receptors within the membrane read the environment, create signals of various kinds and the organelles within the cell respond. When the culture

medium within a petri dish (the cell's external environment) is changed, the health of the cell changes.

Lipton (2015) explains how the human body works in the same way. Our senses, primarily our nervous system, are responsible for our awareness of the environment through a physical sensation. Therefore, perception is the switch that can change your biology. Perception controls your biology. Dr. Lipton (2015) describes how we are not a victim of our genes, but the master of our genes. It's important to create a healthy environment with organic foods, clean air and pure water; and equally potent to our health, is our response to life.

There are many studies over the past 50 years showing a person can learn to regulate one's response to life using a variety of methodologies, including acupuncture, meditation, biofeedback and entheogens (Fenwick, 1990, Fischer & Warshay, 1968, Gass & Glaros, 2013, Nakatani & Yamashita, 1977, O'regan & Filshie, 2010). Yoga is another method that can be used. Yogi Amrit Desai was one of the pioneering yogis to bring the authentic practice of yoga to the West in 1960. He was the founder of Kripalu Center for Yoga and Health, one of the largest health and yoga centers of the U.S. Among his many international awards for his research, teachings and humanitarian service, he received the honor of International Yoga Grand Master in 2013. Now in his 80's, Yogi Desai continues to teach yoga and meditation at his center in Florida, Amrit Yoga Institute (Desai, 2010).

In Desai (2010), Yogi Desai explains the true practice of yoga, an aspect

generally not included by practitioners of yoga popular today:

> The power of yoga is found when the focus is internal, not external. Understood correctly, Hatha Yoga is capable of using the body and the mind to transcend the limits ordinarily imposed by both the body and the mind. It is a non-aggressive, non-competitive, non-mental response to the primal wisdom of prana – our evolutionary force. Ultimately, the practice leads to the union of the individual soul with the infinite cosmic soul. And that is the real purpose of yoga.

Desai (2010) continues his explanation:

> Reconnecting to Source creates a field of infinite possibilities where miracles are possible. The bio-energetic field of the individual body and consciousness (microcosm) is in complete resonance with the cosmic body of consciousness (macrocosm). Spiritual healing happens to the degree to which we have entered the unified field of all possibilities. The rigid boundaries of the body-mind soften, making us more permeable to spiritual attunement eventually connecting individual consciousness to the universal field of divine potential.

Desai (2010) explains how yoga can be used to become aware of the power one has to change one's unconscious reactions in their life. He says, "Amrit Yoga is a metaphor for life. The skills of mindful attention and meditative awareness you develop on the yoga mat extend to challenges you encounter in life. Painful transition periods, relationships and crisis can become opportunities and openings for personal transformation."

Summary

There is a great deal of research, especially among interdisciplinary scientists, examining the processes of cultural and personal evolution as an aspect of the same continuum as biological evolution. All along this continuum of evolution, organisms, no matter how simple or complex, survive by constant interaction with their environment,

thus changing the environment by their own life processes. This, in turn, causes a new response within the organism. And so it goes, the process of evolution; organisms and their environment are in a constant state of adaptation with each other, each one making small, slow changes over time.

And every now and then, often when the ecosystem has reached its capacity for sustaining itself, there is a paradigm shift, where life takes an unexpected leap into a totally new, unpredictable trajectory. Whether it's from the perspective of biology, culture or personal, an integration, rather than a mutation or adaptation, of some kind occurs. This new creation creates a more efficient way to produce and distribute energy and information, allowing for a greater complexity of structure.

Life on Earth has now evolved to the point where at least one species is becoming aware of its relationship to the environment. Humans have also developed the capacity to make conscious choices. At the same time, the global ecosystem seems to be quickly reaching its capacity for sustaining human life. It's time for a conscious paradigm shift.

Individuals and organizations experiencing pain and chaos often seek professional help. As evolution has revealed, pain and chaos can be a precursor to something greater. Fear of survival elicits a response of segregation, and yet the most sustainable solution might be an integration of some kind, a creation that is unpredictable from one's current state of awareness.

Further research can contribute to the discovery of how creation works on a personal level. Because of the complexities in science, this area of exploration is open to

be addressed. This is the logical next step in the evolution of our understanding of the nature of creation. Further research can contribute to the discovery of more effective ways to contribute to the health and well being of all life.

CHAPTER THREE
Critical Analysis Research Methods

Introduction

Developing this theory of the evolutionary process of creation was a lived experience of the process of creation itself. It involved field research during several trips to South America, attendance at lectures and conferences, trainings, academic support, University classes, and research from scholarly sources over a period of several years. Both aspects of evolutionary process, one described by Darwin's natural selection, adaptation and survival of the fittest, the other described by Margulis to include the integrative process of symbiosis, were at play throughout the creation of this dissertation.

Explanation of the Critical Analysis Process

A critical analysis has been selected as the best way to share and present this contribution to a developing theory explaining matter emerges from consciousness, rather than the currently held tenet of materialist sciences stating consciousness is an epiphenomenon of biological evolution.

The critical analysis model allowed for the investigation of diverse studies across a broad spectrum of sciences, including inter-disciplinary research, historical evidence and cross-cultural perspectives. This breadth and depth of knowledge was required to

collect the data necessary for theory development. Using the critical analysis approach, comparisons were made, patterns were distinguished, gaps and shortcomings were identified and new insights acquired.

With a background in environmental education and spiritual development, research began with knowledge of the strong correlation of one's internal and external environments. The original intent was to study the Ecuadorean Indigenous use of cordyceps, a medicinal mushroom that has a symbiotic relationship with insects. This intention quickly expanded as the impact and significance of symbiosis within all ecosystems was realized, from individual health to global sustainability.

While traveling through a variety of ecological environments and cultural groups, an understanding of symbiosis was applied to both cultural evolution and spiritual development. Peer-reviewed, published scientific papers from experts within the fields of biological evolution, cultural evolution and consciousness development were examined. Data was gathered, analyzed and summarized within each category. Key features of the evolutionary/ creation process were identified within each category. Data was then compared among all categories to determine similarities, differences, gaps, shortcomings and patterns. The same key features of one category could be recognized and identified in the other categories, leading to more questions, research and discovery.

The Researcher's Role

The researcher's role was to follow the creative force as an observer, participant and as an investigator of the evolutionary process of creation. Within this investigation,

the researcher's role was to gather and objectively analyze data, look for correlative patterns, draw conclusions and apply postulates among the various disciplines; then continually repeat this process of discovery, eventually coming full circle with the recognition of a unified, interdisciplinary theory.

Data Sources

Because theory development is a broad subject to research, it was necessary that data came from several different sources using a variety of methods. The following describes the various sources used for this research.

Field Research

Field research was important to gain insight and theory application within the disciplines of both biological and cultural evolution, on both individual and species/ social levels. This was carried out in various ecosystems and cultural groups, including the Amazon jungle within an Indigenous community, a large city in high elevation of the Andes of Ecuador (mix of both traditional and developed, urban systems), a city of Colombia recently known as the most violent city of the world, a medium sized, economically vibrant, physically active, racially homogenous town in Colorado Rocky Mountains, and a racially diverse village in a severely economically depressed region of the U.S.

By having a lived experience in each of these diverse areas, the relationship of an individual and the environment (both social and ecological environments) were observed.

Because the findings of this research has applications toward health, conflict resolution, intimacy and creativity, certain aspects of this internal/ external relationship were noted, such as roles and expectations within marriage and family, desire and ability to have economic independence, entrepreneurial support, sustainable and environmentally safe practices, family and social habits, health care and lifestyle choices, conflict resolution, desire and ability to express individuality and creativity, ceremony and rituals (reflective of relationship to a Creator). Based on the work of Jeremy Rifkin who points out how all the great economic paradigm shifts in history share a common denominator: at a certain moment in time, new communication revolutions converged with new energy regimes and new forms of transportation to fundamentally change the way we manage, power and move economic life, the inquiry was, "How does the social and ecological environment influence an individual and overall population?" "How does an individual and overall population influence the social and ecological environment?" "How easily/ difficult does change or growth occur?" "Is there a correlation of how power and resources are viewed and managed within society and a sense of internal power of personal expression?" "Do the attributes of paradigm shifts of cultural evolution correlate to personal consciousness?"

The inquiry related to conscientious behavior and consciousness (as it relates to creation and evolution) was "How does one change behavior?" "How do beliefs, trauma, environment, social conditions encourage/ discourage conscious behavior?" "How can leaders help support (or hinder) conscious behaviors in others?" "Do the attributes of

symbiosis in biological evolution and a paradigm shift in cultural evolution contribute to the understanding of spiritual development within an individual?"

Fieldwork in the Andes, Ecuadorian jungle and Colombia with various shamans and healers of Indigenous Medicine included participating in traditional ceremony, story telling, discussions and the gathering and processing of medicinal plants. These experiences promoted a perception of holism, interconnectedness, acceptance of and a connection to the Mystery. These attributes helped bring together all the many facets and layers of knowledge from interdisciplinary studies into a logical, unified framework.

Conferences and Presentations

Attendance at conferences supported inquiry and gathering of data pertaining to specific facts and evidence within the various disciplines. These gatherings also provided opportunities to discuss, share findings, clarify questions and broaden ideas with colleagues. Presenting at conferences not only provided the same benefits as attending, but also helped to organize data and realize strengths and weaknesses within the theory.

One of the most significant presentations at the Council Grove Conference on Consciousness was by Federico Faggin, a physicist and leader of technology. He pointed out the need for collaborative research "to create a conceptual framework of sufficient power to inspire the necessary mathematical theory of consciousness."

At the Telluride Mushroom Festival Conference, mycologists from around the world discussed the importance of fungi in all ecosystems due to their symbiotic relationship with other organisms. Dr. John Holliday, owner and director of a medicinal

mushroom research lab and production facility, talked specifically about the cordycep, a highly medicinal mushroom used for cancer treatment and immune system modulation. This peculiar family of mushrooms has a symbiotic relationship with insects of various kinds.

Symbiosis involves negotiation, cooperation, sharing of resources, integration and creation of something new. Having previously been taught only Darwin's theory of biological evolution, based on natural selection, adaptation, competition and survival of the fittest, the recent inclusion in mainstream biology of the process of symbiosis as the origin of new species became very intriguing. Dr. Holliday also offered internships at his lab for "anyone with a passion to learn and a willingness to do the meticulous, tedious work needed to maintain a sterile environment."

A presentation was given at the Women and Entheogen Conference in Cleveland, Ohio, in September, 2015 titled, "Different Ways of Knowing." Sharing experiences of apprenticeship with an Ojibway ethnobotanist and Medicine Woman helped organize thoughts and verbalize concepts. The positive and inquisitive response from the audience gave feedback that this direction of study had value to others.

In June 2016, a presentation was given at the 26th Annual Poetry Festival in Medellin, Colombia, once known as the most violent city of the world. Ojibway prayers were sang in Anishinaabemowin, the native language of the Ojibway people, then translated into Spanish. The prayers are considered a covenant between an individual and Great Spirit, saying both thank you for the gifts given and you are welcome for the

expression of those gifts. When asked why the people in the audiences reacted so appreciatively, the translator explained it was very meaningful to hear that Creator would say thank you for one's expression of life and that communication with Creator can go in both directions. This experience brought insight into the significance of developing a symbiotic relationship with creator, furthering the inquiry asking, "How, when and why does a culture develop a relationship with creator, ranging from one being powerless in relation to an external authority to one feeling a sense of a creator within, in relation to a Universal creator?" The attributes of how a symbiotic relationship develops in biological evolution seemed to correlate to cultural evolution as well, leading to another inquiry, "Do the attributes of cultural evolution correlate to biological evolution?"

At the ISSSEEM (International Society for the Study of Subtle Energy and Energy Medicine) conference, September 2016, a private discussion with Dr. Claude Swanson, a physicist, occurred after his presentation on torsion fields. Entropy, enthalpy, Gibb's Free Energy Equation and his use of the concept "negative-entropy" were discussed. The personal inquiry leading to this discussion was "Does entropy decrease or enthalpy increase through the process of symbiosis (biological evolution) or a paradigm shift (cultural evolution)?" "Do the laws of physics change through time?" "Is there an underlying drive toward creation and consciousness?"

After meeting Dr. Melinda Connor in person at the ISSSEEM conference, she was appointed chair of the advisory committee for this dissertation. Discussions with her led to the realization there was sufficient information as well as a need for a step to be taken

for integration and broader applications of the material. Rather than a narrow focused research study, Dr. Connor could see the impetus was in the direction of theory development; therefore a critical analysis would be the best avenue for this dissertation.

Trainings and Internships

Training and internship programs provided hands on experience, knowledge within specific disciplines and opportunities to learn directly from experts within those disciplines.

A Reiki II initiation at the Goldenwing Center for Reiki Training and Core Synchronism and Core Lymphatic, New Mexico School of Natural Therapeutics, June, 2014 provided another lived experience of acknowledging an unseen force that can be received and directed. The primary application within these trainings and the healing arts in general seemed to be toward healing "a problem." And yet, this seemed contradictory to the complaint made against mainstream medicine based on reductionist science; if the search is to find a problem, it will be found. In fact, coming from an energy medicine perspective, not only will the problem be found, but focusing on it, makes it get bigger. The inquiry applied to this fascinating contradiction was, "How can energy medicine (in fact, this includes all forms of medicine) be applied to encourage true healing?" "What is true healing, beyond simply the absence of pain and disease?" "Is it advantageous to direct healing towards the activation of the creation force within?" "If healing is directed towards expression of creativity and self-expression, (rather than getting rid of various

expressions of pain), it appears that the initial problems, such as conflict, lack of intimacy, depression and lack of self-worth, take on a different meaning." "Does this sense of meaning in relation one's pain provide guidance toward creativity, self expression and connection to Creator or creation energy?"

An in-depth understanding of symbiotic relationships between various species of mushrooms and their environment was acquired by a month long internship at Aloha Medicinals, a mushroom biotechnology company in Carson City, Nevada, November, 2014. This internship consisted of participating in every step of cultivating, growing and processing medicinal mushroom compounds and maintenance of a world mycelium preservation bank. In order to maintain federal standards for the production of commercial supplements and preserve mycelium, certification in both *Biological Growth Process Techniques* and *Biological Clean Room Techniques* was required.

Working in a lab setting allowed for the observation of varying fungal growth results due to contaminated environments, different substrates, environmental conditions and species of fungi. Through observation of mushroom hyphae under a microscope, it became clear how different fungal and plant cells were from each other. Until the last few decades, fungi were considered belonging to the plant kingdom. Because of Dr. Lynn Margulis' advancement of the concept of symbiosis, they are now their own separate kingdoms. Great progress has been made through the addition of symbiosis into the understanding of biological evolution, how new species are created and how species within ecosystems are inter-dependent.

Experience cultivating and processing mushroom compounds in a research and production facility led to a desire to further investigate the process of symbiosis. Specific inquiry included exploring the relationship of an organism with its environment, the relationship of an organism with other organisms and what factors hinder/ contribute to symbiotic integration vs. survival of the fittest or adaptation.

Amrit Yoga Teacher Training at Amrit Yoga Institute with Yogi Amrit Desai contributed knowledge and experience from the consciousness perspective. He taught about the shift that occurs through the conscious use of breath and relaxation. Physiologically, this shift includes the ability for self-regulation of certain body functions such as blood pressure, heart rate and digestion. This shift also allows for the regulation of consciously responding to one's environment rather than unconsciously reacting.

Another important aspect of Yogi Desai's teaching included the idea of integration through the Third Eye, where the pineal gland is located. These two teachings in particular, pointing out a shift and integration, correlated to the creation processes described by the experts of both cultural and biological evolution. All three avenues of creation, (cultural, biological and personal) explain when the conditions are just right, an integration occurs producing a paradigm shift. This led to the inquiry "What can be learned by comparing other aspects of each discipline to each other?"

Other Data Sources

In addition, data sources included interviews, observation, Holos University Graduate Seminary classes, conversations with professors, academic guidance, peer reviewed,

scholarly research and books from a variety of libraries. Databases for peer-reviewed scholarly research include PubMed, Google Scholar and Citation Machine journal search.

Ethical Considerations

The ethical considerations of this critical analysis primarily had to do with what and how information was gathered, used and distributed.

When applying concepts from one modality to another, it was important to respect the intent and integrity from where the information came. Care was taken to respect scientific knowledge when applied to a spiritual process by not adding in a sense of meaning, for example, if the researcher did not imply that. The reverse was true as well; meaning and purpose was maintained when applied to other categories of evolution/ creation process if it was explicit in the author's work.

There was an ethical responsibility of respecting knowledge gained from field research within communities. Cultural and language barriers were recognized. For example, when asking permission to take photos and videos and sharing information on the Internet, it was recognized the Kitchwa people of the Amazon, in particular, have little understanding of the implications of that agreement. Due to cultural and language barriers, it was also difficult to share findings with communities. Even when translated into their language, the concepts presented are not necessarily part of their worldview.

There was a conscious effort to use broad concepts gained from cross-cultural experiences verified by scientific research rather than specific personal experiences to

ensure unbiased objectivity and social responsibility. All people involved in the research and identifying information remain anonymous.

Another ethical consideration is how this information will be applied. By exploring the idea that consciousness creates matter, this does not imply there is fault or blame for difficult circumstances within society or an individual's life. Rather, this analysis explores possibilities of sustainable solutions, responsibility and transformation.

Summary

Many facets of learning and discovery were used to develop a contribution to a multi-disciplinary theory that expands over the history of life on this planet. A sense of internal guidance and intuition were essential skills to use, as well as critical thinking, exploring new subjects, curiosity, scientific reading in the areas of botany, biology, chemistry, physics, health, theology, cultural evolution, consciousness and inter-disciplinary sciences. Being welcomed into Indigenous communities provided openness to other awarenesses and perceptions. Support and feedback from experts in their respective fields and from academic advisors also played a critical role for this investigation.

Often, the study kept getting bigger and bigger and more and more complicated, seeming out of control and far too broad to draw concise conclusions. There were times the primary focus seemed clear; then the clarity vanished as the subject became somewhat nebulous again. It was through persistence and an inner sense of knowing that

identifiable patterns eventually began to emerge, forming a logical, methodical framework for theory development.

CHAPTER FOUR
Indigenous Perception Research Methodology

Research Methods Overview

Contributing to a developing theory is a multi-faceted endeavor, especially so when the theory has the potential to create a paradigm shift greater than the shift that occurred as we moved from a geocentric to heliocentric model of our place in the Universe (Beauregard, et al., 2014). There currently is a collective effort on the part of many researchers to support one another providing scientific evidence eventually leading to mathematical proof of the existence of consciousness followed by the emergence of matter (Beauregard, et al., 2014). Current proof based on mass, space, time, gravity and force falls short of explaining non-physical phenomenon such as self-awareness, intuition and consciousness (Haramein, et al., 2016). Researchers acknowledge that because this theory is so broad in its scope, a cooperative effort is necessary. Contributions from many different perspectives and disciplines help advance a comprehensive knowledge base (Beauregard, et al., 2014).

This particular investigation compared the processes of both biological and cultural evolution. It also compared the physical growth of an individual biological species with the non-physical, or spiritual, development of an individual human.

Gathering, analyzing and comparing data, while looking for patterns and insights within such a broad scope, required the use of many different kinds of research methods.

Certainly, greater knowledge of the empirical sciences was acquired, utilized and applied, especially in the areas of natural science (biology, botany, mycology, chemistry and physics) and social science. In addition to the classic, reductionist, mechanistic view, a unique and crucial feature of this research was the use of the Indigenous Perception Research Method (IPRM).

In order to understand the IPRM, it is important to understand the paradigm, or worldview, from which the perception arises. *Worldview* is defined as the conceptualizations providing structure and order of what is believed to be reality, what is probable, possible and impossible (Te Ahukaramu, 2002). *Indigenous* can be defined as those who have inhabited a particular place for thousands of years, often in contrast with those who reside for a few hundred years (Cunningham, 2003). Because of this long connection to the land, sea and stars without a history of movement, the worldviews of Indigenous populations throughout the world have common elements (Cunningham, 2003).

One element of special significance is the recognition of a unifying, spiritual life force that permeates all of creation. The life force not only gives uniqueness to each individual, but also creates a connection, therefore ascribing intrinsic worth to all of creation and a sense of unity within diversity (Spiller, et al., 2010). Other distinctive elements include the beliefs that time can be experienced on different scales, everything

has a purpose, patterns within nature are cyclical, life is a continuum between human and non-human species and this understanding requires relational and contextual conceptualization (Cunningham, 2003, Keewaydinoquay, 1977, Shiva, 2016, Spiller, et al., 2010, Te Ahukaramu, 2002).

Maori scholar Te Ahukaramu Charles Royal (2002) further describes a significant element of Indigenous perception:

> In the Judeo-Christian tradition, God tends to be located outside of the world in a place called 'heaven'. Hence, this world, the one we inhabit, was 'created' by God and is not the equivalent of God, it is not God. Rather, it is simply a manifestation of God's creative power. In the Eastern worldview, on other hand, great emphasis is placed upon the inward path, the finding of the divine within. Hence, the proliferation of meditative practices in the east, the disciplines of the ashram and so on. The indigenous worldview sees God in the world, particularly in the natural world of the forest, the desert, the sea and so on.

Another important aspect of the IPRM (Indigenous Perception Research Method) is the multiple sources of knowledge that are recognized and valued. As described by Marlene Brant Castellano, a Mohawk of the Bay of Quinte band in Ontario, these sources can be defined as empirical, revealed, and traditional. These are not necessarily distinct and separate categories; rather they interact and overlap as knowledge is understood to be acquired in a holistic way, through mind, body and spirit (Dei, Hall, & Rosenberg, 2000).

Empirical Knowledge

Classic, Western empirical knowledge is based on the scientific method, which follows a circular sequence of steps: observation, hypothesis, test, draw conclusions, repeat. This method considers the most reliable results are produced by controlling the

environment, isolating variables and considering the tester as an outside observer with no influence. When this precise method is not followed, conclusions are often considered faulty and dismissed.

Indigenous empirical knowledge shares some similarities along with differences of the classic western, scientific perspective. It follows the same sequence of steps, acquiring knowledge through careful observation; however observations made by many different people over extended periods of time are considered essential to draw accurate conclusions. Rather than developing theories based on quantitative analysis of repeated observations in controlled settings, knowledge is gained by "a convergence of perspectives from different vantage points accumulated over time" (Dei, Hall, & Rosenberg, 2000).

The environment and observer are considered important and active influencers on the results as well. Since Indigenous cultures believe all of creation serves a purpose and is interconnected, IPRM values knowledge gained from all sources, including standard Western perspective.

Revealed Knowledge

Revealed knowledge is knowledge acquired through sources understood to be spiritual in origin (Dei, Hall, & Rosenberg, 2000). This knowledge can be sought purposely such as inducing an altered state of awareness through ceremony, fasting, chanting, isolation, use of ceremonial medicine, prayer and intention. Often, people can receive information unexpectedly as well. Visions and insights gained through

unintentional experiences such as extreme fatigue or pain, extreme illness and fever, seizures, dreams, starvation, near death experiences, inadvertent ingestion of entheogens and the isolation caused by getting lost are shared, discussed and valued. Visions and other forms of revealed information are often shared through stories, song and artwork as well.

Traditional Knowledge

Traditional knowledge is the knowledge handed down from previous generations through stories, songs, ceremonies, and skills needed in everyday life. Oral narratives using metaphorical language are often used for songs and stories. Knowledge passed on through life skills is often observed and experienced (Dei, Hall, & Rosenberg, 2000). Raymond Ruka, a Tohunga Maori Priest from New Zealand, explains, "Within Indigenous cultures, all information is considered sacred. Mysticism is physics. There is no separation. Information is passed down through everyday life, through the mothers and grandmothers, through the gardeners and the navigators of the land and waters. Because Aboriginal people held oral traditions, this observed information was injected into their songs and stories and were passed down verbatim, from generation to generation by their Story Tellers" (Carver, 2013). Indigenous storytellers develop a deep, loving relationship with their stories, leading to a greater understanding of the healing energy of the story. It is believed that certain stories and storytellers have the ability to transfer subtle, yet highly profound spiritual energy to the listeners (Carver, 2013).

As stated in Chapter 3, the researcher's role in this theory development research

was to follow the creative force as an observer, participant and as an investigator of the evolutionary process of creation. The IPRM supported this role in many ways, especially when field research was used in various cross-cultural and ecological settings.

Much insight for this research was gained simply through the isolation inherent in living in another culture, not knowing the language or customs. This situation provided a setting for observation of daily life, community interaction, business and financial values, conflict resolution, acquisition of food, food preparation, childcare practices, male and female roles, styles of education, uses of technology, approaches to health and well-being, spiritual and religious practices, transportation and communication. All three types of knowledge were acquired: empirical, traditional and revealed. As Mohawk scholar Castallano pointed out, the knowledge was gained in a holistic way through a lived experience (Dei, Hall, & Rosenberg, 2000).

Knowledge for this research was also gained through interaction and cross-cultural experience. In the Amazon, for example, a common morning hot beverage was Guayusa tea, known for stimulating strength and focus as well as inducing dreams. There were often questions and discussions around the breakfast table about the previous night's dreams. Since communication was often difficult in remote areas, it was common and acceptable to simply show up unexpectedly at friends' homes and stay for several days. The host often had an intuition about it and might have prepared the visitor's favorite food or ceremony. On another occasion, sloth soup was served, though normally sloths are considered special, so they are protected and left alone. But since this one was

killed accidentally when felling a tree, it was used for food. These are all examples of knowledge gained through a lived experience.

Through everyday life, including childcare, conversation, cooking, doing laundry, gathering wild foods and medicines, attending ceremony, riding buses, walking dirt paths, paddling canoes and socializing around evening fires, a deeper sense of the Indigenous worldview was realized. Collectively, these experiences allowed for the acknowledgement and recognition of Indigenous perception for information acquisition and research application.

CHAPTER FIVE
Presentation of Theory

Introduction

Creation follows an identifiable, methodical process of development. In short, the creation process includes long periods of adaptation to the external environment, allowing for the full internal development of an organism or organization, followed by a shift to integration and creation of a new structure capable of more complexity and greater expression. The pain and constriction of outgrowing the once nurturing, protective environment is a signal to shift; yet there is resistance to going from the known to the unknown.

These phases of development can be identified in the creation processes of biological evolution and cultural evolution. Spiritual transformation is also a creation process with the same characteristics as biological and cultural evolution, though it may appear more difficult to identify since this is a personal, internal, non-physical process. In particular, it is important to recognize the resistance to shift from adaptation to integration. The adaptation phase is the maintenance phase, while the integration phase is where creation occurs. By comparing various creative processes, new insights into the nature of creation energy can be further understood and applied to health, conflict resolution, intimacy and creativity. With this understanding, practitioners of the Healing

Arts can better support clients *through* the resistance rather than simply *adapting to* the resistance.

Brief Summary of Biological Evolution

Throughout history of life on this planet, from pre-cellular microorganisms to complex, planetary ecosystems, we can see long periods of small, slow changes beginning with the very first microorganisms (Margulis & Schwartz, 1998). During these long periods of slow change, the characteristics of evolution outlined by Darwin prevail. Organisms adapt to the environment through natural selection. Biologically, adaptation is defined as "the process by which a species becomes fitted to its environment; it is the result of natural selection's acting upon heritable variation" (Gittleman, 2017).

As organisms gradually adapt to the environment, they also alter their surroundings by use of the local resources for metabolic fuel as well as their own metabolic waste products, such as a change of temperature, pH and gaseous composition (Margulis & Schwartz, 1998). Organisms follow an internal impetus for continual adaptation to the generally slow, but ever-changing external environment.

Overall, the processes of adaptation and natural selection simply maintain the status quo through survival of the fittest, or those best adapted to survive within the predator/ prey balance, primarily through elimination of potential reproduction. Within this phase of maintenance, organisms are somewhat separate from each other, while going through the crucial step of allowing nature to produce a highly developed, best-adapted version of an organism. But adaptation and random gene mutation does not

create. It does not create new species or new relationships between species. It simply selects and eliminates from the pool of genes (expressed as traits) that already exist. It's the process of symbiosis that creates (Margulis & Schwartz, 1998).

Eventually, when the external environment can no longer support the life process of the organism due to depletion of resources, buildup of toxic wastes produced by the organisms and the pressure of predation, the unexpected and unpredictable occurs. The organism now shifts from adapting within the predator/prey model to a model of integration. A somewhat forced cooperation between the organisms form a mutually beneficial relationship with another organism called symbiotic relationships (Zhokhov & Mikheev, 2015).

This step of cooperating with another organism is a vulnerable step. Organisms will resist this until the pressure of survival from the external environmental conditions force a change. Not only does the organism now need to negotiate with another organism that is often a predator, each of the organisms involved need to release control of a life process in order to integrate with another (Bengtson, 2002). (Chloroplasts release their protection behavior and the engulfing microorganisms release the need to find food, thus creating the first plant cells.) Inherent in this process is a period of chaos prior to an integration. Ultimately, this integration creates a new structure capable of greater efficiency, complexity and diverse expression. Symbiogenesis is the evolutionary origin of new species, morphologies and physiologies by symbiosis, responsible for many of the major transitions of biological evolution, such as prokaryote to eukaryote, unicellular to

multicellular to tissue to systems and asexual to sexual reproduction (Margulis, 1991, Bengtson, 2002).

This same process of long periods of slow evolution, whereby organisms continually adapt to their environments, thereby slowly affecting their environments, thus creating conditions for an unpredictable shift in the trajectory of life, is repeated over and over throughout history and on every level of life, from the microcosm to the macrocosm, from microorganisms to complex ecosystems (Margulis & Schwartz, 1998).

In Margulis (1991), Oxford University biology professor states, Sir David C. Smith describes the significance of symbiosis:

> Without symbiosis, the nature of life on Earth would be unrecognizable from that which is found today. This is not just because symbiosis was crucial to the evolution of eukaryotes from their prokaryote ancestors. It is also that most modern terrestrial ecosystems are critically dependent on symbiosis; 90% of land plants in nature are mycorrhizal, and virtually all mammalian and insect herbivores would starve without their cellulose-digesting symbionts.

Brief Summary of Cultural Evolution

A process of cultural evolution can be identified similar to that of biological evolution. Humans adapt to their external environments, thereby changing the environment by use of local resources and contributing waste produced by human social systems. Eventually human systems outgrow the life supporting capacity of the environment and a shift is required. Biologically, this shift is called symbiosis. Culturally, this shift is called a paradigm shift (Rifkin, 2011). Specific paradigm shifts can be identified throughout history when human civilization took an unpredictable turn

allowing for increased efficiency and complexity, such as the development of writing and agriculture (Wright, 2009). Important to note, this shift has almost always been preceded by war and genocide, and then maintained through forced labor (Morris, 2015).

Jeremy Rifkin (2011) points out cultural paradigm shifts have occurred throughout history when three technologies emerge and converge that fundamentally change the way society manage, power and move resources. This integration creates a new structure capable of greater efficiency and complexity in terms of new forms of communication, new sources of energy used to fuel the system, and new transportation and logistics to move resources. These new technologies in a cultural paradigm shift correspond to the same process that creates new morphology and physiology in biology.

Development of an Individual within a Species

Examination of the development of an individual within a species, rather than the species or ecosystem as a whole, can also provide insight into how creation energy works. Many of the same traits seen in other creative processes can be identified here as well.

The birth of a baby from within the womb, a germinating seed from within its seed coat, the blossoming flower from within its calyx, the hatching chick from within its eggshell and the emerging butterfly from within its cocoon -- all are developmental processes of creation. Every new life form is encased in a protective, nurturing structure creating a safe environment providing for all the needs of the growing life within. Just like the development of a species as a whole on a broader timescale, life follows a predictable path.

Within a secluded, protective environment, an individual life form develops to its full potential. The environment provides, protects and nurtures this development. The life within naturally outgrows its environment. What was once nurturing and protective, now becomes suffocating and stifling, painful and toxic. The strength and power to break the structure must be developed from within. It's the creative urge, the creative force that is found within, expanding outward that allows the life form to develop and survive beyond its original protective structure in greater complexity and self-expression.

Spiritual Transformation

Spiritual transformation can be defined as "a process of change within the self toward identity with something sacred through which meaning is discovered" (Hill, 2003). Spiritual transformation is a process of creation, following the same identifiable steps as in the creation process of biological and cultural evolution. Inherent in this process is a shift from survival consciousness to inspired consciousness, similar to the shift known as symbiosis in biological evolution and known as a paradigm shift in cultural evolution. Similar characteristics of this shift include moving adaptation to creation, from separation to integration, from competition to negotiation, from external authority to internal authority, from reaction to one's environment to response toward greater possibility by outgrowing the very same environment that once provided, protected and nurtured the life within.

This is a vulnerable step, a risk into the unknown world of possibilities. Whether it's an organism, an organization, an individual specimen or the spiritual development of

an individual human, enough time must be spent in the survival paradigm to fully develop itself in order to expand into a fuller expression. The environment that was once nurturing and protective naturally becomes stifling, suffocating and toxic simply by the expanding growth process of the life within it. It is some sort of pain or constriction that gives an indication that the life form is ready for a shift. It is now painful to maintain the status quo, but it is also risky to take the vulnerable step into the unknown world of creation.

Process of Spiritual Transformation

As mammals, humans are born into survival consciousness. We look outside ourselves, to our environment, for providing, protecting and nurturing. If we do not receive this, we do not survive. Survival consciousness serves an important purpose. This is the phase of development and maintenance, as seen in both biological and cultural evolution as well. Characteristics of survival consciousness include a sense of stability, safety, security, predictability, expectations, rigid guidelines, belonging, comfort, familiarity, external authority and maintenance of the status quo. Resources are seen as finite and physical.

The rules of survival consciousness are in place to ensure the ongoing of the group, or tribe, not individual expression. A person continues to unconsciously follow the rules of the external environment, conforming, adapting to the expectations of others, camouflaging one's self, following the routine, thus providing a sense of stability and security for the overall group. This paradigm appears to be effective, at least as far as

proliferation goes, since humans are the most populous species of mammals on Earth (Nag, 2016). However, the nature of creation energy is to grow and expand one's expression. There is an innate feeling of wanting more. At first, this feeling of wanting more is interpreted as wanting more resources for survival – more food, more land, more fuel, more power, more sex, more money, all of which under survival circumstances can be beneficial.

Especially since the Industrial Revolution, there are sections of the Earth's population that do not have to be completely focused on survival needs in day-to-day life. So rather than being focused on the acquisition of more physical resources from the external environment, humans begin to awaken to a sense of more from within. A person begins to become aware of one's own self- expression, including one's own gifts, talents, dreams, desires, sensuality, sexuality, wishes, wants. In other words, a person begins to recognize his or her own uniqueness, his or her divinity. Following this inner sense of desire is what gives a person their own set of beliefs and values based on an inner authority, thus developing a sense of meaning, purpose and spiritual direction.

As seen in the creative process of both biological and cultural evolution, this shift into inspired consciousness is not necessarily easy. Just like the cells that instinctively shift into the integrative phase of symbiosis when the external environmental conditions no longer support life efficiently, an individual human is also being encouraged to shift into an integrative phase. The foundation and structure that once kept a person stable and secure is now confining and must fall apart. Common symptoms of outgrowing one's

tribal paradigm include addiction, conflict with significant others, affairs, dissatisfaction, depression, anxiety, feelings of lack, hoarding, loneliness, powerlessness, hopelessness, shame, guilt, confusion, illness and physical and emotional pain.

In this transition stage, a person may feel extremely confused and out of balance while bouncing back and forth between the pain of denying the self while trying to conform to a structure that no longer fits and the fear of independence, personal responsibility and self expression. The awakening person needs to leave the safety and security of the tribe, but hasn't quite developed self-expression of an inner authority and connections to community.

It is also common to experience betrayal by the people and ideologies one tries so hard to please including a spouse, boss, coworkers, one's body, friends, family, parents and religion. An awakening person gets strong messages to change course when one's career, financial situation, relationships with others and/ or one's health contributes to feelings of dis-ease, obligation, heaviness and exhaustion. External circumstances appear to be more and more difficult while the internal struggle intensifies.

Cultures and religions throughout the world recognize the difficulty of this transition stage. The great classic stories reflect what is known as the "Hero's Journey," outlining the stages of personal transformation from a mythological perspective, involving a time of being lost, confused and betrayed (Campbell et. al., 2003). Jungian psychology uses the phrase "The Dark Night of the Soul," written by Christian mystic, John of the Cross, in the 1500's to describe this universal human experience (Moore,

2012). There are common expressions such as “no light at the end of the tunnel”, “falling down the rabbit hole”, “taking a leap of faith”, “jumping off the cliff”, “the bridge to nowhere”, ”trusting the Mystery”; all describing the step of leaving what is known, but painful and going toward the fear of the unknown.

Like the hatching chick or the emerging butterfly, there comes a time to break the external structure. This is not an actual physical structure such as an eggshell or cocoon, rather a social structure such as religious, cultural or family customs, trauma and unconscious social patterns. It is time to awaken to something more, something that cannot be found outside one’s self, but is found within. This stage takes tremendous courage and stamina to begin to recognize, value and express one’s own needs, wants, dreams and desires. There is a shift from external authority to internal authority.

As a person expresses one’s individual gifts and talents and develops an intimate connection to one’s divinity, the connection to one’s external environment – job, family, health, activities, relationships and possessions – becomes an extended expression of one’s self. From this place, as a person learns to honor one’s own uniqueness, it becomes easier to see and honor the uniqueness of others. From here, one can create true community, not from the denial of who one is as in survival (or tribal) consciousness, rather from the expression of who one is from inspired consciousness.

There is no need for blame or faultfinding. After hatching, do chicks turn around and blame the eggshell for confining them and making them work so hard to be free? Of course not. When a foot hurts because it has outgrown its shoe, it is time to get new shoes.

Does the shoe get blamed for not growing? Does the foot get blamed for growing? Of course not. When seen physically, it is easy to understand the natural expansion of growth and the continual need for structures of greater complexity. Spiritual growth works the same way with non-physical components.

Humans are born looking outward to the external environment for love and power, which in a sense is a form of self-denial. Spiritual transformation is simply the natural process of developing self-awareness, connecting to the love and power found within. Pain and fear are not only natural, but an essential experience in the process of awakening. This is creator's way of guiding us into alignment in harmony with an internal sense of expanding expression and creativity. And yet, as seen in Nature, expanding one's expression is a vulnerable, fearful step of integration into the unknown, into the Mystery.

Universal Force

As seen since the beginning of life on planet Earth, life has always held the potential for transformation, and when the external environmental conditions are just right, life takes the vulnerable step of symbiosis, integrating into more complex species and relationships within more complex ecosystems. Creation continually creates new expressions of itself.

Many cultures and religions recognize an internal universal creative force that follows cosmic laws, maintaining balance and harmony amidst constant change. This energy is called the "Holy Spirit" in Christianity, "ki" in Japanese healing and "chi" in Chinese medicine (Kim, 2016, Desai, 2004). Indigenous cultures recognize a unifying,

spiritual life force that permeates all of creation (Spiller, C., et al., 2010). Russian physicists have identified this force as "torsion" (Swanson, 2011).

Yogi Amrit Desai (2004), a yoga and meditation master, explains this creative force called prana in his yogic tradition:

> There is a universal intelligence that carries out all the evolutionary processes of the entire body of the universe, which maintains ecological balance and carries out sustenance. The same intelligence works within the individual body carrying out all the life giving processes intelligently and automatically. You don't have to learn how to use the energy that carries out the involuntary life-giving functions of respiration, circulation, digestion and elimination. They're already instilled and preprogrammed to take place independent of our will. In the body of the Universe, these forces are functioning unconsciously by the divine intelligence.

In addition, many cultures and religions throughout the world describe a concept recognizing that everyone is worthy of a life of ease, peace, joy and abundance through a process of integration and unity. Christianity teaches the idea of "Heaven on Earth," yoga literally means "union," and the Hindus teach about "Samadhi," the state of bliss when body, mind and spirit are one (Seidman & Graves, 2012, Desai, 2004). "Bimidisiwin," meaning living life to the fullest, is a central concept in the Ojibway culture, honoring Creator and one's connection to all of creation (Keewaydinoquay, 1977).

The Human Body is Made to Transform

After billions of years of creation, at least one species (humans) have become aware of its instinctual reaction to environmental conditions and its ability to respond to a desire or yearning for its own creativity. This urge is not based on survival within the external environmental conditions, rather one's internal, unconditional inspiration and

self-expression of one's divinity.

This shift toward one's own conscious creative capabilities can be accessed by many different ways, including the mind/body connection. This connection has been practiced for thousands of years in spiritual contexts and in the past few decades, the mind/body connection has been well documented in the scientific and medical arenas as well (Lehrer, 2013, Mason, et al., 2013, Parshad, 2004).

Any form of relaxation, whether this comes from a spiritual practice such as yoga, meditation and chanting, or a technological form of relaxation such as biofeedback, flotation tank, and light and sound therapies, ultimately slows down and deepens the breath. From here, an entire cascade of physiologic changes begins, including relaxing the body, quieting the mind, regulating hormones within the endocrine system and stabilizing the autonomic nervous system with a tendency toward parasympathetic dominance (Lehrer, 2013, Mason, et al., 2013, Parshad, 2004). This shift into physiologic balance not only supports overall health, well-being and a sense of joy in life, but also can allow greater access to a sense of unity and creation, allowing for a deeper shift out of survival beliefs into inspiration.

As a teacher of spiritual transformation, Yogi Desai (2004) explains this shift to an inner connection:

> The way to reach there is transcending the mind and the body. The mind has its own limitations, which is extension of your own limited self-concepts and belief systems. They are already lingering in your body as tensions, when you go beyond that through conscious relaxation, and stay conscious, you have the power to instill the new program. You can dismantle your old wiring and instill your

> new intentions. That will automatically give you progressively more access. You will live in that contact more and more and more. This is what all human beings are craving for and hardly anyone comes to recognize it or realize it, but everybody desires that. But the reason why they can't get it, is first of all, we try to get it from the world outside ourselves. That is the first misunderstanding.

Structural and Functional Mechanisms

The fact that the human body is made for transformation is not unique; life has always held the ability to transform as seen through the creative process of symbiosis. Humans do, however, have the unique capability to consciously choose to practice transformation. Further insights may be gained by comparing the functional and structural mechanisms (physiology and morphology) within the creative processes of spiritual development and biological and cultural evolution.

It is not known what instigates a biological shift from adaptation to integration beyond the impetus to survive due to a buildup of environmental toxins, a lack of local resources needed for survival and/ or the constant pressure of predation. Further studies will help to understand why some species go extinct while others shift into symbiosis and go on to flourish, for example (Brassier, 1995, Margulis, 1981). Although the specific mechanics of biological symbiosis are not entirely recognized, it is known that gases and chemicals are exchanged when two different species shift into a symbiotic relationship, creating a more efficient system of greater complexity and expression. Oftentimes, new compounds are made from an integrated relationship that would not be made by an organism alone (Couvreur et al., 2006, Landeewert, et al., 2001, Margulis, 1981, Rahn, 2006, Robinson, 2000). The same phenomenon can be identified in spiritual

transformation as well: an exchange of gases (through the breath) and the creation of new chemical compounds (such as the hormones of calmness and connection) are involved in creating a shift toward greater ease and self-expression.

There are similar questions related to cultural evolution as well. Why do some cultures become more violent, competitive, authoritarian and isolated when others shift into cooperation, sharing and connection (Rifkin, 2011, Stein, 1990, Wright, 2009)? How does scarcity of resources and buildup of environmental toxicity relate to the emergence of the three technological advances (communication, source of fuel, transportation of resources) known to produce a paradigm shift?

It is interesting to note that the emergence of new methods of the same three technologies seen in the paradigm shift of cultural evolution can also be identified in both biological symbiosis and personal transformation. The formation of the first plant and animal cell is a good example. Once an isolated microorganism, the mitochondria (in the animal cell) and the chloroplast (in the plant cell) now generate a new, more efficient form of energy for the cell. New forms of both intracellular and extracellular communication develop since organelles within a cell never existed before. New methods to transport the resources, such as endo and exocytosis are also required for the increased complexity of a cell. It's clear to see the need for new communication, new energy sources and new modes of transporting resources in other forms of symbiosis, such as the development of a circulatory system and the relationship of mushroom

hyphae and tree roots. New sources of energy are developed along with new modes of communication and new ways of transporting resources.

The development of the same three mechanisms can be noted within the human body involved in spiritual transformation as well. Since this is a non-physical process, the components may be non-physical. Developing a new source of energy can be described as shifting from willpower to prana, from doing to being, from external authority to internal authority, from reacting to responding, from attachment to love (Desai, 2004). In the words of Christianity, this is explained as "Thy will be done" (Mathew 6:10). Spiritual teacher and author, Gary Zukav (2014), calls this internal source of energy "authentic power."

The new form of communication required for spiritual transformation includes listening within, connecting to the quiet, stillness found within, speaking honestly, asking for what I want, using "I" messages, reflective listening, expressing one's gifts and talents rather than typical fight/flight/hide language such as blaming, sarcasm, manipulation, withholding information, derogatory remarks and an unwillingness to engage. The development of new modes of transporting resources first acknowledges the non-physical resources that become available to a person as one transitions to inspired consciousness. This would include the expression one's gifts, talents, dreams, desires, sensuality, sexuality, in other words, one's divinity. This also includes developing intuition, attraction skills, following a sense of guidance, identifying triggers, synchronicity, personal responsibility and conscientiousness.

Creation Energy

It's quite fascinating to discover the same phases and elements of biological and cultural evolution within the process of spiritual transformation. It is logical then, to inquire if the central component of spiritual transformation can be identified in biological and cultural evolution. The component of spiritual transformation that is considered central to the process is an internal connection to creation energy as well as a connection to all of creation as explained by both quantum physicists and spiritual teachers (Faggin, 2014, Swanson, 2011, Desai, 2004, Keewaydinoquay, 1977). This is the energy of creation, found within and expanding outward, unifying all of creation (Keewaydinoquay, 1977, Kim, 2016, Desai, 2004, Seidman & Graves, 2012, Spiller, C., et al., 2010).

Because this component is non-physical, there are still questions among conventionally minded, materialist scientists as to the existence of a universal creation energy and its significance in biological evolution (Dawkins, 2008, Wright, 2016, Faggin, 2014). However, there are more and more researchers and scientists studying and discussing the nature of creation energy and consciousness, oftentimes due to personal experiences materialist science could not explain (Alexander, 2015, Faggin, 2014, Taylor, 2011, Swanson, 2011).

In an interview with Nora Eckert (2016), Federico Faggin, physicist and inventor of the first commercial microprocessor, describes consciousness:

> Consciousness is a fundamental property of nature, of reality before matter. In other words, it's consciousness that creates matter, instead of the other way around. It is not a philosophical study; it is an exercise in physics trying to

> develop a new physics starting with cognitive principles instead of materialist principles.

Faggin, awarded the National Medal of Technology and Innovation in 2010, continues:

> If we start with the idea there is only one energy, the same energy that produced space, time and matter in the Big Bang, supposing this energy of which everything is made, is also conscious, is also aware, what happens? All of a sudden, awareness or consciousness is the foundational property. If you start with that, you develop physics by starting with this energy. You don't have to put consciousness back later as an afterthought, but consciousness is there from the beginning. From the beginning, there is purpose and meaning in the Universe.

Creation Comes Full Circle

Organisms continue through the evolutionary process creating more complex organisms, which in turn, create more complex relationships, providing impetus for even more complexity. Biological evolution combined with geochemical, oceanographic, tectonic and atmospheric changes result in today's global biosphere with planetary food webs and diverse feeding strategies. Even after a few billion years of growing interconnectedness, when organisms shift into the process of symbiosis and produce greater complexity of some kind, the new organism is still in an ancient survival mode within predator/ prey dynamics of competitor interaction. Until now.

When looking at previous major changes on planet earth, scientists examine the prerequisites, trigger and the effects. For example, Bengtson (2002) of the Swedish Museum of Natural History examines what some consider the most important evolutionary event called the Cambrian explosion, referring to the sudden appearance of complex animals in the fossil record:

> Prerequisites for the Cambrian explosion are many (free oxygen, shelf space, regulatory genes, biominerals, etc.), and so are its effects. All these are parts of cascades, however, whereas a true trigger should be independent of them, an analogue to (and as elusive as) "free will". It must either arise "spontaneously" or be introduced from the "outside"; i.e., it must have a timing independent of the integrated biological–chemical–physical system that determines the actual course of the event. Such a trigger might arise from, say, a cosmic event, but may not be in any way spectacular. An actual trigger is not even needed for the event to take place; the impetus may instead come from a critical accumulation of prerequisite conditions.

This is an especially fascinating time period of evolution. All the characteristics are in place for a global paradigm shift based on historical evidence of cultural evolution (Rifkin, 2011). There are also a multitude of prerequisites seen in other major biological evolutionary events, such as changes in water and air temperature, changes in atmospheric composition, extinction of species and habitat disruption. In addition, geochemical, oceanographic, tectonic and atmospheric changes can either contribute to or trigger a major global event.

And there are two additional factors that have never existed before. First, there is a species (humans) that has developed self-awareness and the ability to make conscious choices. Two, there are communities of people that have transitioned out of survival mode into inspired consciousness. Some people of these two groups overlap, but not all.

This may sound exciting and optimistic for the future, but through the examination of the creation process, it has been shown, creativity is a journey into the unknown, the unpredictable, the Mystery. Oftentimes, those who resist change become leaders as a seeming comfort to those who prefer the stability and security of a paradigm

that once provided enormous benefit and now has been outgrown, causing pain and toxicity to the inhabitants on the planet. Other leaders may embrace the concept of interconnectedness and consciousness, but haven't taken the next step of applying the understanding to inspiration. Like the organism that shifts into symbiosis, the client may shift, but ultimately is still back to adapting within the survival paradigm, believing in lack of resources, external authority and adapting to the expectations of others. This is why it is especially important for leaders to understand the nature of creation to help guide others consciously through the transition. Practitioners of the healing arts can apply knowledge of the creation process to help guide individuals and organizations to transform current social systems for the benefit of all.

Further Inquiry

How does understanding the common elements of the creation process echoed at various levels of creation on Earth help practitioners of the healing arts? Obviously, it's not always as simple as relaxing, cooperating with others and sharing resources in the face of pain and fear. Under some circumstances, that is a sure way of being preyed upon in a hostile takeover whether you are algae, a country, a business or a spouse. From what is currently gleaned from the fossil record and interdisciplinary historical scientific evidence of the past 4 billion years or so, creation constantly perceives, adapts and integrates for its own survival. Under continually changing environmental conditions, impacted by the life process of creation, there is a persistent impetus for the development

of more complex morphology and physiology for more acute and specialized perception and resource networks.

Taking a deeper look at how organisms interact just prior to, during and after the act of symbiosis may shed insight into the process of spiritual development as it applies to practitioners involved with healing, conflict resolution, intimacy and creativity. The shift that occurs in the creation process is actually quite complex. There is more complexity to the evolutionary process than separate organisms simply integrating into one unified organism. It appears that an increase in the severity of survival conditions is needed, including predation and war, forcing cooperation, so to speak.

A Brief, Simplified Explanation of Cells

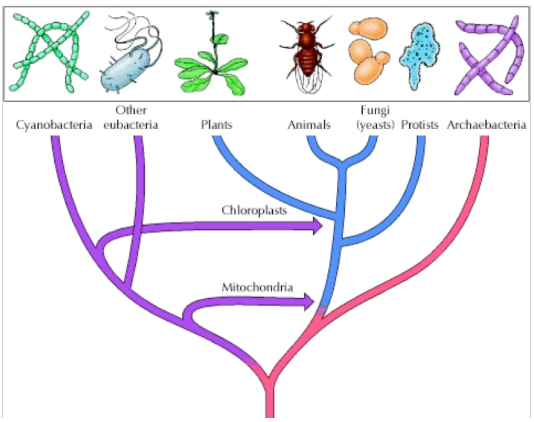
The minimal level of identity in the scientific taxonomy of life is the cell (Margulis, 1991). Viruses and genes do not have a self-identity, for example, as they need to be within another body to express themselves (Margulis, 2004). There are 2 kinds of cells at the Domain level of classification (highest, broadest level), prokaryotes and eukaryotes.

Prokaryotes are always microscopic, simple, single cells without a nucleus. They reproduce through binary fission, a process of making replicas of themselves. Prokaryotes are bacteria and archaea. Archaea generally live in extreme environments, while bacteria live most everywhere.

The first prokaryotes existed about 3.5 billion years ago. After about a billion years, 2 prokaryotes integrated together through the process of symbiogenesis and formed

a more complex organism – a eukaryote. Eukaryotes have a nucleus, organelles and reproduce sexually or asexually (mitosis or meiosis). A eukaryotic cell is a "microbial community, formed from the integration of once separate organisms, whose free-living co-descendants can be traced" (Margulis, 2014). Virtually all visible organisms belong to the Domain Eukaryota, from single-celled organisms to all plants, animals and fungi.

Bacteria, The Basic Building Blocks of Life



(Cooper, 2009)

Evolution of life on this planet is not a branching tree; it is an interconnected web. The branches branch off, come together and intertwine, branch off and intertwine again and again, all the while creating more and more complex organisms and interconnected systems. Meanwhile, the basic building blocks of this intricate global system are the ancient prokaryotes, primarily bacteria, based on current understanding. These simple cells are highly versatile and adaptable. They have no speciation, as they have the ability to mutate according to their environment, transferring genes depending on external conditions such as acidity, temperature, predators, gaseous and chemical composition. Sometimes, this can take as little as 20 minutes.

Overall Advantageous Direction

In general, species grow at a rate that cannot be sustained by the environment. Populations growing beyond their own resources is the base of all evolutionary phenomena. This is an inherent trait of creation energy. Whether born, hatched, budded, or sporulated, organisms produce more offspring than can survive to reproduce themselves (Margulis, 2014). The method of elimination is natural selection; only the fittest, most adaptable to the current environmental conditions, are reproduced. The vast, vast majority of potential offspring are eliminated through natural selection.

The source of innovation in evolutionary change is symbiosis, not random mutation. The complex ecosystems of today have not been caused by a countless number of arbitrary mistakes over a long period of time (Margulis, 2014). Long-term relationships between different species are formed under specific environmental conditions for specific, selective advantages.

Symbiosis is a form of networking, a negotiation, a cooperation in order to compete. This is not necessarily a kind-spirited cooperation, rather more of a forced cooperation due to environmental pressures. Margulis (2014) describes the process: "The selective advantage can always be identified. If you're hungry and the symbiont inside is making food, you become more transparent and lower your pH rather than digest it. This together stage is more selected for in that environment more than the separate stage." The problem is the solution. Systems must be created to regulate reproductive growth of each symbiont, manage metabolic wastes (often the waste of one is the food for the other) and

the final stage of symbiogenesis is the passing of genes to each other while reducing the redundancy of genes.

The biochemical diversity of the planet's biosphere is supplied at the bacterial (prokaryotic) level, where adaptation is quite simple, fast and efficient. Eukaryotes use this versatility to further morphologic and physiologic diversity. It appears the responsiveness of bacteria plays an essential role in life's great diversity and innovation as well as the planet's self-regulating network of geochemical systems.

Predation

Climate change, the shifting of tectonic plates (causing deep ocean fissures, erupting volcanoes and earthquakes to release heat and mineral stores), cosmic influences (such as rotation of the earth, revolution around the sun, asteroid collision, UV light) and atmospheric and oceanic changes have always been a major factor affecting both the creation and extinction of species (Twitchett, 2006, Bengtson, 2002, Margulis, 2014). As technology and global communication rapidly improve, it is becoming clear that predation has been an essential factor in the major transitions in evolution as well. Predation, the act of one organism killing another for food, is a driving force within the process of natural selection (Bengtson, 2002). Through this process of elimination, a prey can be directly driven into extinction or become more susceptible to extinction through other factors (Katz, 1985, Schoener et al., 2001). And for those that live, predation then becomes a force for transformation and increased self-expression.

The pressure of predation appears to be directly responsible the formation of symbiotic relationships (Bengtson, 2002). Some of these relationships evolve to a genetic level creating new physiologies and morphologies through symbiogenesis. The vast number of physiologic changes influenced by predation includes the major leap from prokaryote to eukaryote, asexual to sexual reproduction, unicellular to multicellular, all biologic networking systems (circulatory, respiratory, immune, lymph, nervous, digestion, muscular) and the vast array of sensory, perceptual functions. All these developments also need morphologic structures to support the function. Motility, endo- and exoskeletons, thorns and spines, feathers, scales, fur, colorful flowers, increased brain size all evolved from symbiogenesis which began with the predator/prey dynamics coercing a symbiotic relationship (Bengtson, 2002, Margulis, 1991, 2004, 2014).

As species became more and more diverse with increased complexity of internal organized systems operating larger bodies, cascades of changes continue externally as well. Greater levels of organization and interconnected networks are established; eventually creating modulating feedback loops maintaining patterns of ecological balance (Bengtson, 2002, Lansing et el., 1998, Lovelock, 2004). Predation provides an edge, a constant external impetus toward risk-taking and the innovative combination of shared traits resulting in expanded food webs, redistribution of resources and the ever expansiveness of the creative response (Bengtson, 2002).

What is particularly fascinating is how the same biologic innovation in different species appears to be closely related to predator/ prey interactions in comparable

environments. Of all the countless possibilities, it's intriguing that the burrowing habit, wings of flight and spinosity, for example, developed in separate places under similar environmental conditions. There are at least 13 lineages in which multicellularity has been attained independently, generally as a consequence of size increase (Bonner, 2000). This phenomenon of convergent evolution may provide further insights on the nature of creation energy as a universal force directing actions toward a common outcome.

Predation has been a primary force, moving organisms from complacency to innovation. As Bengtson (2002) a paleobiologist at the Swedish Museum of Natural History in Stockholm describes, "Predator and prey may enter into symbiotic relationships and emerge as new organisms."

War

Because predation has been identified as a driving force in biological evolution, it is a logical step to ask, "Can a similar forced cooperation be seen in cultural evolution?" Dr. Ian Morris is an archeologist and Stanford professor of classics and history. In his book, *War! What Is It Good For*?, Morris (2015) shows a pattern of war being pivotal in creating cultural paradigm shifts over the past 10,000 years. He also points out how war has created richer, safer, less violent and larger, more organized societies over the long-term. (Admittedly, along with all the harm and devastation.)

Based on archeological findings and other historical evidence, it appears that death by violence has dropped 90% between the time of the Stone Age and the 20th century, from 20% to the current global rate of less than 1-2% (Reza & Krug, 2001,

Morris, 2015). And now, the consequences of war have become so devastating and weapons potentially so destructive, while organizations have become so efficient, war no longer holds the potential value it once did.

In addition to war, other factors involved in every major collapse of civilizations include:

- Major uncontrollable populations movements
- Rise of new disease epidemics
- Organizational failure and increased warfare
- Collapsed trade routes
- Climate change

For the survivors of war, however, comes the integration of the defeaters and the defeated, often enlarging the territory of power. War has indirectly contributed to increased complexity of societies. Like biological systems, more complex systems develop to run the expansion of societies such as specialized skills, division of labor, communication, transportation, acquisition of resources and trade routes. Bigger societies need enough leadership to keep order, balanced with enough freedom for markets to flourish. Morris (2015) states organized societies "have greatly reduced the risk that their members will die violently. These better organized societies also have created the conditions for higher living standards and economic growth."

Comparing times of increased and decreased violence since the past Ice Age, an overall pattern and its defining elements can be identified. Leaders don't necessarily

suppress violence because of altruism, rather through a similar forced cooperation as seen in biological evolution. There is an optimal amount of violence to use; too much violence or too much passivity destroys or underutilizes potential beneficial networks and resources. The interconnected networks run most efficiently with the least disruption. What's more, this "sweet spot" of power is constantly changing (Morris, 2015).

Morris (2011) noticed mass violence has been involved every time there was a major shift in social structures. Historical evidence reveals avoidance of a major collapse in the face of the factors involves good leadership. Peace and security depend on healthy economic growth while controlling violence. Morris (20015) states, "Paradoxically, war has created safer, richer, bigger, interconnected societies putting itself out of business."

Empathy

Another way to look at the evolution of humanity is the continual expansion of empathy and compassion (Rifkin, 2016, Wright, 2001). Rifkin points out that throughout every major economic paradigm shift there was a convergence of 3 technologies (communication, sources of energy and transportation) to handle the greater complexity of society. Along with this, came a greater sense of connection to others with a broadening of empathic ties.

Just like the solution of symbiosis, Rifkin proposes solutions of networking to address the global problems of today. Rather than a centralized patriarchal, top-down, authoritative structure, he gives concrete examples of sustainable, open-source solutions

that include the Internet technology, collaboration, shared resources and distributed power, many of which are currently being implemented throughout Europe.

And now, at this time of another great paradigm shift, a leap into biosphere consciousness is necessary (Rifkin, 2013). Shifts in consciousness have occurred throughout the history of humanity. Rifkin points out how consciousness changes quickly when new energy/communication revolutions change the structure of relationships humans have with others. This, in turn, changes the temporal spatial orientation of the brain. Rifkin (2013) gives the example the human brain today is wired differently than a medieval surf's brain which is wired differently than a hunter-gatherer's brain. With improving technology and the ability to share ideas around the globe, researchers are advancing knowledge of how this process might work. One such avenue of investigation studies the "mirror neuron" in the brains of various animals, such as dogs, monkeys, dolphins, elephants, pigeons and humans, to help explain how empathy might be learned (Winerman, 2005, Gallese, 2001, Sue, 2016, Rifkin, 2009, Blakeslee, 2006).

It is quite interesting to ponder the path evolution has taken through a myriad of predators, several extreme swings of the climate pendulum, extinction of species, creation of species, geographical travels, cosmic intrusions, untold generations of symbiogenesis, and countless other environmental forces leading up to the creation of a mirror neuron. Of all the possibilities, in this case, creation energy found a selective advantage to create the experience of empathy with others. And simple bacteria have the adaptive response to make it happen.

CHAPTER SIX: Discussion

Creative Evolution

What are the implications and applications of a paradigm shift? They are endless, of course, not only changing every system of human interaction, but the entire biosphere. By Rifkin's (2013) definition of a social paradigm shift, new communication, transportation and fuel systems emerge as the structure of society changes, particularly in size and complexity. This, in turn, affects all other systems including food, justice, education, healthcare and economics. And as the process of evolution goes, all this change then changes environmental conditions, creating a new, unpredictable trajectory of life.

As far as planetary history is understood at this time, humans are the first species to be aware, to be conscious of our own effect on our environment. And this responsibility is just dawning on us, in a relatively small population – small, but not isolated. The leaders and visionaries have the power of networking, collaboration and sharing of resources, like the bacteria and mushroom mycelium interconnecting all the species of a forest. As David Grinspoon (2016), astrobiologist and author of *Earth in Human Hands* states, "We are at the controls, but we are not in control." And that's exactly how symbiosis works, a forced cooperation. Will the selective advantage be chosen? Based on historical evidence, many outcomes are possible, including extinction.

The true power of Energy Medicine comes from the understanding of creation energy or source energy. As Claude Swanson (2011), MIT and Princeton educated physicist and author states:

> There is a growing understanding in science of what makes energy medicine possible. It is a force which pervades the universe and underlies the forces of western physics. It is the energy which forms the aura and makes ESP and long distance healing possible. It is known in oriental medicine as "prana" or "chi." Recent discoveries in Russia have established the physics underlying this force. They call it "torsion"… It seems to be a universal force underlying all of physics, and is the basis for energy medicine.

In contrast, Dr. Michael Shermer sides on the position of materialist science, believing consciousness is an epiphenomenon of evolution. He is the publisher of Skeptic Magazine, author, columnist and past professor of history of science. In a recorded conversation with Robert Wright (2016), author of *Evolution of God*, Shermer explains his perspective on natural selection:

> It's good to remember, just to remind everybody when we're talking about natural selection, it's often used to reify (*to make concrete or real*) as if it's like it's a force of nature like gravity or electromagnetism or something and it's good to remember, it's not. It's just a description of something that happens in nature. Much like I mentioned in punctuated equilibrium, people glommed onto that like it was some special force of nature. And all it was was Gould's and Eldridge's description of the fossil record which has long periods of stasis and then short bursts of rapid speciation. Natural selection isn't *doing* anything. I think it was one of the unfortunate analogies of Charles Darwin's book (*Origin of Species*) was to open with artificial selection as a metaphor. …

Robert Wright clarifies, "By which he means domestication of animals, the way farmers do it."

Shermer continues,

> It implies there is a selector, like there is some force selecting for rabbit's ears or pigeon's wings or whatever and there is no such force at all. It's not at all like an artificial selection. Like a breeder, it's not like a breeder at all. It's just describing differential reproductive success and nothing more. Just population genetic shifts over time and so on. It's just a description, so it's not a force. Terms or words like the word *purpose* tend to reify that into that there's something out there that's reaching in to stir the particles in a certain direction.

Once a creationist and evangelical Christian himself, Dr. Shermer is one of the best known scientists defending evolutionary theory. And yet, Dr. Shermer, a Ph.D. in the history of science, doesn't take symbiosis into account. As Dr. Margulis (1991, 2004, 2008, 2014) distinguishes, natural selection eliminates and maintains; it does not create. It is symbiosis that creates. Shermer argues there is no force "out there, reaching in" within natural selection (in contrast to Intelligent Design theory), but fails to realize the force of creation is internal, expanding outward.

Recognizing creation energy is an internal force, expanding outward is an important concept to comprehend for practitioners of Energy Medicine. The creation process follows a predictable, methodical path. It appears as though there is an underlying trajectory of creation creating creation to the point of becoming conscious of one's own involvement of the process. There is growing evidence this process is fueled by an energy not recognized by the materialist, reductionist sciences. In humans, this creation energy can be felt as desire; not the desire of external recognition and social acceptance, but an internal desire of expansion, the desire of self-expression, expressing

one's uniqueness, one's divinity, giving life a sense of guidance toward meaning and purpose.

For the creative evolutionists, torsion, source energy or creation energy are terms for God, the Creator. Rather than being an external authority figure as in many religions, god is experienced as an internal energy interacting with life and interconnecting the Universe. The following bible verse has meaning for both the religious and the mystic, each with their own orientation: *We saw that God reveals Himself to man through the creation itself* (Ps. 19:1-2, Romans 1:18-20).

Perhaps it's a symbiosis of the evolutionists and the creationists; aspects of both processes exist. Interestingly, it's often the creation phase associated with God or creator. It's during times of creation when a sense of the divine or awe is often felt. The birth of a child, the blossoming of a flower, the hatching of an egg, a sunrise, a synchronistic event, the expression of unique talent such as music or beautiful art are the experiences one may call a blessing, a miracle, a mystery or magic. It's often the time a person may exclaim, "Oh, my God!"

Application to Practitioners of the Healing Arts

An important concept for practitioners of the healing arts to understand is the existence of the shift in the creation process. Practitioners of the healing arts include anyone who supports another toward growth and healing, professional and casual, which is most everyone. In particular, this includes health care practitioners, parents, grandparents, adult children, teachers, coaches and mentors of all kinds (sports, business,

spiritual, educational), business management, friends, partners, spouses, clergy, neighbors, authors, politicians, business people, military and anyone supportive of the well-being of one's self, well-being of another and the well-being of the planet. This is biosphere consciousness.

Table of Phases and Elements of the Creation Process

The following table is a rough beginning showing the phases and the integral elements involved in the process of creation echoed at multiple levels within the construct of the Earth. This will be refined as networking and collaboration continues among the researchers of interdisciplinary fields investigating the field of consciousness. It would be another interesting study to extend the table in the other direction, researching historical evidence when species and cultures did not move toward the selective advantage of symbiosis, but rather moved toward greater constriction, possibly resulting in extinction. Generally, this scenario has been influenced by the usual conditions -- environmental toxicity, over or under population, geographical conditions, cosmic influences and climate change. Further research would most likely reveal specific insights that might prove useful for practitioners and leaders guiding both personal and organizational development and its impact on the global biosphere.

Reading the Table

Ultimately, a diagram of the phases and elements of the creation process is most accurately portrayed as a continual spiral of greater complexity and expanding networks.

Organisms and organizations all adapt within their environment until a threshold is reached, initiating a shift of greater complexity. The adaptation phase begins again maintaining the new paradigm until life naturally expands within its confines, again and again. Every phase of integration becomes the new norm of maintenance and adaptation.

For the sake of clarity, *The Phases and Elements of the Creation Process* is depicted in table format. This can be read vertically and horizontally. The elements listed are some of the primary attributes associated with the creation process though the list of elements is, in fact, limitless; meaning every phase of creation expresses the same quality differently. Understanding that each phase of creation defines the same quality differently is especially important for practitioners to understand. Whether one is a leader negotiating peace between countries, deepening intimacy between spouses, supporting healing for trauma and chronic illness, guiding a CEO toward sustainability and profitability or a forester applying ecological principals, it is essential to grasp the significance of the client's (or clients') position. A husband (or country, business or bacteria) that sees resources as limited will negotiate very differently than a spouse (or country, business or bacteria) that sees resources as abundant. One view is not better or worse, more or less accurate than the other; they are simply different, and valid, viewpoints. The same holds true of varying viewpoints held within one's self as well.

How one views a specific element, such as lack or abundance of resources, is often a reflection of a much larger worldview, or the phase of creation one perceives. Listening to a client's story gives a practitioner insight to where the constriction and

resistance is, which also is the path toward resolution and expansion. A practitioner, whether this is a business coach, health care practitioner, teacher, parent, mediator or an individual conscious of their own vitality and creativity, can use this table to identify the leading edge of spiritual growth, knowing the story describing the pain of an external difficulty is the expression of the fear of internal expansion. From an energy medicine viewpoint, this understanding of the nature of creation energy is essential to fully utilize one's direct connection to creation energy, the most profound, yet subtle, energy of the Universe.

Reading the table vertically gives a sense of the attributes of each phase of creation:

Adaptation Phase

In the adaptation phase, resources appear to be limited, orientation is based on past experience (includes instincts on biological level, social norms on cultural level and unconscious reactions on personal level), interactions are competitive meaning a hierarchy of power is important, (predator/ prey interactions on biological level, adherence to social norms on a cultural level and conformity to external authority on a personal level) and natural selection eliminates the weak and less adaptable, thus maintaining the survival of the status quo. Nothing new is added into this system, such as new gene combinations, new ecological, social or cultural relationships, new ideas or new innovations. This phase offers stability, predictability, safety and security, which provides, protects and nurtures the growth and development of each component of the

system. It's this natural process of growth and development combined with changing environmental conditions, in which the once nurturing environment becomes constrictive.

Constriction Phase

It is during the constriction phase that a person (or business, culture or biological organism) begins to feel both the pain of outgrowing what is comfortable and the fear of expansion beyond the familiar. A client may experience depression, anxiety, confusion, health concerns, hopelessness, helplessness, powerlessness or feeling lost and lonely. This is the phase where a person most often reaches out for help, support or guidance and/ or exhibits signs of difficulty.

When a practitioner realizes both the nature of creation energy and the elements of the creation process, the practitioner can support the client by recognizing the symptoms of the shift. Simply focusing on relieving the symptoms, even if it's through modalities of Energy Medicine, practitioners unwittingly often simply help others cope and adapt to the status quo rather than providing guidance to move toward greater self-expression. For the practitioner to make a shift into the *paradigm* of Energy Medicine, it's essential to guide a client toward the recognition of one's internal connection to creation energy (or prana) as well as the recognition of one's uniqueness (divinity) through the acknowledgement of one's dreams, desires, gifts and talents.

Cooperation Phase

The cooperation phase is where the creation of new possibilities takes place.

Biologically, culturally and personally, this phase is where new relationships are negotiated and new ideas are imagined. A shift occurs from reacting to external conditions of survival consciousness to a recognition of internal qualities. Biologically, this is the process of symbiosis such as the bacteria of the gut biome and an animal's digestive tract each giving and receiving essential attributes, thus expanding the expression of all species involved. This also expands the network and complexity of the entire ecosystem allowing all species to adapt to more diverse conditions. A similar process occurs within cultures, business and personally.

In this phase of cooperation, practitioners support clients to recognize one's internal attributes, one's unique combination of gifts and talents. This internal recognition of one's divinity and cooperation with creation energy provides a sense of purpose, meaning, direction and spiritual guidance. This same framework of recognizing and valuing uniqueness of one's self and others can be applied to conflict resolution, intimacy, creativity and healing.

Integration Phase

The integration phase is when one experiences a sense of autonomy, self-expression and personal responsibility balanced with a connection to others. Biologically, new gene combinations create new species, new morphologies and new physiologies. Culturally, new technologies are extended throughout a greater network of applications. Personally, an individual who has recognized one's own gifts and talents in the cooperation phase now shares a personal passion with others.

This also begins a new adaptation phase with greater complexity and networks (both internal and external) since the previous go-around. Within this expanded paradigm, organisms and organizations generally have plenty of resources (physical resources such as fuel, food, transportation, communication and non-physical resources such as new ideas, new relationships, inspiration and desire) with which to grow and develop. In this phase, practitioners help support clients prioritize, clarify and focus their dreams and desires within a balanced, fulfilling lifestyle.

Reading the Table Horizontally

The Table of the Phases and Elements of Creation Process can also be read horizontally. For instance, when a client is expressing doubt in one's self, finding shortcomings and faults in others, describing problems with a boss, spouse or health problems and fears a potential crisis such as divorce, being fired or illness, the client is clearly experiencing constriction within the current situation. Within the paradigm of Energy Medicine, this can signify a person who has outgrown the status quo and wants more passion and self-expression in life. The client's outlook is "viewing what isn't", often based in past experiences of hurt and betrayal. Moving across the phases in the table, a practitioner can guide the client to "view what is" (cooperation phase) and "view what is possible" (integration phase) by asking leading questions as well as many other forms of support.

Common Phases and Elements of Creation Process:

Biological Evolution, Cultural Evolution and Spiritual Transformation

Phase	Adaptation	Constriction	Cooperation	Integration
Element				
Biological Process	Natural Selection	Coercion	Symbiosis	Symbiogenisis
Development Process	Maintenance/ Elimination	Destabilization	Selective Advantage	Creation
Connection	Linear	Fragmentation	External Network	Internal & External Network
Relationship	Separation	Isolation	Connection	Unity
Expression	Concealing/ Camouflage	Vulnerable	Self Expression/ Recognition	Expanded Expression
Scientific Property	Δ geology	Δ physics	Δ chemistry	Δ matter
Appearance of Resources	Limited	Scarce /Lack	Shared	Abundant
Time Base	Past Experience	Standstill	Present	Future Presence/ Imagination
Environmental Condition	Stability	Toxicity	Cleansing	Balance
Outlook	Views what isn't	Hidden	What is	What is possible
Relationship	Competition	Disconnected	Collaboration	Network
Awareness	Reaction to External Conditions/ Instinct	Restriction	Response to Internal Conditions	Unconditional
Orientation	Survival/Tribal	Lonely/Alone	Self Awareness	Community
Authority	External	Unsure	Internal	Flow
Impetus for Change	Crisis	Prevention	Inspiration	Passion
Emotion	Self-Denial	Pain/ Fear	Enthusiasm	Joy

Energy Medicine

Understanding the nature of creation energy allows for the full power of what Energy Medicine is all about. Energy Medicine is a completely different paradigm than conventional medicine; though many practitioners view Energy Medicine within the current paradigm, simply replacing medications and surgery with herbs and acupuncture, for example. This can help in the short term, allowing the client to develop strength and stamina, but as the creation process shows, adaptation does not create. Rather than simply relieving the symptoms of chaos and confusion, a practitioner can help guide a client through the internal, dark, fearful journey toward self-awareness, self-recognition and self-expression.

All supportive modalities of healing can be utilized, no doubt. It's not the modality that is concerning, it is the paradigm in which it is being used. It is highly beneficial to encourage clients to listen within, to dream, imagine, to envision the future. This allows the natural impetus of creation energy to take its course toward the selective advantage within the Mystery.

In order to move forward toward greater expression of one's gifts and talents, the heaviness of unconscious belief systems needs to be transformed. A similar process takes place physically as microorganisms take the vulnerable step toward symbiosis. Each symbiont will let go of redundant and extraneous genes and compounds no longer required for a more efficient expression (Schenk, et al., 2013). Oftentimes, when a person

is ready to move into expanded self-expression, old trauma and unconscious historical family and karmic patterns surface. Everyone on the planet has unconscious patterns. Everyone on the planet comes from a history of invasion; there is no judgment in that. On the contrary. Within the paradigm of Energy Medicine, noticing, welcoming and transforming constriction is a powerful subtle energy skill that can be developed.

A very concrete, straightforward way to develop internal subtle energy awareness is through the practice of conscientiousness. A common definition of conscientiousness from the field of psychology, based in materialist science, is "the propensity to follow socially prescribed norms for impulse control, to be goal directed, to plan, and to be able to delay gratification" often applied to job performance and academic success (Robertson et al., 2000). This definition works fine for the maintenance phase, where the locus of control is external (social norms) and evaluation of success is fixed, rigid and judged (results of plans and goals).

To apply the true potential of Energy Medicine, something more needs to be included in the definition -- a connection to the creative force within. From the perspective of the integration phase of the creation process, the locus of control is internal and evaluation of success is defined by one's experience, which is always developing and changing.

Another definition of conscientiousness used for sports coaching is "an internal moral code of self discipline" (Tutko, 1985). This definition is a bit closer to the integration phase depending on whose morals are used. Spiritual development is a life

long process from being born into the survival paradigm, looking outside one's self for providing, protecting and nurturing to an internal connection with creation energy. One's external experience is realized as a reflection of the internal, a door to the unconscious. Therefore, one develops their own morals and values with freedom and fluidity, rather than a fixed, rigid set of rules applied to everyone at all times.

The word "discipline" is also used in this definition of conscientiousness. From the perspective of Energy Medicine, discipline comes from the word disciple, meaning spiritual student. Therefore, conscientiousness can be viewed as a spiritual practice. These seven lifestyle habits are always a good way to come back to the basics of conscientiousness. The habits themselves are symbiotic, each supporting the other.

- Daily exposure to sunshine/ outdoors
- Drink plenty of clean water
- Stable, comfortable weight
- Primarily eat real, whole food, including a good amount of vegetables
- Plenty of enjoyable body movement daily
- 7-8 hours of good sleep
- Cultivation of friendships

Though seemingly simple, lack of personal care can provide powerful feedback revealing unconscious, historical patterns of trauma, triggers and unworthiness. It takes stamina and commitment to shift to an internal connection in order to develop the value

of self-expression, to play in one's imagination, to follow an inner sense of guidance and to create community with those who honor others.

Many energy practitioners give valuable support to others; yet disregard their own connection to creation energy. Inadvertently, the practitioner becomes an external authority giving healing energy to a client, a relationship based in the adaptation phase, which can be very beneficial, no doubt. However, to access the true power and understanding of creation energy, when the practitioner is consciously connected to prana, a vibration emanates allowing the client's vibration to harmonize with it. The only way to truly know the existence of prana is to experience it. Being a role model of the connection to prana is an integral piece of Energy Medicine. Practicing the seven lifestyle habits of conscientiousness becomes a beautiful spiritual practice, simple, yet profoundly transformative.

From the perspective of spiritual transformation, it becomes clear that pain and chaos are a signal to relax, breathe and shift into connection to prana, or creation energy, within, expanding into self-expression rather than feeling confined and constricted (Desai, 2012). This is creator's way of guiding us into alignment in harmony with an internal sense of expanding expression. And yet, as we can see in nature, expanded expression is a vulnerable, fearful step. Pain and fear are not only natural, but an essential experience in the process of awakening (Desai, 2010). Spiritual practices can be used to connect with the integrative force found within. Yogi Amrit Desai (2004) explains:

Only human beings, as far as we know, are conscious of this process. You can go against your instinctual impulse and you can go with it. And we also have a divine potential to go beyond it. That's a very special evolutionary state that we human beings are.

In other words, all the biological laws, physical laws, they will not apply on a yogi who has reached a very high state. India in that sense is a very unique country for having carried out such unique experiments in god realization, where man becomes one with God. So that is what establishes a very deep connection. But it is no more meaningful that the meaning you assign to it. It's all limited by your thinking again. No matter what you get, you don't get anymore than what you thought you got. You are always limited by the meaning you assign to it. You might be in the presence of God and you can't get anymore from God than what you think God is capable of. You assign the capacity to God even. That's how powerful you are.

You have such profound possibilities you never need to be confined to those concepts that have been thrown into you through mass hypnosis. You can enter the infinite field of possibilities and can create whatever you want to create.

CHAPTER SEVEN: Conclusion

Conclusion

The purpose of this critical analysis was to discover the common phases and elements of the creation process. Two hypotheses were examined. One: that an integral theory of the process of creation and its elements can be determined based on observation of the natural world. Two: that the elements involved in the process of creation are echoed at multiple levels within the construct of the world. By comparing the creation processes of biological evolution, cultural evolution and spiritual transformation, the purpose was fulfilled.

The following are some of the common characteristics of the creation process identified at multiple levels of creation:

- Creation follows an identifiable, methodical process.
- Creation energy is found within, expanding outward.
- Creation energy moves in an overall direction of selective advantage.
- Creation energy follows a specific blueprint of creation, maintaining balance by creating through negotiation, cooperation and unity while eliminating extremes.
- Four phases of the creation process are identified.
- Each phase has specific characteristics or elements.
- There are important contributions to gain from each phase.

- Chaos and confusion precede a shift.
- Chaos serves as guidance toward the selective advantage, thus toward creativity and integration.
- Humans follow the same evolutionary pathway as the rest of nature.
- Humans have the capacity to be aware of their own transformation process, including their contribution to and responsibility for Earth's biosphere.

Through the investigation of three different types of creation processes, a deeper understanding and appreciation of the overall process of creation was gained. The inquiry into the specific details led to identifying a richer, more extensive process than originally expected. A next step would be to apply these same principles to chemistry and physics, since they are also processes of creation. Can the same phases and elements be identified within the behavior of atoms and molecules? How does this understanding apply to entropy and enthalpy for example? It is through the symbiotic effort of interdisciplinary scientists that a fuller understanding of the nature of creation energy, the creation process and consciousness will be gained.

The pain, constriction and toxicity experienced throughout the planet at this time is the natural unfolding toward a paradigm shift. As the nature of creation energy reveals, matter is created from consciousness. It is especially important for leaders and practitioners to realize focusing solely on the alleviation of a client's problem simply maintains or eliminates, but does not move forward toward expanded expression. To contribute to a paradigm shift of inspiration, an internal connection to creation energy

must be at the core of one's personal and professional practice. With this knowledge, practitioners of the healing arts can develop their effectiveness, supporting and guiding clients through the constriction phase of a shift, allowing the Mystery to naturally expand toward balance, health and joy.

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