

**ENCOURAGING CHANGE: TRANSFORMATIVE LEARNING,
HOLARCHY, EPIPHANY, AND THE SHEPHERD**

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**ENCOURAGING CHANGE: TRANSFORMATIVE LEARNING,
HOLARCHY, EPIPHANY, AND THE SHEPHERD**

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
 CHAPTER	
1. TRANSFORMATION.....	1
WHAT IS TRANSFORMATION?.....	1
A FRAMEWORK FOR TRANSFORMATION	8
 2. TRANSFORMATIVE LEARNING.....	 15
WHAT IS TRANSFORMATIVE LEARNING?.....	15
WHY IS TRANSFORMATIVE LEARNING SUPERIOR, YET INSUFFICIENT?	 26
 3. HOLARCHY	 42
WHAT IS HOLARCHY?.....	42
SYSTEMS, INTERRELATION AND EMERGENCE	50
PARADOX, NESTED SCALES AND PARAMETERS.....	59
 4. EPIPHANY	 66
EPIPHANY.....	66
CYCLES AND PROCESS ORIENTATION	70
BELIEF.....	80

5. ENCOURAGING CHANGE	85
BUILDING TRUST	85
FACING FEAR.....	91
VULNERABILITY AND ACCEPTANCE	96
CHOICE AND ACCOUNTABILITY	99
WORKS CITED.....	104

LIST OF TABLES

Table	Page
1. Types of Reflection and Meaning Perspectives	24
2. Types of Reflection and Learning	25

LIST OF FIGURES

Figure	Page
1. The Life Cycle of a Butterfly	4
2. Simple Holarchy of an Organism	46
3. Simple Holarchy of Life Domains.....	46
4. Holling's Adaptive Cycle in 2D	53
5. Nested Hierarchies.....	61
6. The Traditional Great Chain of Being	62
7. A Pure Sine Wave.....	74
8. Low, Medium and High Frequency Sine Waves with Equal Amplitudes.....	75
9. Modulated Sine Waves	75

CHAPTER 1

TRANSFORMATION

WHAT IS TRANSFORMATION?

“The minute a man ceases to grow, no matter what his years, that minute he begins to be old.” -William James (“When Is A Man Old?” 760)

What does it really mean to transform? As children, some of us played with Transformers; toys which could change from a robot to a vehicle and back. These playthings were undoubtedly innovative and fun, but they did not truly have the facility to transform. A car can be taken to a body shop and have its appearance revamped by adding a spoiler, side rails and a special paint job, making it look like a fresh, custom ride. Still, this isn't a full transformation. A potter can mold a piece of clay into a beautiful, yet functional piece of art, using his creative abilities to fashion something of significance out of a shapeless blob, but again one cannot conclude that a *complete transformation* had occurred. The reason is, these examples do not demonstrate the type

of comprehensive conversion that constitutes an actual transformation. These are partial or superficial changes missing something that a full understanding of transformation would grasp. Full transformation involves substantial change and involves revolution from one-sort-of-thing to another.

The toy Transformers are limited by manufacturing capabilities. They can shift from shape to shape, yet were never intended to undergo a *total* metamorphosis. The majority of the overhauled car's structure and functional capacities has not been altered, only the appearance has been changed. Even if adjustments and improved parts are incorporated into the engine, making the car faster and more responsive, the core components of the automobile carry on unaffected. Though the shape of the clay does evolve and become something new, the substance itself never changes; it remains clay, albeit in a more aesthetically pleasing format. These examples from everyday life seem to leave out something important, something we are interested in when we describe a person as "transformed."

The matter of how to characterize change can be quite subtle. It is one of the original problems of philosophy, one which preoccupied Plato and Aristotle, as well as many pre-Socratic thinkers. What is a "complete" or "total" change? If it means that one thing, A, fully, in all respects, becomes a different thing, B, then in what sense does A equal B, or in what sense is there the same thing through all of the changes? At what point does the Ship of Theseus or George Washington's axe become a different object entirely, if it does at all?

In the case of the car we would commonly recognize that it is fundamentally the same machine. Even if every piece of the car except the vehicle identification number

were replaced, it would still be rational to judge it to be the same vehicle. Likewise, new cells are continuously produced in our bodies as older ones expire. After less than a decade every component of a person's body is replaced. Physically, we, like Heraclitus' river, are never exactly the same at two given points in time. These changes occur delicately over time, and there are a number of both synchronic and diachronic criteria which allow for a rational understanding of continuity.

In the case of a person's psychological ontology, we seem to readily accept the paradox consisting of both persistence and delineation. We mean that someone who has experienced some sort of breakthrough is both the same, and yet somehow significantly different. So how do we embrace this paradox and move on to develop a clear picture of transformation that will allow for us to recognize this type of complete transformative shift within personal development?

There is generally a central concern for the content of peoples' lives to include or develop the traditional Aristotelian understanding of character, or what he would label *arête*. Therefore, I am trying to develop an analysis of how human lives change in the direction of becoming more satisfying, more rewarding, more flourishing and more fully lived. In doing that, I give a model of what that change looks like and some ways to facilitate it, essentially laying the groundwork for further, more detailed exploration in this area. I propose that by considering transformative learning from a holarchical perspective we can further the development of *arête*. First, I present an established model of learning which functions as a foundational structure for explaining how transformation occurs in people, how to promote change, and how to understand the rhythm of human development. Next, I give a background metaphysical ontology that, if we can place our

self within it, explicates what change looks like and why it has to happen the way it does, through an understanding of process, paradox and partiality, which shows that no resting point is ever final. Against that backdrop I talk about two important things: The moments of breakthrough and the role of “the shepherd” in transformation. I identify and walk beside each individual perspective in order to move forward into a brief excursion into the basics of my generalized framework for encouraging change.

A straightforward way to understand full transformation is to think about the life cycle of a butterfly or moth. Both are insects from the order Lepidoptera, which undergo holometabolism, or inclusive metamorphosis, as they progress from embryo to larva to pupa to imago, or adult. We find that a caterpillar may molt many times prior to becoming a pupa in a way quite similar to a snake shedding its skin, but this, of course, does not entail a full transformation in either case. It is during the pupa phase that the internal change occurs, altering the structure of the being entirely, permitting a butterfly or moth to eclose, or emerge, from its chrysalis as a fully developed, mature adult.

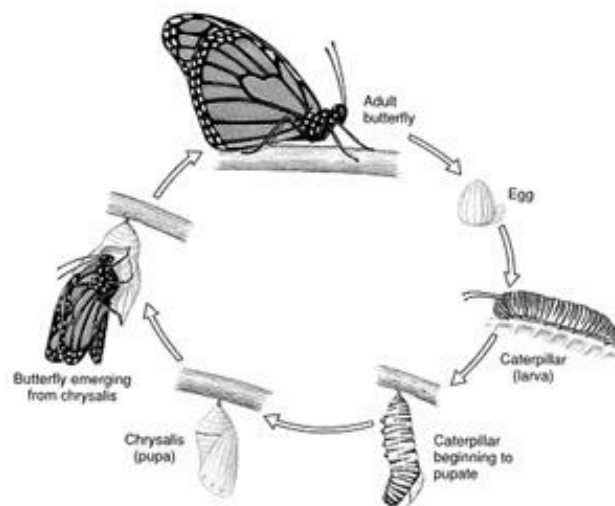


Figure 1. The Life Cycle of a Butterfly. The butterfly undergoes a complete transformation known as holometabolism. (Hickman)

Humans do not undergo the same brand of holometabolism; a newly born human appears, in smaller form, noticeably similar to an adult. However, through the process of transformative learning a person experiences a drastic non-physical, interior renovation a number of times throughout life. This is the sort of change that constitutes a conversion relevant enough to be deemed a full transformation. It is important to reflect on what “total,” “complete” or “full” transformation means for the purposes of this work.

With respect to the physical transformations of Lepidoptera, exploring the analogy to a person’s non-physical development will help to understand transformative learning as part of a continual and lifelong process of change that incorporates minor alterations and growth akin to the shedding of skin, as well as major, perspective shifting changes reminiscent of the move from caterpillar to butterfly. So, what is it that makes the butterfly the same thing as the caterpillar? Is it only the physical continuity, including genetic continuity? If so, a person experiencing profound psychological changes maintains the same sort of continuity. But, the matter of total transformation raises extensive issues: What is changed? In what sense is the “after” the same as before? In the case of Lepidoptera, there seems to be some core that remains unchanged while the essence and form have been completely replaced. The meaning and purpose of a butterfly differs from that of a caterpillar. There is a similarity with humans and their personal development. The core also remains, as does the form. Both the DNA and the vessel, or body, continue on as before, but the essence has been replaced because a revolution of understanding completely alters the perspective, and therefore the actions, of the changed person, who can never go back to the exact state of mind which was

previously held. It is this state of mind which, intertwined with one's spirituality, determines a person's essence.

For our purposes here, it is helpful to operate under the assumption that all living organisms undergo oscillations and must be either growing or dying, either expanding or contracting, either reproducing or diminishing, either unfolding or enfolding, moving towards either extropy or entropy. The biblical ideal of being fruitful and multiplying is merely an extension of this simplest law of life. Even if you happen to be facing in the proper direction, chances are that if you remain standing in place you will get passed or sometimes even trampled. Today's status quo is tomorrow's left behind because what we claim to be remaining in stasis in a particular moment becomes degeneration over time. Therefore, if any population, be it cells, plants, or people are not multiplying, they are shrinking. In the words of French Existentialist, Simone de Beauvoir, "There is no justification for present existence other than its expansion into an indefinitely open future." ("The Second Sex" xxxv) This view will be explored at greater length below when we turn our attention to Holarchy.

A creature such as an insect or a mammal continues to enlarge over time by continuing to ingest food and engage in activities requiring motion. This is a physical type of growth that is evident across the gamut of the living. Plants feed off of the sun through photosynthesis and continue to grow, sprouting new limbs and gaining thickness in their existing roots and stems. In winter, both animals and plants typically experience a diminished rate of growth because the fuel needed for growth is not as abundant. It is also possible for the entity to cross a threshold and begin withering, or attenuating, reversing the process and moving toward entropy. There is an oscillation around a point

of balance, but there exists no enduring status quo for any physical being. “Life is occupied in both perpetuating itself and in surpassing itself; if all it does is maintain itself, then living is only not dying.” (Beauvoir, “The Ethics of Ambiguity” 82-83) A pure equilibrium, a maintained stasis or status quo, cannot persist as conditions and circumstances inexorably change. In a nod to Heraclitus, we find that all is flux, nothing stays still; the only constant is change. However slight, there is an incessant replenishing and elimination of cells and their components that mandates continuous change within each being. Psychologist Carl Jung muses on this reality in *Memories, Dreams, and Reflections*, where a plant ceaselessly alters while the rhizome represents constancy by capturing multiplicities. He says,

“Life has always seemed to me like a plant that lives on its rhizome. Its true life is invisible, hidden in the rhizome. The part that appears above ground lasts only a single summer. Then it withers away -- an ephemeral apparition. When we think of the unending growth and decay of life and civilizations, we cannot escape the impression of absolute nullity. Yet I have never lost a sense of something that lives and endures underneath the eternal flux. What we see is the blossom, which passes. The rhizome remains.” (2)

Naturally, humans go through this growth and death process. However, we also have a documented derivative process of escalation and demise that we experience. It is the rational psychological expansion that can lead us to become more intelligent, moral, selfless, understanding, compassionate and loving beings.

“All the evidence that we have indicates that it is reasonable to assume in practically every human being, and certainly in almost every newborn baby, that there is an active will toward health, an impulse towards growth, or towards the actualization.” (Maslow, “The Farther Reaches of Human Nature” 25)

This is the type of psychological metamorphosis that a human experiences in transformative learning. By acting on the urge to actualize, humans can manifest a series of metaphorical pupae, which provide the conditions necessary to eclose as more mature, revolutionized beings. Like the caterpillar, we are required to psychologically molt if we are to develop. “We must let go of the life we have planned, so as to accept the one that is waiting for us. The old skin has to be shed before the new one can come.” (Campbell)

A FRAMEWORK FOR TRANSFORMATION

“Knowing reality means constructing systems of transformations that correspond, more or less adequately, to reality.” -Jean Piaget (“Genetic Epistemology” Lecture 1)

By applying a transdisciplinary approach to an individual’s transformative progression, and through the process of synthesizing multifaceted material, a method of jumpstarting an individual on a path of self-directed, lifelong, and transformative learning

can be adopted. Via recognition of the precise patterns and markers that signify growth in our own lives and in the lives of others, a framework can be created and implemented. The knowledge gained provides a springboard for self-examination and understanding, supporting the endeavor for personal growth. Additionally, we can utilize this structure with the intention of assisting the uninitiated in their effort to consciously seek and find each of their own successive transformations. Then, after living through, reflecting on, and understanding the nature of this process, these students can reformat themselves as teachers, allowing the system to be remolded and passed along to a multitude of future learners.

It is important to note that these ideas can be currently applied, or contain nascent potential to be utilized in, examinations of all complex adaptive systems including ecological, educational, political, and social arrangements, as well as other small and large scale relational situations. Though an attempt will be made to keep the material in this work oriented towards the developmental process of a singular human, the concepts covered stem from an understanding of the universe as being *integral* (see my discussion of holarchy below). In fact, it is somewhat tricky to detach a number of these principles involved from larger scopes of observation. This is especially the case because acknowledging the interwoven disposition of the fabric of the cosmos is an important part of the understanding implicit in fully embracing the developmental process. By recognizing the interwoven nature of levels of reality, and hence the interwoven nature of our concepts and understandings, we see that the problems we face are those we face with any systematic philosophy – all parts play a role, and any entry seems incomplete and

unanchored. Only once we have a fuller view can we adequately understand the pieces. And yet, we can only start from the pieces.

Because of this innate feature of reality, we must identify what is at stake both individually and globally. William James identifies this resultant emergent quandary in *The Will to Believe and Other Essays in Popular Philosophy*. He declares, “If this life be not a real fight, in which something is eternally gained for the universe by success, it is no better than a game of private theatricals from which one may withdraw at will. But it feels like a real fight.” (61)

This brawl entails that the inherent details explicated throughout this work are sometimes better understood by altering the relative position from which the reader consumes them, sometimes more than once, as it is an ingredient of proper transformative learning to reflect and make judgments from multiple, sometimes contradictory perspectives. Hence, it must be assumed that the reader has enough maturity, and abstract capacity, to imagine events similar to those described, or recognize those that have transpired in your own life. Essentially, one must be cognizant of his own previous conversions and the wrestling involved in them, in order to adequately conceptualize the methods used to instill dramatic change in others through the proposed scheme.

“We cannot lay hold of the new, we cannot even keep it before our minds, much less understand it, save by the use of ideas and knowledge we already possess. But just because the new is new it is not a mere repetition of something already had and mastered. The old takes on new color and meaning in being employed to grasp and interpret the new. The greater the gap, the disparity, between what has become a familiar possession and

the traits presented in new subject matter, the greater is the burden imposed upon reflection; the distance between old and new is the measure of the range and depth of the thought required.” (Dewey, “Experience and Nature” xiii)

Because of its interconnected nature, this framework overcomes traditional paradigmatic and disciplinary boundaries and, if adopted, can encourage the recognition required to institute the crucial changes that can slowly liberate society at large, transforming the noosphere, the sphere of human thought, which continues to grow ever more complex and unified. This mirrors Ludwig Wittgenstein’s sentiments in *Philosophical Investigations*, where he explains that, “Our civilization is characterized by the word ‘progress.’ Progress is its form rather than making progress being one of its features. Typically it constructs. It is occupied with building an ever more complicated structure. And even clarity is sought only as a means to that end.” (Section 129)

The notion of the noosphere is a concept that is analytically useful and turns our attention to relations and connections as a whole – an aspect we might miss if we focused solely on more reductive models. Fashioned by Pierre Teilhard de Chardin, a Jesuit theologian and paleontologist, the concept of the noosphere is that of a self-organized, continually evolving global psyche, consisting of the amalgamation of all human consciousness, culture, technology and creation. This noosphere highlights the future of civilization as it continues evolving into an interconnected, cooperative entity, or superorganism. Since the cosmos is ongoing, its advance is in compliance with humanity’s psychological evolution as a whole. Teilhard de Chardin claimed that, “The universe as we know it is a joint product of the observer and the observed.” (qtd. in

Machiraju, 44) Essentially, everything from subatomic particles, to plants, to animals, to the peasant, to the greatest king, contains both peripheral and internal dimensions that jointly co-evolve (this is reminiscent of the monads of Leibniz to be addressed later), and that collective awareness intensifies and expands as substance becomes more and more complex.

Physicist David Bohm has built off of this understanding in order to make breakthroughs in quantum mechanics, consciousness and even in the way people dialogue, developing his own system, a “Bohm Dialogue,” intended to provide the conditions needed for heightening creativity in groups. He embraces the integration of science, psychological evolution, and group dynamics and asserts that, “In some sense man is a microcosm of the universe; therefore what man is is a clue to the universe. We are enfolded in the universe.” (qtd. in Fiddes, 9)

All entities experience both the microcosm and the macrocosm simultaneously while going through periods of entropy and extropy, though these epochs can be incredibly small or large; so much so, that the ability to recognize the oscillation can sometimes be greatly diminished. A way to picture this dynamic is through associating the action of breathing. The repeated expansion and contraction of any entity is a type of breathing, whether this is seen literally or metaphorically. It tends to be an involuntary movement, but it is nevertheless compulsory for any entity. We see examples of this in our planet, through plate tectonics and ocean currents, in water itself, as it evaporates, condenses and freezes, in rock formations, through compression and erosion, and in plants, through the process of blooming and seeding and the changing of seasons. This also happens to be the case for all animate objects, and the social groups they form,

which are highly dynamic. On another level, we can identify the attribute of a sort of breathing, an ongoing dynamic of change, as the case for the noosphere, the galaxy and also, the cosmos. Imagine the universe before the big bang on the far end of the contraction side of the spectrum, and how it is currently experiencing the part of the oscillation moving toward the extreme side of expansion.

Based on the underlying supposition that all organisms are either increasing or fading, my contention is that after a prolonged period of self-examination and growth it is a beneficial and good thing to seek out opportunities to support and escort others through the process of transformative learning. For the mentoring process to be useful and succeed, it is essential to retain a generous concern for others and it needs great emphasis on refraining from being paternalistic and objectifying others, rather than treating them as agents. We can act as a shepherd, leave open the possibility that the student will elicit a transformation in the guide while facilitating the novice to reach the point of epiphany by relating to her, building trust and teaching her the signs to be aware of, all the while helping build an understanding that each step along the way is reliant on her personal choice and accountability.

Often, when a person experiences his first epiphany, there is a profound and common desire to continue the growth process. Though the concepts involved develop more profundity, the increase in momentum helps overcome the need for specified one-on-one coaching with a single, particular guide. After enough leaps, the individual may become capable of continuing the cycle, by locating his own opportunities to guide other beginners' growth with generous concern, hastening subsequent transformations for both the original learner and the new subjects in the process. Though the process commences

with an undeveloped tyro, we participate in a chain of events that transforms humankind itself. Yes, “During the earliest stages the child perceives things like a solipsist who is unaware of himself as subject and is familiar only with his own actions.” (Piaget, “The Construction of Reality in the Child” 352) But, there is a corollary to this evolving procession. “Free the child's potential, and you will transform him into the world.” (Maria Montessori, qtd. in Simanek.)

CHAPTER 2

TRANSFORMATIVE LEARNING

WHAT IS TRANSFORMATIVE LEARNING?

“Knowledge, then, is a system of transformations that become progressively adequate.” -Jean Piaget (“Genetic Epistemology” Lecture 1)

Undergoing the process of transformative learning is for all intents and purposes inevitable for everyone, though it frequently goes unnoticed and remains largely foreign to the majority of people who undergo the process and its ensuing modifications. Unfortunately, the experience is far less impactful and self-altering under these conditions. “Genius... means little more than the faculty of perceiving in an unhabitual way.” (James, “The Principles of Psychology” Chapter 19) In a manner that is related to Plato’s distinctions along the divided-line between knowledge and opinion where recognition and understanding are necessary for knowledge, it is the acknowledgment of

the transformative process itself that supplies the foundational circumstances which act as an accelerant and create a greater advantage through its unfolding. Creator of the hierarchy of needs, Abraham Maslow, stressed that we should,

“Become aware of internal, subjective, sub-verbal experiences, so that these experiences can be brought into the world of abstraction, of conversation... with the consequence that it immediately becomes possible for a certain amount of control to be exerted over these hitherto unconscious and uncontrollable processes.” (Maslow, *“Religions, Values, and Peak Experiences”* 34)

He sums it up thusly, “What is necessary to change a person is to change his awareness of himself.” (Maslow, *“Religions, Values, and Peak Experiences”* 33)

This type of learning is a process that revolutionizes the way individuals perceive, contemplate, reflect on, interact with, and act in the world around them as a way of developing significance in their existence. In a traditional model of pedagogy we find a teacher-centric environment where the responsibility for choosing what, how and when learning occurs is determined by the educator. The normal teacher-focused approach restricts the authority to control information flow and provides a learning environment consisting of a sort of indoctrination that can be quite limiting. The students remain secondary in the learning process, subjugated by the topics and teachers who control the environment with a pre-established curriculum based on convention. The transformative development process is malleable based on the learner’s needs, experience and intuition. By definition transformative learning provokes a more extensive change in the pupil

compared with traditional pedagogy because of the paradigm shift it induces, essentially hastening the process of self-actualization.

Jack Mezirow is acknowledged as the intellectual who initially proposed academic progress could be achieved through transformative learning, and he focused primarily on transformation as a gradual progression. The nature of transformation is that it occurs after numerous minor realizations accumulate. These insights are limitless and can incorporate the intellectual, which includes the identification of a misinterpretation, inaccuracy, or error; the epistemological, such as the recognition of something limiting; and the performative, which involves enacting something concrete with respect towards something particular (what kind of life you see yourself living, how can I address my performative habits). At some point the accretion prepares the possibility for a larger transition and these accumulated minor realizations generate a substantial behavior shift, a change which mandates the reconsideration of previous attitudes and viewpoints through a drastic overhaul of the individual's suppositions, expectations, actions, and overall demeanor and awareness, thereby resulting in an expansion of consciousness.

The absolute alteration of the individual's perspective, a full paradigm shift, is essential for the change to be considered transformative. This is much more than just a temporary higher state of consciousness; it is the authentic realization of a permanent advanced stage of development. I explore this process in more detail below. For now, it is important to recognize that temporary elevated states of awareness can produce a propensity to erroneously presume that one has achieved some enlightenment (which will be illusory), but these states can be achieved through singular experiences, such as meditation, drugs, or other phenomena, that can be construed as cutting corners and do

not typically provide the depth of change necessary to be lasting and fully transformational.

Mezirow claims we alter our underappreciated “frames of reference” by adopting more comprehensive, judicious, pliable, and philosophical perspectives that guide us into adopting more beneficial practices. (“Transformative Learning: Theory to Practice” 5-8) We begin to understand occurrences in a novel way, to visualize fresh alternatives, and to develop more steadfast morals and integrity. We, in effect, heed the call of Baruch Spinoza. “If you want the present to be different from the past, study the past.” (Congress, 22,134) Mezirow established a structure identifying ten phases of transformative learning where the pupil first (1) undergoes a “disorienting dilemma,” followed by (2) experiencing guilt, anger, fear, or shame through self-examination, (3) critically assessing their assumptions, (4) recognizing that many others have executed a similar change, (5) exploring new roles, relationships, and actions, (6) planning a course of action, (7) acquiring the necessary knowledge and skills, (8) provisionally undertaking these new roles, (9) building competence and self-confidence in new roles and relationships, (10) and reintegrating new assumptions based on their new paradigm. (“Transformative Dimensions of Adult Learning”)

“The position here is that there is an inherent logic, ideal, and purpose in the process of transformative learning. The process involves transforming frames of reference through critical reflection of assumptions, validating contested beliefs through discourse, taking action on one’s reflective insight, and critically assessing it.” (11)

A simpler way to identify this process is by looking at four key concepts. Initially the subject experiences trepidation that comes from the tension created by the dilemma. Next, he participates in critical thinking and reflection. Third, the individual engages in rational dialogue with peers, authorities or mentors. And finally, he begins to take action. Since transformative learning is triggered by encountering a difficulty that has never been previously experienced, and therefore can be agonizing, critical reflection generally emerges after the challenge has been properly distinguished and accepted. It is this reflection that imparts the desire for change and subsequent action. “Your vision will become clear only when you can look into your own heart. Who looks outside, dreams; who looks inside, awakens.” (Jung, qtd. in “Living the Dream”)

In work that has been instrumental to advancing the theory of transformative learning, Patricia Cranton utilized the deep structure of Jürgen Habermas' theory of communicative action (1981), which built from his 1971 work *Knowledge and Human Interests*, where he defined three areas of knowledge: technical knowledge, which reveals causal associations, practical knowledge, which is oriented towards understanding what others mean, and emancipatory knowledge, which involves critical self-reflection. (“Understanding and Promoting Transformative Learning” 9)

Based off of emancipatory of knowledge, Mezirow developed three domains of learning. (1) Instrumental knowledge is technical and helps us to create hypotheses regarding our perceptions, informs us how to better manage ourselves and our surroundings, and can be examined empirically. (2) Communicative knowledge is practical and helps us to determine significance from our relations with others. It is more resistant to empirical examination and mandates engaging in the dialogical process.

Preferably, communicative learning entails arriving at a consensus. (3) Emancipatory knowledge helps us challenge our restrictive suppositions and leads towards deep transformations. (“Learning to Think Like an Adult” 6-9)

Emancipatory knowledge is dependent on communicative knowledge. Both instrumental and communicative reason, and the knowledge they produce, are primary, and arise out of fundamentals of the human condition (we are physical creatures and must navigate the material world, and we are social creatures and must live there as well). The third interest (and thus the third sort of reasoning and the third area of knowledge) emerges out of the other two. It arises from each separately and because of distortions in each. When our individual and social practices conflict, they stand in the way, distort our communication, and keep us from fully participating in understanding. We then we derive an interest in emancipation – an interest in transforming circumstances that will allow both of the other two areas to more fully function. Thus, the emancipatory knowledge rests on each of the others.

Furthermore, in order to challenge our suppositions and reach any consensus dialogue is imperative. "Rational discourse is a catalyst for transformation, as it induced the various participants to explore the depth and meaning of their various world-views, and articulate those ideas." (“Transformative Dimensions of Adult Learning” 66) Discussion corroborates understanding in a way that an appeal to authority or convention cannot. "If we do not love life on our own account and through others, it is futile to seek to justify it in any way." (Beauvoir, “The Ethics of Ambiguity” 135-136) Dialogue itself is what provides the opportunity for relationship, harmony and justification. In *Unfolding Meaning: a weekend of dialogue with David Bohm*, we find that,

“A new kind of mind thus begins to come into being which is based on the development of a common meaning that is constantly transforming in the process of the dialogue. People are no longer primarily in opposition, nor can they be said to be interacting, rather they are participating in this pool of common meaning which is capable of constant development and change.” (175)

Since “the state of man’s mind, or the elementary phase of mind which he so far possesses, conforms precisely to the state of the world as he so far views it,” (Hegel, *Introductory Lectures On Aesthetics*, 76) Mezirow is adamant that critical reflection is compulsory insofar as change is desired or necessary. “The process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world,” is literally what makes a psychological transformation to, “a more inclusive, discriminating, and integrating perspective” possible. (“*Transformative Dimensions of Adult Learning*” 167) By analyzing more versions of perception through communication, there exists a higher probability of reliable interpretation or synthesis. (“*Learning to Think Like an Adult*” 6-7)

Utilizing Mezirow’s terms, Patricia Cranton explains the essential role critical reflection plays and defines three different areas in which the individual will reassess his reference points through this activity. These are, content reflection, process reflection, and premise reflection. In content reflection, the primary question addressed is, “What?” The subject reflects on the depiction or substance of a challenge in ways that are analogous to thoughts regarding problem solving endorsed by pragmatism. John Dewey puts forward the notion that creatures fall in and out of balance with their environment,

and that coming back to equilibrium is a kind of development or interaction which brings us back to further growth and transformation. The idea of the continual oscillation representing the deviation and regression towards the mean is fundamental to the exercise of conversion. We absolutely must fall, or at least stumble, in order to have the opportunity to get back on our feet and develop a better understanding of ourselves and the world. For this reason the disorienting dilemma can be seen as simultaneously a positive and negative occurrence. It remains quite a blessing to recognize a mistake, a shortcoming, or a negative assumption or habit. Faltering can sometimes lead to a debilitating slide into depression or apathy, but it can also provide an open door, through which lies an obstacle to conquer. Content reflection allows for this obstacle to become a springboard which leads towards a quantum leap in development.

A recent New York Times article by Paul Tough, entitled, *What if the Secret to Success Is Failure?*, highlighted a couple of prescient examples showcasing the value of running aground. First of all, according to school administrator, Domonic Randolph, crucial character behaviors of “mind and habit” tend to be more important components of long term success than intelligence or socio-economic status. He says,

“People who have an easy time of things, who get 800s on their SATs, I worry that those people get feedback that everything they’re doing is great. And I think as a result, we are actually setting them up for long-term failure. When that person suddenly has to face up to a difficult moment, then I think they’re screwed, to be honest. I don’t think they’ve grown the capacities to be able to handle that.”

(Tough, 1)

Character traits such as work ethic, persistence, perseverance, forgoing shortcuts, and optimism, particularly, retaining a positive attitude when facing an impediment generate a high likelihood of success. Another administrator, David Levin found that prep school alumni who endured at university were those with outstanding strength of character, not the ones who had earned the best grades or test scores. Those who could recuperate after dealing with a major hindrance, such as a poor test or even failing a course, and yet show the tenacity to subsequently improve, showed the grit necessary to develop into successful students over the long term. Many individuals are safeguarded from failure and distress and therefore never develop resilience to it. Yet it is precisely when confronting challenging conditions that learning occurs and character is developed.

A third Administrator, Tom Brunzell, likens character development to cognitive behavioral therapy, a psychotherapeutic approach to personal modification that stems from positive psychology and is similar to the reflection involved in transformative learning, yet has particular goals in mind. One commonly used technique involves framing an urgent calamity within a greater context in order to develop proper perspective which can enable conquest. Brunzell claims,

“All kids this age are having mini-implosions every day. I mean, it’s middle school, the worst years of their lives. But the kids who make it are the ones who can tell themselves: ‘I can rise above this little situation. I’m O.K. Tomorrow is a new day.’” (Tough, 8)

The basic sentiment of the article is in order to flourish, we must first fail. Facing adversity and deprivation and surmounting it helps a person reach a deeper understanding of his own inadequacies, and in turn, confirms his competence through the toil to prevail

over them. Heck, even my own personal failure concerning my inability to finish this thesis in the time I had originally allotted provided an impediment, that when overcome, fostered evident character growth. Opportunely, my understanding of this concept afforded me the occasion to see the setback as a blessing relatively quickly and identify what I needed to alter through content reflection, which in turn paved the way to the other two types of reflection.

Process reflection incorporates logically contemplating problem-solving tactics helping to scrutinize the problem. It is essentially asking, “How?” This provides the individual a road to understanding the way her personal paradigm was established and how she has been influenced. Premise reflection primarily asks the question “Why?” It transpires when the subject inquires about the impact of acutely ingrained, beliefs, values, and assumptions regarding society or self that are fundamental to the challenge. (“Professional Development as Transformative Learning” 81-82)

Table 1. Types of Reflection and Meaning Perspectives. (“Understanding and Promoting Transformative Learning” 51)

Reflection	Perspective		
	Psychological	Sociolinguistic	Epistemic
Content	What do I believe about myself?	What are the social norms?	What knowledge do I have?
Process	How have I come to have this perspective of myself?	How have these social norms been influential?	How did I obtain this knowledge?
Premise	Why should I question this perception?	Why are these norms important?	Why do I need/not need this knowledge?

Table 2. Types of Reflection and Learning. (“Understanding and Promoting Transformative Learning” 51)

Reflection	Learning		
	Instrumental	Communicative	Emancipatory
Content	What is the causal relationship event?	What do others say about this issue?	What are my assumptions?
Process	How did I empirically validate the causal relationship?	How did I obtain consensual validation on this issue?	How do I know my assumptions are valid?
Premise	Why is this knowledge important to me?	Why should I believe in this conclusion?	Why should I revise/not revise my perspective?

Mezirow suggests that premise reflection, specifically, “is the dynamic by which our belief systems – meaning perspective – become transformed.” (“Transformative Dimensions of Adult Learning” 111) The tables above demonstrate some of the questions that arise from different perspectives and areas of knowledge through content, process and premise reflection.

He explains the extent, to which these types of reflection can be applied in the process of transformative learning,

“Critically explored assumptions may be in the autobiographical context of a belief, or they may be supporting a social, cultural, economic, political, educational, or psychological system. Transformations in frames of reference take place through critical reflection and transformation of a habit of mind, or they may result from an accretion of transformations in points of view.” (“Learning to Think Like an Adult” 7)

By reflecting in this way the individual takes advantage of the opportunity to dispose of immature, imprecise or unfounded judgments, revise them, and put their pristine perspective to the test by taking action under the new conditions. (“Professional Development as Transformative Learning” 113) The process of transformative learning gives persons the ability to consciously direct themselves toward development and maturity. “We cannot create observers by saying ‘observe,’ but by giving them the power and the means for this observation.” (“The Montessori Method” 228-229) Edification supported by the theory of transformative learning provides these very means, and is advantageous relative to other styles of education.

WHY IS TRANSFORMATIVE LEARNING SUPERIOR, YET INSUFFICIENT?

“Those who have a higher conception of education will prize most the method of cultivating a tree so that it fulfils to perfection its own natural conditions of growth.” -Carl Jung (“The Theory of Psychoanalysis” 107-108)

There are essentially three approaches to education and there is a bit of overlap between them. First, there is transmissional, mimetic or informative instruction in which knowledge is conveyed to the student by a lecturer. Of course,

“If education is always to be conceived along the same antiquated lines of a mere transmission of knowledge, there is little to be hoped from it in the bettering of man's future. For what is the use of transmitting knowledge if the individual's total development lags behind?” (Montessori, “The Absorbent Mind” 4)

This understanding leads to the second approach, transactional education, which appropriately assumes that a student often discovers more through his experience. There is an incredibly wide chasm between these two styles of education as the former commonly fails to engage the learner because of its inclination to encourage pupils to ingest and regurgitate. “The principle goal of education in the schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done.” (Piaget, qtd. in Eisner, 15) Students of philosophy, in particular, have derived great value from engaging in transactional learning because of the focus on dialogue, critical thinking and scholarly examination within the discipline.

The third type of teaching, of course, is transformative. There are a number of similarities connecting transactional and transformative learning, and often there is confusion regarding the two. In fact, transactional learning can actually be constructive in leading to transformative learning, but more is involved in the latter, creating another ample gap between these two methods. In *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning*, Mezirow claims that all education intends to create change, yet the predominant quantity of this change is not transformational. (“Transformative Dimensions of Adult Learning” xx) The concrete difference lies in the experiencing of a profound, foundational swing in the fundamental

principles and manifestations of the thoughts, emotions, and practices of an individual who has undergone a transformation. These transformations will include the perception of the self as well as the social associations with other people, the universe and its components and their personal milieu. (O’Sullivan, 326)

In *Art as Experience*, John Dewey describes the *integral* character of the components that we find involved in transformative learning, which throb and dance amid each other throughout life while maintaining their inevitable connection like the strand of an animated Celtic knot, yantra or mandala, which psychologist Carl Jung fittingly believed signified transformation, eternal re-creation, and the unconscious self while fostering movement towards the unity of identity. (Jung, “Memories, Dreams, Reflections” 186-197, 334-335)

“Direct experience comes from nature and man interacting with each other. In this interaction, human energy gathers, is released, dammed up, frustrated and victorious. There are rhythmic beats of want and fulfillment, pulses of doing and being withheld from doing. All interactions that effect stability and order in the whirling flux of change are rhythms. There is ebb and flow, systole and diastole: ordered change. The latter moves within bounds. To overpass the limits that are set is destruction and death, out of which, however, new rhythms are built up... Contrast of lack and fullness, of struggle and achievement, of adjustment after consummated irregularity, form the drama in which action, feeling, and meaning are one.” (Dewey, “Art as Experience” pg. 16)

Since personal development involves persistent transformations throughout life, and experience is intertwined with the element of re-creation, the rhythms that emerge from action provide a learner both obstacles and the means to overcome them. Each time one's perceived parameters are tested, which is when a disorienting dilemma arises, a choice materializes. One must either accept these limitations or figure out a way to surpass them predominantly unharmed. For this reason it is vital to explore the idea of holarchy, which will be covered in the next chapter. Rational contradictions arise, along with the oneness of experience, and bring about a need for a perspective that can account for the paradoxical aspects of transformation. Holarchy provides an outlook that helps solidify the desire to surpass limitations and find new ways to develop through experience and begin to comprehend one's purpose. Maintaining a pattern of accommodating limitations expressly limits experience, and therefore growth, leading to entropy. By seeking change through experience those who do not fence themselves in achieve increased vibrancy.

“Experience in the degree in which it is experience is heightened vitality [extropy]. Instead of signifying being shut up within one's private feelings and sensations, it signifies active and alert commerce with the world; at its height it signifies complete interpenetration of the self and the world of objects and events. Instead of signifying surrender to caprice and disorder, it affords our sole demonstration of a stability that is not stagnation but is rhythmic and developing... Experience is the fulfillment

of an organism in its struggles and achievements in a world of things.”

(Dewey, “Art as Experience” 19)

Dewey certainly seems to feel that man (among other organisms) is literally created to partake in a boogie with experience through interaction with struggle, which leads to accomplishment and fulfillment. Participating in the interaction itself, along with welcoming the consummate development it entails, is our very function. If transformative learning represents the basis for a means to carry out our purpose, it is an incredibly valuable method to incorporate into any individual’s regimen of personal development.

The vivacious dance leads to a paradigm shift that radically and irrevocably amends every subsequent experience in such a way that the individual is psychologically an entirely fresh person, and interestingly, “we grow in direct proportion to the amount of chaos we can sustain and dissipate.” (Prigogine, xx) Chaos provides tribulations, which are gifts in that they necessitate a shift. In order to achieve this shift a novice needs to be amenable to the act of consciously seeking what Mezirow calls, “alternative expressions of meaning,” while both perceiving and understanding the genuine significance and veracity of the insight. (“Transformative Dimensions of Adult Learning”) By engaging in the transformative process a person chooses to take on disorienting dilemmas and, in turn, experience suffering along with exhilaration in the course of the practice of contemplation and association.

Pragmatist constructivism accentuates the significance of the individual’s function within her own experience and Dewey emphasized that a learner needs to participate in collaboration with humankind because no truth is autonomous. Seeing as reflective

analysis actively, consistently, and cautiously mulls over conjectures and viewpoints critically, transformative learning fits well with this mindset. (Dewey, “Art as Experience” 9) The pragmatist lens would find great value in the way experience is more than an exercise in folly, but accomplishes meaningful growth that can be applied to further developmental endeavors and other learners with a broader paradigm, and that leaves the individual more able to engage dialectically.

The notion of experience is central since it provides the initial impulse to inquire and to change because something does not work or does not make sense. Dewey, and the pragmatists generally, would agree that reason plays an important role at many stages. But, in many ways reason comes after, making conscious and coherent sense of what has already been experienced. Hegel, of course, famously touched on this when he claimed,

“Only one word more concerning the desire to teach the world what it ought to be. For such a purpose philosophy at least always comes too late. Philosophy, as the thought of the world, does not appear until reality has completed its formative process, and made itself ready. History thus corroborates the teaching of the conception that only in the maturity of reality does the ideal appear as counterpart to the real, apprehends the real world in its substance, and shapes it into an intellectual kingdom. When philosophy paints its grey in grey, one form of life has become old, and by means of grey it cannot be rejuvenated, but only known. The owl of Minerva takes its flight only when the shades of night are gathering.”
 (“Philosophy of Right,” xxi)

Few people undergo profound changes based on the force of only reason, so, reason plays a central and necessary role, but rather than arguing self and others into a better view, transformative learning enables experience and understanding to be put into proper context, and often multiple contexts, which allows for the relativity necessary for reason to enact the most positive benefits. Not to mention, there are times when experience, and therefore transformation, transcends reason, and this can best be accounted for through holarchy, which can assimilate the contradictory truths of paradox. Just as Jung thought, “Reason alone does not suffice.” (“The Undiscovered Self” 98)

The objective of transformative learning is autonomous, self-actualized thought, which ironically implies *integral* conceptualization. “And what on earth - or in heaven - do I mean by ‘integral?’ The dictionary meaning is fairly simple: ‘comprehensive, balanced, inclusive, essential for completeness.’ Short definition, tall order.” (Wilber, “Sense & Soul”) This is precisely why Mezirow’s model of transformative learning alone can fall short of achieving intentional comprehensive and deep change. It is not that the model is flawed, but a perspective that incorporates the need for the paradox involved can supplement the educational theory. It gives shepherds myriad approaches to offering help and learners the capability to make possible multifaceted understanding which can enhance the intensity and fullness of conversion. Of course, no matter the approach, greater understanding and recognition and capacity for change comes through experience and dialogue.

Mezirow seriously valued the dialectical model and articulates the way rational discourse is defined by,

“That specialized use of dialogue devoted to searching for a common understanding and assessment of the justification of an interpretation or belief. This involves assessing reasons advanced by weighing the supporting evidence and arguments, and by examining alternative perspectives after having complete information and being free from self-deception... [Leading] toward a clearer understanding by tapping collective experience to arrive at a tentative best judgment.” (“Learning to Think Like an Adult” 10-11)

It is this collective experience that can ignite a fire in support of self-direction because the familiarity of rising among others, who are also kindling a desire for growth, is reciprocally contagious.

Transformative learning emphasizes a process that makes self-actualization an intrinsic quality of an incessant progression that develops not only self-direction, but also an intense craving for life-long learning. This advanced form of education transcends customary passive informative learning, where a student is acquainted with topics, rather than participating in rational discourse as a step toward a recursive relationship that can provoke an understanding superior to the more superficial gains attributed to established scholasticism. "Good teaching is more a giving of right questions than a giving of right answers." (Albers, 70) For example, a student who memorizes ten pages worth of notes in order to ace an exam will doubtfully carry the material forward in a way that manifests a continued interest in the topic, and the subsequent insights it may breed. Whereas, in transformative learning, the same student who engages in the dialogical process and

experiences an alteration of assumptions is more likely to continue to explore the topic and be led to more fulfilling material.

According to Maria Montessori, whose educational theories spawned a wealth of schools founded on respect for personalized psychological development, “Education is a natural process carried out by the human individual, and is acquired not by listening to words, but by experiences in the environment.” (“Education for a New World” 9) A teacher offering rational challenges to a subject, and engaging in dialogical interchange, has a superior opportunity to encourage a pupil to discover and experience more astute and more valuable insights, since coherent examination is indispensable if we are to move to a more reasonably adequate understating of the world and our place in it. “Precisely the ultimate and most sublime values have retreated from public life... into the brotherliness of direct and personal human relations. It is not accidental that our greatest art is intimate and not monumental.” (Weber, 133-134)

Closeness and familiarity is not evident in every type of scholarly method or environment. There is nothing intimate about parroting an instructor or memorizing lecture notes, even if the instructor is incredibly intelligent and highly regarded. This is typical in subject-oriented learning, one of Cranton’s three perspectives of adult learning that evolved from the earlier types of learning three-part scheme. In this case, students fill their bucket full of bits and pieces of straight-forward information in a predominantly unidirectional manner, which nevertheless feels comfy for the student, because there is a low level of trepidation and reflection involved in this positivist approach. Often this bucket needs to be dumped out in order to be filled again with new information.

Another type of adult learning she identified is consumer-oriented learning, a constructivist style where the learner decides the parameters and asks the educator to provide guidance, but refrains from dialectical exchanges and reflective querying. The bucket gets filled in the same way, even though the student retains more responsibility for the material covered. Though it provides greater autonomy, there is a dearth of interchange which can produce dramatic insights. For the third perspective Cranton also chose to use the term emancipatory learning. This constructivist method helps the pupil recognize restrictions and includes mandatory independent study, so it is therefore both more unnerving and more liberating. Instead being like a bucket, the learner acts more as a channel where new information can enter and interact in an ever evolving synthesis through the exchange of ideas. This opens the door to the possibility of transformation and an intentional orientation to full paradigm shifts. (“Understanding and Promoting Transformative Learning” 10-20)

There is more, though, than solely a difference in comfort level and style on the spectrum between subject-oriented, and transformative learning. It seems that “Our problem... is to explain how the transition is made from a lower level of knowledge to a level that is judged to be higher.” (Piaget, “Genetic Epistemology” Lecture 1) This can be achieved by utilizing deliberately focused actions such as judiciously scrutinizing foundational principles and tapping into the unconscious mind through reflection and analysis. Maslow would say that we each have an obligation, “To objectify our subjective thought so as to be able to look at it and improve it toward perfection; to seek peak experiences.” (qtd. in Hurley,) When this is done, an individual develops the opportunity to expand her awareness and integrate a multitude of aspects of her

personality, allowing a person to evangelize the practice of consciously engaging in transformative learning.

The addition of a shepherd, coach, or mentor to this process facilitates an individual's ability to undergo these arduous tasks and assists the individual in overcoming the obstacles which can stunt progress over long time horizons. In many cases, those without any recognition of this process, or without another person to help them along, can remain stuck for years or even decades. Traditional learning does not orient itself towards this sort of self-reflection and refrains from encouraging students to comprehend their personal habits and patterns that hinder their growth or have lost their significance. In fact, some of those habits have developed specifically because of conventional pedagogy and its unidirectional manner, expecting pupils to learn through one-sided lectures, memorization and brief, superficial classroom chatter which hardly engages any desire to assume or institute novel actions or customs, and neglects the amalgamation of innovative patterns with the positive old ones.

One of the important differences with this model relative to established instruction is that much traditional education neglects or utterly avoids the rhythm of growth. Commonly failure is never expectant or even allowed, or sometimes the approach is of breaking down and not then providing guidance, or tools, or a safe space for rebuilding. So, the teacher, professor, or guide might provide enough tools and challenges to shake-things-up, and then... that's it. Attentiveness to both facets (phases) is required to be able to edify and propel the learner towards increased development.

In order to generate an overwhelming desire for individuals and pedagogy at large to adopt an enriching paradigm that encourages transformative learning it is important to

identify the existence of particular attributes that allow for a shepherd to nurture a person who is stretching as a human and gaining an ever increasing understanding of the world and his or her personal *telos* within it. We can understand this by turning to Kierkegaard's representation of Christian existential subjective truth in *Fear and Trembling*, where *telos* represents the destination and objective that all earthly beings must arrive at and cannot be devoid of. It is impossible to pinpoint this destination in advance, and the attempt to do so, and consequently orient oneself toward a sole aspiration can actually be detrimental, but employing the perception that there is a *telos* for each individual, can bolster an individual's desire to take action leading to growth.

Kierkegaard's distinction between the ethical and faith represents the contrast between Hegel's position of understanding in the universal, infinite system, and that of the finite, individual self which is associated with paradoxical and illogical belief in the absurd. The ethical *telos* is to be one with the universal, shunning individuality for the sake of the bigger picture. Kierkegaard affirms that, with faith, the individual can transcend the universal in an absurd paradox that is beyond reason. By exerting effort and toiling with belief, an individual can be thrust into passion, which can only be experienced. The ethical or universal *telos* abides with each soul because it transpires ubiquitously and permeates everything and everyone. The exception to being under the ethical *telos* are the elevated faithful Christians whose belief defers the universal; "a teleological suspension of the ethical." ("Fear and Trembling" 6) This is because paradox occurs when the inimitable believer graduates and surpasses it, enabling more consequential experience. The Christian's eminent *telos* is an analog to the individual who is consciously developing by leaps and bounds through transformative learning.

“He exists as the particular in opposition to the universal.” (“Fear and Trembling” 6)

When approaching learning with only rational reflection, the opportunity for synergy is missed. By entering into belief and allowing for the absurd paradox, a greater *telos* can be achieved, which would account for the deferral of our ethical principles.

In the process of transformative learning and of personal growth, the subject also faces a paradox that arrives with the disorienting dilemma. By choosing to face fear and take on the challenge presented, he takes a leap of faith which, by definition, transcends reason, yet ultimately provides joy and meaning. This teleological evolution into a being that is more advanced is recognizable with each metamorphosis and provides the core evidence for the desirable ascendancy of transformative learning. It also develops the *integral* understanding, the patience, the fortitude and the generous concern and compassion necessary to facilitate others beginning to embark on their own transformations.

So as to establish that it is favorable for everyone directly and tangentially involved to provide added confidence and guidance to an individual through friendship and mentoring, enabling greater integrity and a desire for further growth, we must identify how a one-on-one relationship between a trainee and a trainer can promote transformative learning and be the impetus for faster improvement. Of course, pedagogy is supported by individual perceptions and values regarding actions and outcomes that are positive or negative for students. In a similar way, a coach may have an idea regarding what the learner ought to obtain through the developmental process. In order to best nurture a mentee so that, she most nearly realizes “to perfection [her] own natural conditions of growth,” (“The Theory of Psychoanalysis” 108) it is incredibly important

not to cross over the line into persuasion. The learner must be able to see things for himself, take his own steps, draw his own conclusions and realize his own transformations. A shepherd can help the subject to define his own orientation and to be aware of possibilities, but the necessity of generous concern for the subject can only be satisfied if there is enough separation to fully allow for him to take risks, make mistakes, and establish his own process, which in turn leads to the subject's ability to both graduate and, maybe more importantly, recognize his graduation, so that he can choose to seek further growth and prepare others to do the same.

It is unquestionably worthwhile to analyze the ideals within the greater educational system, but we can gain even more insight by looking at the way singular persons choose to go about their auto-didactical exploration. Self-pedagogy, or self-directed learning concentrates more on an individual's personal interest and pace; the structure of edification is more transparent. Lawrence Kohlberg, the psychologist who was fascinated with the values and ethical facets of education, and created the theory of stages of moral development said, "The individual makes a clear effort to define moral values and principles that have validity and application apart from the authority of the groups of persons holding them and apart from the individual's own identification with the group." (1) Understanding this, it seems that drawing conclusions rooted in more individualized methods of learning would be a pragmatic way to formulate a system that, if successful, may lead to greater insight regarding the greater extent of the pedagogical landscape. The whole may not retain the same characteristics as its parts, but as with a waterfall, which begins with a solitary drop of water, any hulking teaching enterprise begins with the singular student.

One student and one mind is a catalyst for an unending array of potential that may transform one *telos* and expand to engage the purpose of many. “Our minds are finite, and yet even in these circumstances of finitude we are surrounded by possibilities that are infinite, and the purpose of life is to grasp as much as we can out of that infinitude” (Whitehead, “Dialogues” 160) Transformative learning is more than an educational perspective, it is a way to realize purpose. It would be well characterized as a revolutionary and irreversible transition in the culture of learning, growth and pedagogy toward a more complete and dynamic *integral* model that will continue its rise by mending the splintered facets of education and personal development.

This realization of purpose is central to what distinguishes transformative learning, and why it is preferable. Without this the learner has gained knowledge but might be aimless or adrift. Here we again encounter a beautiful paradox. Absent some sense of purpose or *telos* or what Dewey calls “end in view” nothing at all happens. Since every human activity has an implied *telos*, even the desire for stasis, any concept must include it, but any unrelenting focus on reaching a destination subtracts from the effects of experience, limiting the ability to arrive at said destination. The problem with the other views of learning is that what is learned can be false and dangerous because they may be untrue to the underlying ontology of world and persons. By exploring the metaphysical concept of holarchy and combining it with the transformative model, we can get even closer to an all-inclusive structure, by incorporating experience through the acceptance of paradox. Holarchy helps us to recognize that all conceptions are partial, which is why they can be so precarious. Understanding the metaphysical view of holarchy is an instrumental, communicative and practical interest and is thus fundamental

to emancipatory knowledge in this case. By abstaining from explicitly recognizing the importance of *telos* and incorporating holarchic understanding, Mezirow's basic model of transformative learning fails to equip learners to critically engage at the most paramount level, and thus decreases the likelihood of exhorting an aspiration for the greatest possible growth as well as the ability to obtain it.

CHAPTER 3

HOLARCHY

WHAT IS HOLARCHY?

“We have reversed the usual classical notion that the independent ‘elementary parts’ of the world are the fundamental reality, and that the various systems are merely particular contingent forms and arrangements of these parts. Rather, we say that inseparable quantum interconnectedness of the whole universe is the fundamental reality, and that relatively independent behaving parts are merely particular and contingent forms within this whole.” -David Bohm (Bohm and Hiley 102)

Most people have become used to viewing the world in a predominantly Cartesian manner, attempting to understand the elements that construct the world in order to gain a better understanding of it in totality, but, “The notion that all these fragments are separately existent is evidently an illusion.” (Bohm, “Wholeness and the Implicate

Order” 2) Others have gone the other direction, identifying the mistake of placing a spotlight exclusively on the parts, and choosing to espouse a holistic outlook. This too, though, turns out to be lacking because we cannot maintain this perspective and, therefore, lose the opportunity to learn from deconstruction.

These are two separate points – that we cannot maintain only a systemic view (which might be from our own mental weakness, not for any better reason), and that maintaining such a view means that we miss something important and real that could be epistemological or metaphysical. Thinking about something can require pseudo-contradictory views. Someone must both maintain a holistic perspective and cannot maintain a holistic perspective. In the domains of existence, neither parts nor wholes exist in the absolute sense. The paradox involved in this reality forces the establishment of an innovative perspective that allows for flow between both sides of the coin, while, ironically, eliminating the sides. The holon is a notion meant to recognize this paradox and unify atomistic and holistic methods. (“Beyond Reductionism”) What I suggest is that it is imperative to regard transformative learning from a holarchical standpoint in order to fully comprehend the non-linear, multi-scalar properties of the process of psychological transformation.

Holarchy is essentially a non-linear structural alternative to hierarchy. The easiest way to understand it is as a hierarchy of holons, a term Arthur Koestler invented in his 1967 book *The Ghost in the Machine*. A “holon” illustrates the correlation between the element and the entire. The word merges the suffix “on” implying a part/particle (like proton) with the Greek “holos” meaning whole, and it identifies autonomous entities which are paradoxically, a whole, and a component of larger systems simultaneously.

(“Ghost in the Machine”) As both science and philosophy progress and we engage physics and metaphysics to greater depths, we have become privy to an ontological understanding that alludes to a fascinating concept. “Reality is composed neither of things nor processes, neither wholes nor parts, but whole/parts, or holons – all the way up, all the way down.” (Wilber, “A Brief History of Everything” 28) Holarchy is a representation of a natural hierarchy that shows systems contained by each other as an organization of escalating wholeness.

Koestler recognized that systems work in multi-scalar hierarchies. He developed a scheme that integrates science’s reductionist paradigm with a holistic one, while incorporating the significance of evolutionary processes for both individuals and societies that considers both microcosm (person) and macrocosm (collective). This, he argued, provides us with a model that covers all aspects of human interaction. By analyzing hierarchies as well as stable intermediate forms in organisms and social organizations, he proposed that wholes and parts do not exist alone, even though parts and wholes can be identified.

Though the idea seems to be contradictory, and therefore unreasonable, holons are self-regulating and autonomous, as well as being dependent entities that can manage unforeseen events without instruction, and are deemed part of a hierarchy of sub-wholes that branch into lower order holons, and so on, *ad infinitum*. Traditional linear models would not find these attributes consistent or compatible, because to be dependent seems to be in some tension with the first two descriptors. Also, one must contemplate, what, if anything, is fully self-regulating? If there is such a thing, then it enters into wholes only accidentally or voluntarily and not necessarily. The reality of the wholes then depends

entirely on the logical and metaphysical priority of the individuals. Singular entities, in turn are constituent to that which encompasses them. Parts and wholes are both real, neither can exist without the other, neither can be fully explained through an account of the other, and neither has logical or metaphysical priority. This is quite a provocative contradiction, that nevertheless retains its accuracy from both directions and applies to humans.

People are holons in and of themselves and are generally thought to be self-regulating, though they aren't always seen that way. Most persons who have developed postmodern understanding can see how they can make free choices and control the world and also feel completely helpless at times. Interconnectedness, networks and the tendencies are constituent to autonomy. Being semi-independent open systems, the hybrid ontology of a holon is always reciprocal to both its reliant and subsidiary pieces according to the momentary frame of reference. At any point, the holon can be identified as a whole if it is looking below itself in the hierarchy, or as a part if looking up. It is the simultaneity of the gestalt that provides the ontological paradox. It remains always a part, which composes wholes based on its constitution, and a whole that is composed of elements that are, in themselves, wholes as well. This rhizomatic bilaterality, called the "Janus phenomenon," or *Janus effect*, abides on each stratum of all hierarchic structures. ("Ghost in the Machine," "Beyond Reductionism")

The terms holon and holarchy can apply to a vast array of organizational hierarchies. One example is the stock market, which includes elemental corporations, which consist of subsidiaries, containing departments, holding committees, which are made up of employees. And all of these levels contain nodes that are interrelated and

cannot exist without one another. “A corporation is organized as a system - it has this department, that department, that department... they don’t have any meaning separately; they only can function together. And also the body is a system. Society is a system in some sense. And so on.” (Bohm, “Thought as a System” 19) Another example is found in domains of authority, which can escalate from individual to family, to building or neighborhood (home owners association), to community, to city, to county, to state, to nation, to planet (United Nations). It is easy to understand the flow of holarchical governance by looking at uncomplicated schematics that show some of the levels within a holarchy. The figures below show two straightforward diagrams of holarchies and help us to see the relationships between holons, but neglect the nested scales that pertain to the holarchies. For this reason the diagrams give the impression of top-down linear systems, because it is the nested nature of holarchy that transcends the linear capacity. Even so, it is valuable to use graphics such as these to help identify holons that retain complex relations with other sub-wholes.

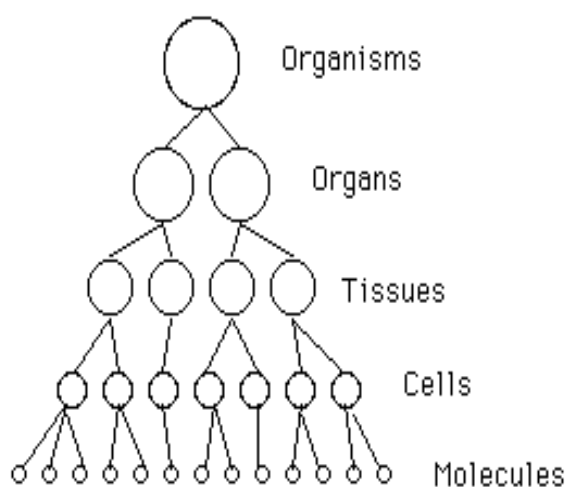


Figure 2. Simple Hierarchy of an Organism.

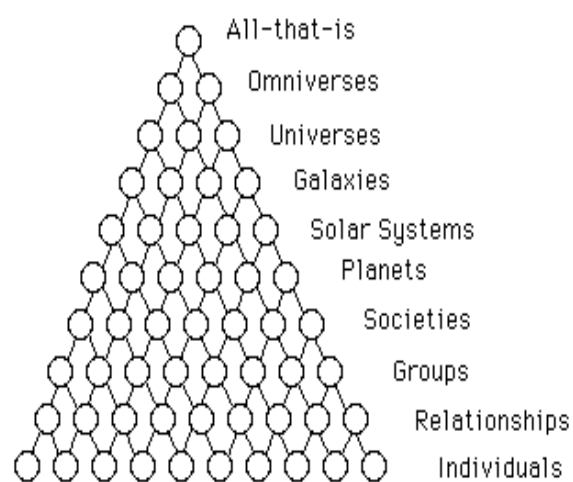


Figure 3. Simple Hierarchy of Life Domains.

In both illustrations, the holarchies are broken down into constituent rhizomes and each circle represents a holon which is a node in the holarchy. All of them are *integral* entities that join others above and below. Every elevated echelon encompasses and transcends the subordinate level, similar to the way Leibnitz' higher-ranking conscious monads hold more psychic life than others. Higher-level holons are progressively less predictable, more complex and more elastic, experiencing more liberty and variety of movement. Lower level holons are more predictable, more mechanical, and easier to label. The amount of strata within a holarchy delineates the depth, while the amount of nodes on particular level describes the span.

If it were possible to achieve the paramount level of infinity it would be a realization of Heraclitus' Logos, the god [God] in Spinoza's substance monism, or the biblical "I Am," or "Alpha and Omega." Any other being or assemblage is innately holarchic. According to Heraclitus, "This Logos holds always but humans always prove unable to understand it, both before hearing it and when they have first heard it." ("Logos" DK 22B1) Echoing Kant's view in the *Critique of Pure Reason*, David Bohm suggests that the universe has both the explicate order, which corresponds to our regularly understood material actuality, and the implicate order; a more primary, underlying order, the implicate order, is continuously in flux from moment to moment within the space time continuum. The explicate order we see is merely the facade of the enfolding and unfolding implicate order where space and time are modes or forms of the implicate process. ("Wholeness and the Implicate Order") Kant's outlook was that it is possible to have knowledge even if you cannot have direct experience of mind-independent reality (things-in-themselves or the "noumenal world") because everybody

experiences a phenomenal world (explicit order) that has a necessary composition. (“Pure Reason” B307-312) The indispensable structures exist because they are structures of rationality and may or may not be what we would see if we had God’s view. The fundamental components of that order are space and time; therefore we cannot in our perspective have an experience without those components. (Palmer, 220-225)

From our perspective as individuals, space and time provide the synthetic *a priori* foundation for perception, and thus, relativity. As a point in a pecking order that defines perspective and depicts the relationship between entities while focus continues to travel, a holon can delineate a person’s perspective at any given moment, one’s conception of the world, and the connections to other individuals.

“To understand the whole, it is necessary to understand the parts. To understand the parts, it is necessary to understand the whole. Such is the circle of understanding. We move from part to whole and back again, and in that dance of comprehension, in that amazing circle of understanding, we come alive to meaning, to value, and to vision.” (Wilber, “The Eye of Spirit” 1)

It is impossible for someone to be entirely embodied in her own consciousness because ideas always refer back to themselves in recursion. One cannot ever be separate from one’s self, and this paradox can be useful. Logical contradictions are mandatorily evident in self-referencing objects. Therefore, her actions cease to be predicted because a strange loop of infinite regression would result due to this holonic self-reference. By allowing for malleability in perspective, we can accept paradox and open up more possibilities. (Hoefstadter)

“Most people live, whether physically, intellectually or morally, in a very restricted circle of their potential being. They make very small use of their possible consciousness, and of their soul's resources in general, much like a man who, out of his whole bodily organism, should get into a habit of using and moving only his little finger.” (James, “Letter to W. Lutoslawski” 253-254)

The use of the term holon is no strange coincidence in transformative learning, a model of learning that seeks to inspire a complete or whole metamorphosis while recognizing the components or parts involved in the process. Holarchy supports transformative learning by providing a missing link that accounts for the lack of reason associated with experience. Together the two paradigms of holon theory and transformative learning can produce a synergistic outcome in an individual seeking growth. Personal development must embrace and surpass the past while it unfolds by its transcendental nature. Otherwise, it ceases to be development. Its inherent direction points toward more worth, profundity, vitality, complexity, and awareness. By being focused on the process itself, the subject who believes that a positive change is soon to transpire enters into the realm of paradox containing subjective and objective dimensions of his reality, washing away the partitions and opening the door to transformation.

“Man's general way of thinking of the totality, i.e. his general world view, is crucial for overall order of the human mind itself. If he thinks of the totality as constituted of independent fragments, then that is how his mind will tend to operate, but if he can include everything coherently and harmoniously in an overall whole that is undivided, unbroken and without

border (for every border is a division or break) then his mind will tend to move in a similar way, and from this will flow an orderly action within the whole.” (Bohm, “Wholeness and the Implicate Order” xiii)

This orderly action can lead to increased development for the individual, hastening graduation to more elevated , encompassing holons. Incorporating complexity science and systems thinking, which blends scalar properties of holarchy, forms the basis for my further endeavor: to map and hearten the imperative and momentous transformative moments within the learning process, which can be understood as a quantum leap of human consciousness which is characterized by individual epiphanies.

SYSTEMS, INTERRELATION AND EMERGENCE

“What I mean by 'thought' is the whole thing – thought, 'felt', the body, the whole society sharing thoughts – it's all one process. It is essential for me not to break that up, because it's all one process; somebody else's thought becomes my thought, and vice versa. Therefore it would be wrong and misleading to break it up into my thought, your thought, my feelings, these feelings, those feelings. I would say that thought makes what is often called in modern language a system. A system means a set of connected things or parts. But the way people commonly use the word nowadays it means something all of whose parts are mutually interdependent – not

only for their mutual action, but for their meaning and for their existence.”

-David Bohm (“*Thought as a System*” 19)

For the moment, let us focus on the holistic side of the paradox in lieu of the singular. A great deal can be gleaned from systems and complexity theory that provides a large amount of insight on personal development and encouraging change. Systems are inherently holarchic, and the greater the depth and span of the system, the greater the complexity. Through observing whole systems, we know that dynamic complex adaptive systems cannot maintain homeostasis, or equilibrium. As these systems go in the direction of chaos the process of self-organization or emergence arises unprompted. In his *Critique of Judgment*, Kant wrote, “In such a natural product as this every part is thought as owing its presence to the agency of all the remaining parts, and also as existing for the sake of the others and of the whole, that is as an instrument or organ... The part must be an organ producing the other parts - each, consequently, reciprocally producing the others... Only under these conditions and upon these terms can such a product be an organized and self-organized being.” (Section 65, 373-74)

An easy way to understand this self-organized emergence is to imagine an ant colony that continues to grow ever larger. Each ant is, of course, a singular entity. It is also a component of the colony, which is a whole entity, or superorganism unto itself. If a disturbance, such as a human foot, comes through the colony crushing a small ant hill and causing a high degree of disequilibrium we would find that the self-organized colony works by pure instinct creating new tunnels and developing a more intricate and larger system for the ants to thrive in. A bigger anthill arises after the disorder and is

considered an emergent property of the system itself. There is no way to predict the size and pattern of the tubules that materialize. This impulsive shift typically supports greater complexity and incorporation to the system even though it was never planned or intended. The literal mound, the complexity and the integration, all emerge as a part of the alteration of the colony. The idea is touched on by E.O. Wilson, whose work on ants is regarded as definitive. Wilson formed an idea called the *Epic of Evolution* which is defined by a shared narrative incorporating a gradual and progressive process of interrelated phenomena, where a system evolves into a more novel and complex form. (“Consilience, “On Human Nature,” “The Ants”) This narrative provides a greater recognition of value in the system and its constituent elements because of increased autonomy and meaning.

We find that the systems of all types can develop more autonomy in their functions and more potential for creation after a disturbance or disorienting dilemma of this sort in the same way as in transformative learning. At least, in so far as they avoid setbacks (stagnation, marginalization, a slide to irrelevance or slow death) or destruction. If those individuals who are embarking on a journey of personal growth can appreciate the nature of systems and complexity, it can bring a synergistic result that provides not only more resilience for the system as a whole, but also for the individual who is a part of the system. Systems exhibit marked thresholds in their dynamics, and multiple stability domains, or attractors, develop after a long enough period of time.

University of Florida ecologist C.S. Holling notes that we see change typically advances through four phases – growth, accumulation, collapse, and reorganization. His adaptive cycles constantly continue coping with and adapting to changes while

functioning across multiple scales in a way that can seem quite paradoxical. He deems this panarchy, but it is no different than if he were to use the term holarchy. (Gunderson) Below is a diagram that shows Holling's adaptive process in two dimensions. In three dimensions, the visual of the process would resemble a Möbius Strip and shows resiliency along with potential and connectedness.

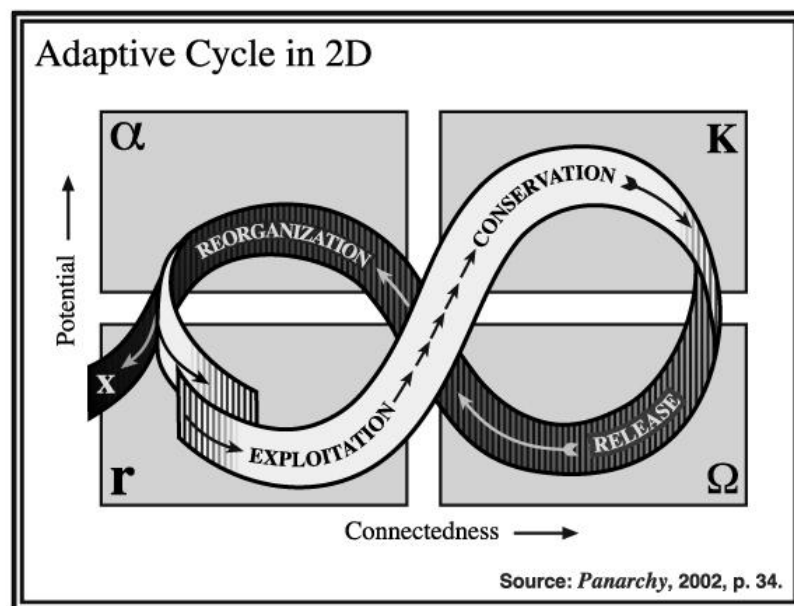


Figure 4. Holling's Adaptive Cycle in 2D. Shows a system which thrives in the r phase, attempts to sustain growth until it reaches a zenith in the K phase, experiences turbulence in the Ω phase, and transforms in the α phase. (Gunderson, 34)

Change occurs faster than we can understand, therefore it is difficult to be able to predict the progression of adaptive cycles, which is why it is so important to maximize diversity within systems. When diversity is minimized, a system becomes less resilient and that tends to lead to collapse. The interesting thing is that because of the constant adaptations, equilibrium is relentlessly in flux as well, so there can be no true point of

security. This is actually a component of a metastable condition called the edge of chaos. In his 1997 work, *Chaos Theory: Interface with Jungian Psychology; The Order/Chaos Relationship in Complex Systems*, Gerald Schueler states, “Complexity lies at the edge of chaos (the phrase edge of chaos was first used by Norman Packard in 1988) within the fine line that lies between order and chaos. Although this region is thin, it is vast, like the surface of the ocean. The edge of chaos is a transition phase, where life itself is thought to be created and sustained.” (Schueler) For example, Wikipedia states,

“A system in equilibrium does not have the internal dynamics to enable it to respond to its environment and will slowly (or quickly) die. A system in chaos ceases to function as a system. The most productive state to be in is at the edge of chaos where there is maximum variety and creativity, leading to new possibilities.” (“Edge of Chaos.”)

In fact, Wikipedia itself operates as a self-organized system teetering on the edge of chaos by design. The multitude of Wikipedia’s online managers consists of the collaborative public, which chaotically utilizes, compiles and adapts the available information to the betterment of the masses. The disorder that is inherent in the system is protected by the order offered by its arrangement of checks and balances enforced by both the public and the parent organization, so it functions on the edge of chaos. This presents a vibrant, ever-changing organism that ensures the utmost versatility within the greatest compendium of information known to man. It is reliable enough to be used as the initial source of information, but fallible enough to need corroboration.

A person who lives on the edge of chaos will purposely seek disorienting dilemmas in order to undergo deep and frequent transformations. In both transformative

learning and in complex adaptive systems, some sort of turbulence or disturbance leads to a change (learning, evolution, growth, expansion, progress, etc.) if it is not resisted. Resistance can cause collapse, but in disorder, an opportunity exists for change. In a way, the edge is indefinable, but the most vitality and complexity can be found by oscillating between chaos and order somewhat near to the line that would theoretically demarcate homeostasis. But it must remain illusory. This is why in essence "there's no secret to balance. You just have to feel the waves." ("Chapterhouse Dune" 428)

Criticality in dynamic systems is where near-equilibrium can no longer be maintained. It represents the threshold at which a metamorphosis occurs within the system in order for it to retain its vitality. It is when the holon must accept new attributes from above or below. What we find within this systems-informed perspective is the surfacing of a sort of co-evolution that occurs when the holon accepts its place as both whole and part in the arrangement.

"The process of evolution may be described as differentiation of structure and integration of function. The more differentiated and specialized the parts, the more elaborate co-ordination is needed to create a well-balanced whole. The ultimate criterion of the value of a functional whole is the degree of its internal harmony or integratedness, whether the functional whole is a biological species or a civilization or an individual. A whole is defined by the pattern of relations between its parts, not by the sum of its parts; and a civilization is not defined by the sum of its science, technology, art and social organization, but by the total pattern which they

form, and the degree of harmonious integration in that pattern.” (Koestler, qtd. in “Defining Holism”)

Together, this simultaneous inter-connectedness and inter-dependence form a flowing fractal ontology that is unpredictable, yet over time, forms a pattern out of the noise, even within subjective experience and personal development. Since balance is illusory and the oscillation between chaos and order is inevitable, we know that essentially, chaos cannot continue indefinitely, There is always an underlying pattern given a large enough scope, therefore we find that “the irreversibility of time is the mechanism that brings order out of chaos.” (Prigogine, 292) Likewise, over time, individuals such as Jack Mezirow have begun to map out the patterns involved with transformative growth and now we realize that the more different types of disorienting dilemmas a system faces, the more resilience and diversity is developed within it. Complex systems evolve from simple ones more swiftly if chaotic interruptions affect the system more frequently, as long as the turbulence is not resisted in such a way that a monumental collapse ensues. This is true of the ant colony, the civilization or the individual.

“Similarly, thought is a system. That system not only includes thought and feelings, but it includes the state of the body; it includes the whole of society - as thought is passing back and forth between people in a process by which thought evolved from ancient times.” (Bohm, “Thought as a System” 19)

An unpredicted contingency necessitates an upward shift from the habitual thought of the mechanical to the process oriented humility of the mindful. Consciousness

emerges and evolves towards more complexity, resilience and diversity after chaotic interference. Stress, if assimilated, brings forth an impending qualitative change and also increases systemic integrity within the human psyche, which, of course, mirrors the feelings of John Dewey we considered in the second section of Chapter Two.

An interesting concept found throughout the walk of life we all embark on is the nifty way that every predicament encountered on the journey comes tied together with an answer. In fact, each quandary presents an opportunity to the person facing it to grow stronger by being a problem solver. As Jung wrote, “Man needs difficulties; they are necessary for health.” (“The Transcendent Function” 73) This is in fact why Mezirow finds it obligatory for transformative learning to begin with a disorienting dilemma. Every obstacle we face at present is a test that, when conquered, promotes an endowment of personal growth and supplies us with the occasion to enjoy the positive feeling that comes with effectuating our abundant capabilities. This simple fact was also eloquently affirmed by the pre-Socratic philosopher Heraclitus who avowed that everyone who encounters prosperity also encounters danger.

Resistance is futile and merely increases stress and the likelihood of breakdown. The way to obtain self-actualization is precisely by delving into the issues we see as curses, overcoming them and realizing that growth inevitably emerges from this process whether we wish it to or not.

“There are as many nights as days, and the one is just as long as the other in the year’s course. Even a happy life cannot be without a measure of darkness, and the word ‘happy’ would lose its meaning if it were not balanced by sadness. It is far better take things as they come along with

patience and equanimity.” (Jung, “Memories, Dreams and Reflections” 336)

What becomes most important is actively pursuing transformation, growth and self-actualization after recognizing the benefits of personal expansion. Since it is unknowable and unpredictable, the only way to do this is by mapping the patterns that have occurred through previous transformations and focusing on the process itself, rather than any destination. And every time we graduate and take a quantum leap in understanding we cross the threshold of our new kingdom of interminable potential.

Returning to *Art as Experience*, we find that John Dewey addresses this concept ever so eloquently.

“Life itself consists of phases in which the organism falls out of step with the march of surrounding things and then recovers unison with it—either through effort or by some happy chance. And, in a growing life, the recovery is never mere return to a prior state, for it is enriched by the state of disparity and resistance through which it has successfully passed. If the gap between organism and environment is too wide, the creature dies. If its activity is not enhanced by the temporary alienation, it merely subsists. Life grows when a temporary falling out is a transition to a more extensive balance of the energies of the organism with those of the conditions under which it lives... If life continues and if in continuing it expands, there is an overcoming of factors of opposition and conflict; there is a transformation of them into differentiated aspects of a higher powered and more significant life. The marvel of organic, of vital, adaptation through

expansion (instead of by contraction and passive accommodation) actually takes place..." ("Art as Experience" 14)

PARADOX, NESTED SCALES AND PARAMETERS

"Paradox is the passion of thought, and the thinker without the paradox is like the lover without passion: a mediocre fellow." -Søren Kierkegaard ("Philosophical Fragments" 37)

If we can develop the ability to accept paradox as a component of our holarchic ontology, we can adapt to the world we are in by allowing ourselves to jump between multiple varying perspectives, giving us the opportunity to symbolically walk a mile in someone else's shoes or see things through another's eyes. Of course, one can never obtain a purely accurate depiction of another's paradigm, but through communication and building trust we can learn to recognize, select, and capture contradictory perspectives.

As we gain more and more insight and understanding we develop the ability to process multifaceted concepts involving increased intricacy. The world we are encased in expands with more creativity and activity, thus the noosphere increases in complexity as well. Simultaneously we recognize our oneness with this system where all disparity is resolved into harmony. When many singular parts become unified they return to an identity as a singular unit with solitary, unremitting focus from conflict and separation.

Diversity becomes unanimity and we become inordinately simpler creatures. This, illogicality of course, fits with Gilles Deleuze's notion that "paradox is the affirmation of both senses or directions at the same time." ("Logic of Sense" 1)

Though the growth process is actually relatively plain in regards to acceptance being the means to development. The paradox is found in the tug of war between our capacity for complexity, diversity and vitality, and our metaphysical standing which becomes more simple because we begin to not only understand, but acquiesce to the fundamental aspects of existence, and the way we can apply these rudiments to our lives. In the words of Albert North Whitehead, "In formal logic, a contradiction is the signal of defeat, but in the evolution of real knowledge it marks the first step in progress toward a victory." ("Science and the Modern World" 266-267).)

It is puzzling to recognize this dualism and the way competition and cooperation, can work together and against each other at the same time. Without accepting that the same action is both cause and effect we have a difficult time recognizing the nested nature of holarchy. "The explicable requires the inexplicable. Experience requires the nonexperienceable. The obvious requires the mystical. This is a powerful group of paired concepts generated by the complementarity of conceptuality." ("Synergetics" 501.13) Every previous paradigm that each individual holds is fully encompassed by each new one and there are contradictory truths, which are evident depending on the frame of reference, reminiscent of Hegel's notion that "though the mind does have a universal, abstract structure, its content changes evolutionarily from period to period." (Palmer, 236) This paradox must be accepted in order to discuss this framework further, "But

people are curious about the result, as they are about the result in a book -- they want to know nothing about dread, distress, the paradox.” (“Fear and Trembling” 7)

By understanding the way nested systems, or holons work, we can derive an easier path to accepting the contradictions inherent in the transformative process.

“The mature person needs to achieve a new apprehension and an effective use of contradictions in operations and thoughts. Contradictions should no longer be regarded as deficiencies that have to be straightened out by formal thinking.... In particular, they form the basis for any innovative and creative work.” (Riegel, 101)

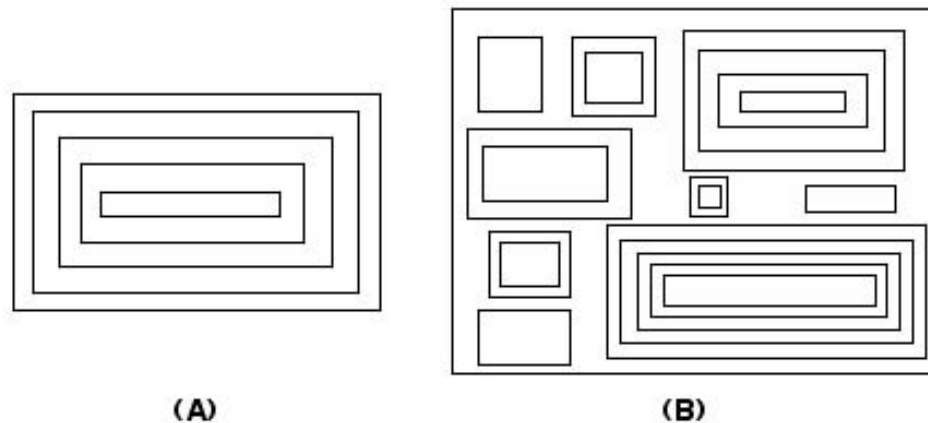


Figure 5. Nested Hierarchies. In non-nested hierarchy, (not pictured) lower holons exist outside of higher holons. (A) In this holarchy, or nested hierarchy, higher holons fully encompass each lower one, similar to a series of Russian dolls. (B) In a varied hierarchical arrangement, assorted sizes or stages of nested holons exist outside of each other, but are included within a higher holon.

The nested, or embedded, nature of holarchy is best pictured as an onion.

In the realm of personal development the initial or shallowest perspective is the

heart of the onion. Each new, superior holon of understanding fully encompasses the first and is considered deeper. The transformative process takes place in such a way that resembles diagram (A) in Figure 5 above.

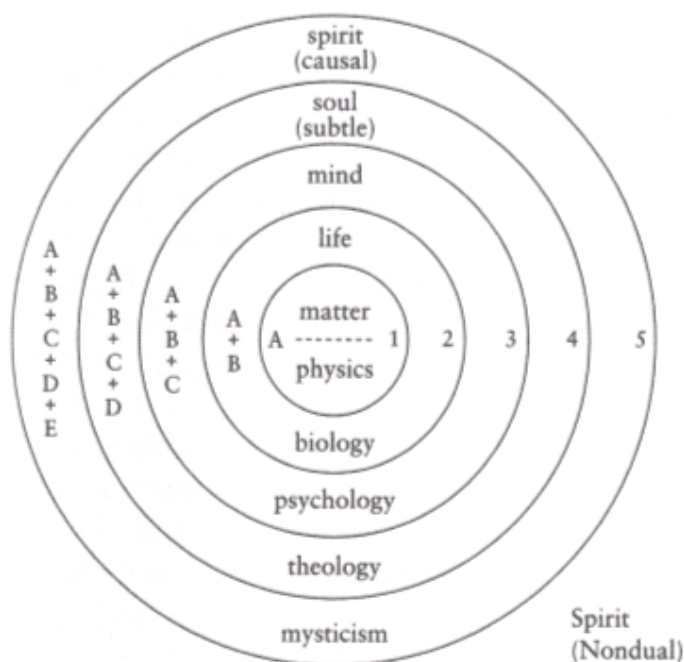


Figure 6. The Traditional Great Chain of Being. (Wilber, Excerpt G”)

In Figure 6 above, we see a nested hierarchy of the Traditional Great Chain of Being used by Ken Wilber, which is useful to show how to switch frames of reference. In the Great Chain of Being, every deeper level encases or nests all shallower levels. “As each new level unfolds, it enfolds its predecessor – a development that is envelopment.” (Wilber, “The Integral Vision” 125) Every superior level fundamentally transcends the shallower levels and cannot be reduced or explained by them. Something new has emerged in the quantum leap to the next level that did not exist in the shallower stratum.

We find that each holon is both a microcosm and a macrocosm. It is an observer and it is observed. It is a box that contains and it is boxed in. The frame of reference defines truth from within the determined set of parameters, and could switch to the frame of reference of any shallower holon at any time once a particular holon of understanding has been reached. In a way, when dealing with personal development, an individual can envision and explain previous paradigms and relate to people in them as long as they care to remember and practice dialectical thinking.

“The dialectical thinker will be able to appreciate the contradictions, accept and even contribute to the process of transformation, and transform his or her roles and commitments accordingly. On the other hand, the uncritical, undialectical pragmatic thinker, oriented only to adaptation to the context in its present form, will perceive the contradictions as threat. He or she is likely to react by denial, entrenchment, and other manifestations of cognitive rigidity, which are likely to interfere with development.” (Basseches, 221)

Essentially, when dealing with nested systems of this sort it is extremely important to look at possible outcomes from many perspectives. We must enter the paradox that accepts that “unity is plural and, at minimum, is two.” (“Synergetics” 224.12) We can start with the learner’s frame of reference since suppositions are typically constructed by the way we interpret experience. We must be able to identify and communicate the frame of reference we begin from. Holons cooperate with the level above them, compete with other holons on equal footing and command holons that they encompass. Superior holons mitigate conflict between those at lower levels and establish

integration. In order to communicate to another dialectical thinker, it is important to define the parameters that would limit the frame of reference. Otherwise there would be no basis for understanding contradictory truths. If two people do not agree, we must go beyond a singular perspective and examine multiple levels and the cooperation involved between them. “Indeed every monad must be different from every other. For there are never in nature two beings, which are precisely alike, and in which it is not possible to find some difference which is internal, or based on some intrinsic quality.” (Leibniz, 2)

This of course, does not limit the ability to communicate and cooperate. By explaining the parameters of a particular holon you are discussing, you can reach a consensus on a frame of reference with any individual who has held that paradigm consciously in the past as long as the individual can remember and relate to it. “An argument can be legitimately sustained only if the participants are speaking about the same level.” (Wilber, “The Spectrum of Consciousness” 6)

As people transform and reach more complex and mature paradigms, they develop an ability to sympathize with others regarding alternate cares, perceptions, dependencies, restrictions, pleasures and so on. Every increasing transition reveals more clarity and capacity for recognition, which in turn provides the opportunity for a more diverse array of choices and therefore freedom within the individual’s subjective experience. This represents Teilhard de Chardin’s “*law of complexity and consciousness*, a law that itself implies that the world has a psychically convergent structure,” which implies that the more exterior complexity an individual can accept the more interior consciousness can be enacted. (“The Human Phenomenon” 28) Thus, complexification

manifests consciousness and the evolution of the exterior and the interior is paradoxically transcendent and inclusive within nested holarchical order.

“Relativity is inherently convergent, though convergent toward a plurality of centers of abstract truths. Degrees of accuracy are only degrees of refinement and magnitude in no way affects the fundamental reliability, which refers, as directional or angular sense, toward centralized truths. Truth is a relationship.” (“The Buckminster Fuller Reader” 305)

The more this relationship is invested in, the more opportunity there is to engage in further transformation. The process pushes us toward graduation through epiphany, and then we cycle through again and again. This could either seem unnerving, or it can be a joy depending on our orientation, acceptance and willingness to believe in the transformative process itself.

CHAPTER 4

EPIPHANY

EPHIPHANY

“Evolution is gaining the psychic zones of the world... life, being and ascent of consciousness, could not continue to advance indefinitely along its line without transforming itself in depth. The being who is the object of his own reflection, in consequence, of that very doubling back upon himself becomes in a flash able to raise himself to a new sphere.” -Pierre Teilhard de Chardin (“The Phenomenon of Man” 165)

Within the process of personal growth, which takes place in a series of identifiable plateaus and leaps, there is a pivotal moment at which time a person first recognizes that she is seeing the world from an entirely new set of eyes. The identification of this new, wiser, and more mature perspective is the key point when each stage in the process of transformative learning comes to fruition and can be identified as a

revelation. I refer to this moment as epiphany, which is merely a metaphorical singular incident, or singularity, surrounded by other familiar periods of struggle, recognition, choice, surrender and emergence, which together establish a framework for personal growth.

The point of epiphany is best understood as representation of a singularity, which is a particular, unfeasibly dense and miniscule point of space-time that is paradoxically infinite and impossible to fathom. This is what would be found at the end of a black hole, where what is on the other side is imminently unpredictable. It is what occurs when the fabric of space-time folds into itself. Wormholes and the Big Bang itself are often thought of as singularities. Ontologically, it is a discontinuity, though not a radical discontinuity – it builds on what has come before. The way is prepared by what and how prior living is undergone and processed. What emerges from the other side of the singularity is a transformed being with a fundamentally altered disposition. Thus, the epiphany can seem to be more “out-of-nothing” than it really is. This can be true of the apparent out-of-nowhere performer who had actually been training and preparing for years, or within an individual life when a breakthrough of some sort – behavioral, emotional, psychological, intellectual, physical – suddenly occurs. There may be a gradual preparation for an epiphany, but such as with *satori*, there is a flush of impulsive awareness. Though one can pave the way for its incidence, he cannot seek the moment of epiphany, because it happens independently, and out of our control.

One aspect of epiphany as defined here is the way it happens in a particular moment of time. “We will all be changed, in a moment, in the twinkling of an eye.” (“NASB” 1 Corinthians 15.51-52) In a blink, our entire world blows up and reforms with

a whole new palette to work with. It only takes an instant within this linear world to experience a revolution of understanding that changes our lives forever. In the time it takes to look back on a moment ago, we have already experienced the kind of change that may take weeks, months or years to dismantle and reconstruct. And of course, that will be a part of our upcoming transformation, because there is no stopping time, or the process; there is only being stubborn and fighting its inevitability.

This individual culminating moment, in which a robust augmentation of understanding occurs, can be pinpointed, and therefore, there should exist a way to improve the likelihood of reaching further increases. Yet, the difficulty of recognizing the moment of epiphany remains, as it tends to be hard enough to maintain focus on the present, let alone, the precise point this transformative singularity occurs that William James calls the “specious present.” He says in *The Principles of Psychology*,

“Let anyone try, I will not say to arrest, but to notice or to attend to, the present moment of time. One of the most baffling experiences occurs. Where is it, this present? It has melted in our grasp, fled ere we could touch it, gone in the instant of becoming.” (Chapter 15)

Though it may not always be the most pleasant experience of our lives, it remains most beneficial to concern ourselves with our current state. In the words of science fiction writer Frank Herbert, author of *Dune*, “It is impossible to live in the past, difficult to live in the present and a waste to live in the future.” (“Dune” 471) If we live in alignment with our own earnest and lofty philosophical tenets and focus on the present by engaging life with integrity, a deeper consciousness emerges, seemingly out-of-the-blue.

“The moment of truth, the sudden emergence of a new insight, is an act of intuition. Such intuitions give the appearance of miraculous flushes, or short-circuits of reasoning. In fact they may be likened to an immersed chain, of which only the beginning and the end are visible above the surface of consciousness. The diver vanishes at one end of the chain and comes up at the other end, guided by invisible links.” (“The Act of Creation” 211)

The depth of the transformation in a subject is essentially defined by the parameters established by both the old and the new holon of understanding. Though a complete transformation occurs with each graduation, particular revelations can seem especially drastic. A person’s initial conscious transformation is often experienced as a tremendously extensive shift relative to ensuing revolutions. At times transformations are recognizable and important but fleeting when compared to major transitions.

With each epiphany and subsequent transformation every pupil/pupa reaches a deeper level or holon of understanding.

“Every time man makes a new experiment he always learns more. He cannot learn less. He may learn that what he thought was true was not true. By the elimination of a false premise, his basic capital wealth which in his given lifetime is disembarassed of further preoccupation with considerations of how to employ a worthless time-consuming hypothesis. Freeing his time for its more effective exploratory investment is to give man increased wealth.” (“Operating Manual for Spaceship Earth”)

In this framework a man's wealth, or depth of understanding, can be a tricky concept, because it not only refers to how many times one has graduated since one's first transformation, when one was at the heart of the onion. It also refers to the amplitude, or strength of an individual transition. This is often determined by the learner's commitment, intention, authenticity, orientation, transparency and level of trust in both the shepherd as well as the process itself. The more oriented toward the process, rather than a destination we are, the more likely we are to embark on deep transformations. "For a conscious being, to exist is to change, to change is to mature, to mature is to go on creating oneself endlessly." (Bergson, 10)

CYCLES AND PROCESS ORIENTATION

"The mystery of life isn't a problem to solve, but a reality to experience... Any road followed precisely to its end leads precisely nowhere. Climb the mountain just a little bit to test it's a mountain. From the top of the mountain, you cannot see the mountain... A process cannot be understood by stopping it. Understanding must move with the flow of the process, must join it and flow with it." -Frank Herbert ("Dune" 30, 69)

One way to help generate transformation is by refraining from being dogmatic, thus by being open and accepting situations as they are without analyzing them and

resisting judgment in the short term. This is related to mindfulness, which occurs when an individual's complete attention is applied to present experience. This induces the opportunity for development as an enduring process, which contains no conclusion within our lifetime, as we understand it. This is not necessarily an easy place to arrive at. Tougher still, is staying there and allowing ourselves to be broken down and then rebuilt, because being deconstructed is commonly quite painful. In the words of Joseph Campbell, "Out of perfection nothing can be made. Every process involves breaking something up." (Campbell)

Another way to look at mindfulness is as process orientation, where one's goals are left malleable and generalized in order to allow transformation to occur more freely. One potent way to visualize the process of personal transformation is by looking at the inevitable oscillation of a sine wave. There is a centerline which would indicate equilibrium or balance, but whether the process itself is accepted or not, maintaining that equilibrium will always be impossible. When a person attempts to achieve homeostasis at this midline, which tends to happen when we are self-oriented and stubborn, we inevitably begin to travel down the wave towards entropy. Since the status quo cannot be maintained, yet feels comfortable, we try even harder to manipulate the world around us, fawning for more comfort and increasing the slide down the wave. One of the risks of epiphany is that we try to hold onto it, we do not move on, instead seeking the console of the breakthrough, or attempt to recreate it again and again – to relive the moment. This is not the same as attempting to avoid any change, but it is an attempt to freeze the movement and the inherent growth of life.

When this is the case, we begin to feel escalated pressure as if we were sinking into the depths of the ocean. As this happens our trepidation builds to the point where panic ensues and we are faced with a choice. Do we want to continue to grasp for this illusory reassurance, or are we willing to put our faith in something we have never done before that frightens the bejeezus out of us, akin to taking a deep breath while underwater the first time using scuba gear. Since, as Heraclitus said, "Everything rests by changing," (Robinson, 51 [Fragment 84A]), we cannot find the same respite or the comfort we seek in that which placated us previously, because it will always provide diminishing returns.

When we truly recognize and accept that in order to overcome the circumstances we face we must alter our actions, the slope of the downward movement begins to reduce until the point of no return is reached. This is the moment when one chooses to unreservedly let go and face the music. This is the singularity at the very bottom of the sine wave; the precise moment of epiphany, from which instant everything currently experienced and that which is impending feels like a wonderful reward. Everything seems fresh and exciting, and appears to swell more rapidly as you go. From this position the pressure feels so grand it is intoxicating and provides a sensation of eternal freedom. Joy springs forth with every original appreciation and action.

We swiftly ascend the positive half of the wave feeling as if nothing can go wrong, and this is when arrogance and selfishness start to encumber the ascension. The slope again begins to decrease until we find ourselves at a point where there can be no more rising within this particular holon of understanding. Yet another singularity at the apex of the curve that is commonly imperceptible because the intensity of positive emotions experienced diminishes any desire to recognize such a zenith.

Though it is not yet discernible, we have begun a trip down on the sine wave once again. This oscillation is equivalent to the innate pulse of growth that Dewey documented, falling in and out of balance as the natural rhythm of a living creature. Like a roller coaster the ride remains remarkably exhilarating until it is too late, and we find ourselves once again striving for the relief and comfort we enjoyed so much just a brief while ago, beginning the cycle all over again. It seems each person is always meant to discover that, “If you live long enough, every triumph will turn into a tragedy.” (Beauvoir, qtd. in Vida 436)

Dewey elucidates this further,

“In the process of living, attainment of a period of equilibrium is at the same time the initiation of a new relation to the environment, one that brings with it the potency of new adjustments to be made through struggle. The time of consummation is also one of beginning anew. Any attempt to perpetuate beyond its term the enjoyment attending the time of fulfillment and harmony constitutes withdrawal from the world. Hence it marks the lowering and loss of vitality. But, through the phases of perturbation and conflict, there abides the deep-seated memory of an underlying harmony, the sense of which haunts life like the sense of being founded on a rock.” (Dewey, “Art as Experience” pg. 17)

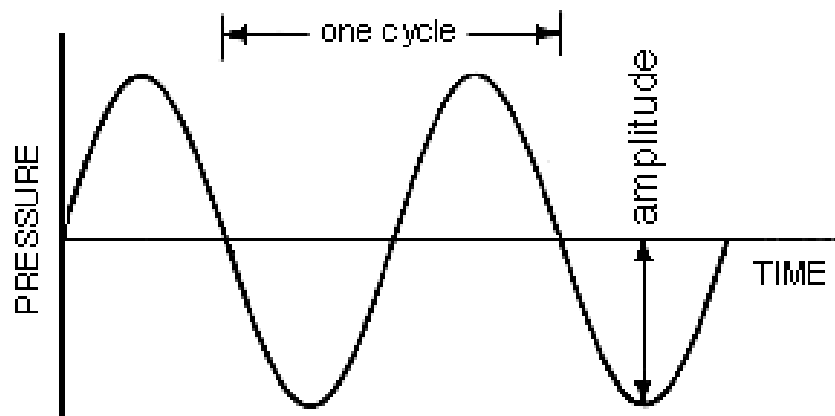


Figure 7. A Pure Sine Wave.

In figure 7 above we can see how pressure increases over time heightening at the zenith and nadir of each cycle. The amplitude can be determined by the depth of the individual's transformation, mostly recognizable by the levels of elation and fear experienced during a cycle, and they are effectively correspondent to the amount of pressure that one feels. One aspect that differs from a pure sine wave is that both the amplitude and the frequency are malleable and change based on the amount of pressure felt and the degree of stubbornness in the individual experiencing the particular transformation. Each subsequent graduation leads to a new cycle that may be relatively shallow, or as deep as an abyss, as well as quite rapid, or as slow as molasses, depending on the level of fear induced by the change involved in the next lesson, the ability to let go of that fear, and the amount of awareness of the transformation itself. As Heraclitus said, "greater dooms win greater destinies." (Robinson, 23 [Fragment 25]) The extraordinary benefit derived from the guide-subject relationship is the increased frequency and depth with which one can obtain further transformations and consequently, growth and maturity.

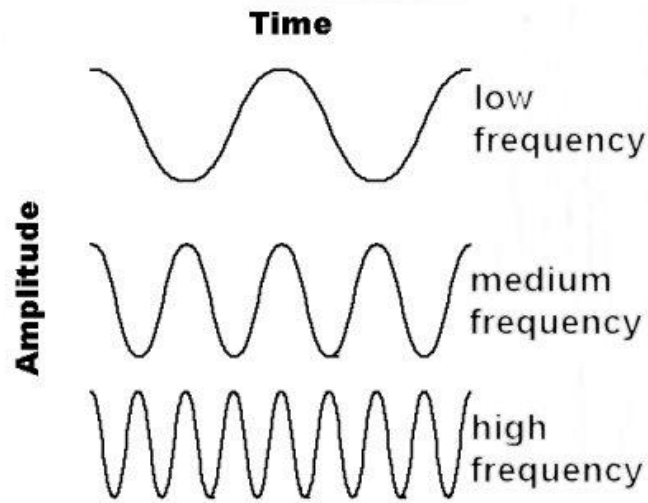


Figure 8. Low, Medium and High Frequency Sine Waves with Equal Amplitudes.

In figure 8 above we see pure sine waves with differing frequencies. Just as if we were dealing with a sound wave we find that the process can experience modulations in both amplitude and frequency separately and simultaneously. Without delving too far into the world of an audio engineer, it is interesting to note the way this process unfolds visually. In figure 9 below an amplitude-modulated wave is shown on top, and a frequency-modulated wave is shown on bottom.

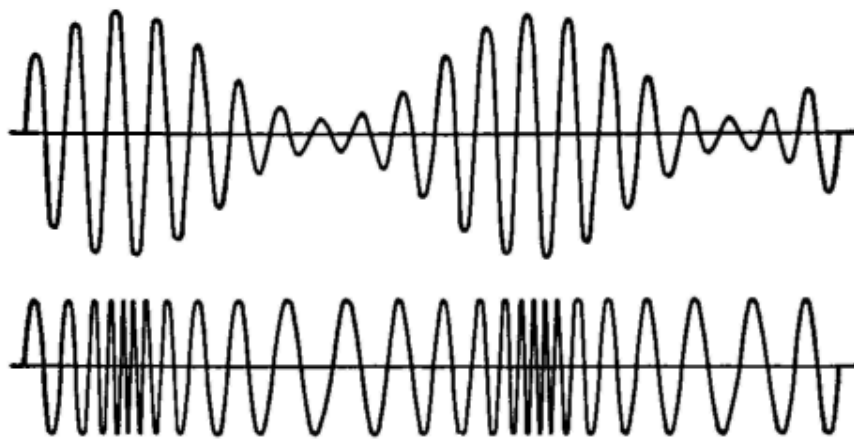


Figure 9. Modulated Sine Waves. Top – An amplitude-modulated wave with unchanging frequency. Bottom – A frequency-modulated wave with unchanging amplitude.

It can be enormously difficult to deny a purely linear perspective and focus on a framework that works in cycles, but this is what we predominantly witness in transformative learning. Of course, actions and events occur on a linear timeline as we mature and change, but in order to be conscious of our own process of transformation and perceive the way we change in repeated patterns over time we must look into a possible structure that happens cyclically.

We cannot be certain there is no end to the cycles involved in this process. When we die or reach a sort of spiritual nirvana, the cycles would have no benefit, because eternity becomes the understood present norm and any entity would drop all conceived notions of linear time. On the other hand, it would be difficult to communicate with a being that had achieved this sort of unity with the process of the universe, or to even have a glimpse of what such existence would be. So, for the sake of this work, I will continue to utilize these cycles as if they were to carry on in perpetuity. Turning to Wittgenstein, “Death is not an event in life: we do not live to experience death. If we take eternity to mean not infinite temporal duration but timelessness, then eternal life belongs to those who live in the present.” (“Tractatus Logico-Philosophicus” 6.4311) All processes, it seems, progress in cycles. The patterns can be altered somewhat in the same way as when we see modulations. What we see at the present is not a moment in time; it is a continuous process that never ceases to be. “People like us, who believe in physics, know that the distinction between past, present and future is only a stubbornly persistent illusion.” (Einstein, qtd. in Dyson, 193)

A great understanding of these cyclical processes can be seen in the seasons this planet experiences. The seasons are a clear representation of C.S. Holling’s adaptive

process, or regenerative cycle of ecology. When seasons shift and times change, Earth rearranges the life forms on it. While extreme growth occurs in the springtime in one hemisphere, the other is experiencing release in the fall. Winter brings a time of reorganization just as summer emulates the conservation phase.

Lessons from nature can be quite helpful when it comes to informing transformative learning. Humans go through the transition from rapid growth to conservation to release to reorganization. There is an oscillation similar to the structure of a sine wave, but can be seen represented in a continuous double helix that goes through the phases. The epiphany occurs at the nadir of the release phase. When the person accepts and surrenders to the release and is willing to face the fear of the unknown that comes with it, the opportunity for reorganization emerges because disorder cannot persist endlessly.

When we hide from fear, or run from the choice to go through the struggle of release and reorganization, the burden becomes much greater. When we accept the choice in front of us and choose to walk forward into the process, the burden becomes much lighter because the gravity of the situation is removed. The mass of the yoke may remain the same, but the weight is much less. This is both an objective claim about how the process works, and a subjective claim about how individuals experience their situations. In the second sense, many therapists have begun orienting the treatment of addicts who are overcoming obstacles in therapy towards greater acceptance. According to psychologist Graham W. Price,

“The biggest advance in therapy in recent years is the development of acceptance-based approaches, such as Acceptance and Commitment

Therapy, Compassion-Focused Therapy, Mindfulness and Acceptance-Action Therapy. Acceptance-based approaches are changing the face of addiction treatments. People with mental health problems or any other sources of unhappiness are living in a state of resistance. They're either resisting aspects of their lives or they're resisting 'internal' experiences such as uncomfortable feelings... What most people don't realize is that resistance always reinforces the programming that's driving the uncomfortable feelings... The opposite of resistance is acceptance. Acceptance-based therapies encourage us to accept uncomfortable feelings rather than resist them. We're then better able to cease the unproductive behaviours that have been reinforcing the programming driving the feelings. Through a combination of acceptance and breaking behavior patterns, we can start to unwind the programming that's driving feelings such as cravings. And so we begin to gain a sense of control over our lives." ("New Psychological Approaches to Overcoming Addictions")

It is really our attitudes that define the way we deal with the changes. Just like as in the case of addicts the struggle will still occur when seeking any kind of personal development, but it becomes somewhat joyous because the light at the end of the tunnel is recognized and hope is established. Spring is just around the corner. By holding in the conservation phase too long we give ourselves the opportunity to experience a deep and lengthy depression. The depression exists when we do not give ourselves the ability to accept and surrender to the collapse. A shorter conservation phase allows for a minor

collapse that is more easily recovered from. The major collapse deteriorates momentum to a point where it is much more difficult to move toward reorganization.

A person who becomes stagnant in the back loop is no longer moving towards growing, he is in fact dying. We choose depression because of our fear of the unknown, but we do not realize that it is always worse to hide or run from change, than to accept the lighter burden of moving forward into growth. There is great meaning in struggle. Even if it is contrary to impulse, the struggle is what provides opportunity to test our will, our resolve, to stretch our capacity for a meaningful life itself.

“Equilibrium comes about not mechanically and inertly but out of, because of, tension... Changes interlock and sustain one another. Wherever there is this coherence, there is endurance. Order is not imposed from without but is made out of the relations of harmonious interactions that energies bear to one another... For only when an organism shares in the ordered relations of its environment does it secure the stability essential to living. And when the participation comes after a phase of disruption and conflict, it bears within itself the germs of a consummation... The rhythm of loss of integration with environment and recovery of union not only persists in man but becomes conscious with him; its conditions are material out of which he forms purposes. Emotion is the conscious sign of a break, actual or impending. The discord is the occasion that induces reflection. Desire for restoration of the unison converts mere emotion into interest in objects as conditions of realization of harmony. With the realization, material is incorporated into objects as

their meaning... He does not shun moments of resistance and tension. He rather cultivates them, not for their own sake but because of their potentialities, bringing to living consciousness an experience that is unified and total..." (Dewey, "Art as Experience" 14-15)

It is our effort that truly defines us and we feel intrinsically that our contribution to the world comes from the struggle itself, and then, by being oriented on the process rather than the destination, we become a part of the struggle, transforming it from the heavy burden into the creative force nature intended for life to be.

BELIEF

"We have only to believe. And the more threatening and irreducible reality appears, the more firmly and desperately we must believe. Then, little by little, we shall see the universal horror unbend, and then smile upon us, and then take us in its more than human arms." -Pierre Teilhard de Chardin ("The Divine Mileau" 100)

What you see depends on who you are because every perspective is fractional and temporal, though it may feel as if it was whole and infinite at a particular moment. We are often told something that we logically know should be true, but have trouble actually embracing that truth. Again, addiction is a wonderful example of seeing this

phenomenon work in real life. For example, it is not difficult to accept the veracity of a claim which concludes that injecting heroin or smoking cigarettes is incredibly bad for the body and often fatal. It isn't much of a stretch to accept that these habits will also cause the user a great deal of mental and emotional stress as well.

Individuals who choose to use heroin and smoke cigarettes rarely find themselves in a position where they are ignorant to this. There is no question that most of these people "get it." That is, they understand that these drugs are bad for you, that they hasten death and that the suffering involved with their abuse and the pain that accompanies the desire and halfhearted attempts to stop using is severe. Quitting smoking is something that nearly all smokers discern they should do. They "get" that it would be better for them in a multitude of ways to break all ties with the drug, but this understanding has not enveloped their entire person. They do not yet "know it."

There is a point when the truths surrounding smoking cut to the very core of your being and you know intrinsically that you cannot participate in this debilitating action any longer. People can tell others how bad drugs are until they are blue in the face, but until a person truly "knows" this for himself, he will not have the ability to refrain because it is the self-recognition that changes the desire of a human, not the wishes of some other person.

The difference in *getting it* and *knowing it* is a key to reaching an epiphany and relates to our ability to truly believe in something. Without the ability to believe in the beneficence of the changes we embark on, to "know" that they are good and are a part of becoming a better person, we cannot take the steps necessary to consciously embrace transformative learning and therefore achieve the deepest transformations. We cannot,

“Participate joyfully in the sorrows of the world. We cannot cure the world of sorrows, but we can choose to live in joy,” to, “Find a place inside where there’s joy, and the joy will burn out the pain.” (Campbell)

Socrates, Epicurus, and the Stoics all argue that we will have more successful, better, and happier lives by orienting our understanding and life with the nature of reality. The exquisite joy of life emerges from the experience of orienting ourselves to the process of growth. There we can learn through personal transformation, as well as through the support of the transformation of others, resulting in the recognition that our true self can give and receive love without the restrictions associated with fear. With this understanding we begin to believe that fear itself is paradoxical, and the moment we acquiesce to it, it becomes something else entirely, just as, “The beginning of knowledge is the discovery of something we do not understand.” (“God Emperor of Dune” 150)

Believing is more than mere positive thinking, it develops when we maintain faith in, as well as have a right view of, the thing you put your confidence and trust in one-hundred percent. “Faith creates its own verification. Believe and you shall be right, for you shall save yourself; doubt, and you shall again be right, for you shall perish. The only difference is that to believe is greatly to your advantage.” (James, “The Will to Believe” 80) Confidence in the transformative process is implicit, and satisfies only the first step in the process, which leads to change.

“From the creation of the world it has been customary for the result to come last, and that, if one would truly learn anything from great actions, one must pay attention precisely to the beginning. In case he who should act were to judge himself according to the result, he would never get to the

point of beginning. Even though the result may give joy to the whole world, it cannot help the hero, for he would get to know the result only when the whole thing was over, and it was not by this he became a hero, but he was such for the fact that he began.” (“Fear and Trembling” 6)

Humans have an amazing capacity for novelty, but that trait seems to be inherent in all complex adaptive systems, not unique to humans, or entities with a capacity for reason. In his book entitled *Novelty*, Donald A Crosby states,

“Emergent novelty is an outcome of complexity, of movement over time from simpler to more elaborate forms of being. It does not leave earlier properties or types of being behind, but builds upon and enriches them by adding new properties and entities to older ones.” (49)

We find this is true, whether looking at a colony of ants, a corporation, or a classroom. According to *Novelty, Adaptive Capacity, and Resilience* by Craig R. Allen and C.S. Holling,

“Novelty and innovation are required to keep existing complex systems resilient and to create new structures and dynamics following system crashes. This is true in all complex systems, and the importance of novelty is recognized as much (if not more) in the management and business world as it is in scientific fields.” (Allen and Holling)

If there were some sort of mental capacity or reason attached to a system of this type, it makes sense that an amount of belief and hope would have to be involved: a desire for balance, a reason to continue to strive. “Faith [is] among the forces by which

men live. The total absence of it... means collapse.” (James, “The Varieties of Religious Experience” Lecture XX) The perseverance needed to continue pushing for equilibrium is what is essential to systems organized by humans. All natural complex systems have this trait inherently, though there is not necessarily any knowledge of it. Many incorrectly view perceived homeostasis as a process that requires conscious control, but it is actually an emergent property. It seems successful human complex systems need to be retrofitted with a great deal of belief and hope in order to achieve the stamina needed to achieve transformation. “Faith means belief in something concerning which doubt is theoretically possible.” (James, “The Will to Believe” 76) and it is the doubt that makes it difficult to trust, overcome fear, and experience transformation. It is our natural inclination to believe. “We are born believing. A man bears beliefs, as a tree bears apples.” (Emerson, 108) By making choices that follow from that inclination, we give ourselves the opportunity to reach deeper epiphanies more rapidly and with less resistance.

Since, “Every man has enough power left to carry out that of which he is convinced,” (Goethe, 79) it follows that when this recognition is fully apprehended, it is our duty to pass it along to others who may not yet recognize that the transformative process is something to believe in. We should adopt the shepherd’s stance and assist learners in their assimilation of their own fear by building trust and encouraging their belief in that which inspires doubt; We should help the uninitiated understand that, “He that will believe only what he can fully comprehend must have a long head or a very short creed.” (Perry, 9)

CHAPTER 5

ENCOURAGING CHANGE

BUILDING TRUST

“The glory of friendship is not the outstretched hand, nor the kindly smile, nor the joy of companionship; it's the spiritual inspiration that comes to one when he discovers that someone else believes in him and is willing to trust him with his friendship.” -Ralph Waldo Emerson (qtd. in Dorris, 111)

When going through the process of transformation the first implicit component is Trust. Absent conviction in the fact that transformation will be beneficial, there is no point in pursuing it. Without trust in a process that will induce transformation there is nothing concrete to base your conscious development on. After recognizing your own personal transformations by going through the process a few times, denoting the epiphany, and knowing the beneficial changes that have occurred, it is possible to orient oneself toward the process for future transformative endeavors. However, a shepherd is

of inestimable value in order to encourage an individual to encounter her first epiphany, and frequently, an introductory series of epiphanies.

“I am personally convinced that one person can be a change catalyst, a transformer in any situation, any organization. Such an individual is yeast that can leaven an entire loaf. It requires vision, initiative, patience, respect, persistence, courage, and faith to be a transforming leader.”

(Steven Covey, qtd. in Lunn, 87-88)

In a highly superficial society dominated by narcissism, entitlement, the desire for immediate gratification, short attention spans, image orientation and cynicism it becomes exceedingly more difficult to enter into deep, meaningful and growth inducing conversations in the public realm. “Someone who thinks the world is always cheating him is right. He is missing that wonderful feeling of trust in someone or something.” (Hoffer, 59)

Also, many private conversations tend toward idle chatter, leaving a prominent amount of depth, connection and trust to be desired. Because of a lack of practice or a dearth of willing and insistent, yet gentle instigators, many people are unwilling, or even unable, to enter into a concerted discussion about their most engrained fears, weaknesses, hurts, struggles, and secrets. The willingness to engage in this sort of discussion is a crucial component to personal development in general and transformative learning in particular.

The only way to help someone nudge herself over the precipice of transparency is to temporarily sacrifice your self-interest in order to focus on the other person and build enough trust to enhance the desire to further develop a relationship through

communication. “What is essential here is the presence of the spirit of dialogue, which is in short, the ability to hold many points of view in suspension, along with a primary interest in the creation of common meaning.” (Bohm and Peat 248) If a foundation of trust is not evident to both parties, there is very little hope of constructing the depth necessary for a valuable mentor-mentee relationship, because there are many variables present in their personalities. “Whenever two people meet there are really six people present. There is each man as he sees himself, each man as the other person sees him, and each man as he really is.” (William James, qtd. in Cran, 21)

In their book, *Building Trust: In Business, Politics, Relationships, and Life*, Robert Solomon and Fernando Flores generally characterize authentic trust as a mode of interpersonal collaboration contingent on conversation that is the indispensable prerequisite for success. They maintain that it is a self-conscious and dynamic action we carry out independently; it is an emotional proficiency we construct and uphold with our commitments and integrity by choice, not to be mistaken for familiarity, discretion or reliability because it should not be based upon expectation or predictability. As a function of our responsibilities that is mindful of its own circumstances and restrictions, trust is amenable to unique prospects. Reflection and dialogue regarding trust is stimulating and induces behavioral modifications for all parties involved and in relationships themselves. Essentially, both the individual who trusts and the one being trusted undergo transformation. Since it is a judgment, authentic trusting considers how interpersonal association will transform, so properly understanding it drastically affects our willingness and capacity to trust or choose not to. (Solomon and Flores)

Each and every one of us has aspects of our lives that we have either consciously or subconsciously attempted to avoid, whether they are full-fledged skeletons in the closet or issues that seem too tiny to address. The truth is that often those matters are only pretending to be small, and the willingness to address them can be the very thing that leads us toward our next great transformation. “In the dim background of mind we know what we ought to be doing... but somehow we cannot start.” (James, “Principles of Psychology” Chapter 11)

Again, I can cite the creation of this thesis as an example, since at times, fear-induced paralysis influenced the delay of its completion, yet it was also the impetus for vast personal change. The longer someone puts off the concerns that he would rather keep locked away, the larger they grow, until he has no choice but to address them. Unsurprisingly, apprehension that comes with confronting the demons is beyond palpable. Nevertheless, there always comes a time to manage each one of these problems because the process will not cease even when we desire it to. Whether we like it or not the time to heal arrives at the door, and until we face it, we are destined to wallow within limits that we set upon ourselves, neglecting our potentiality for the sake of insecurity. “Every worthwhile accomplishment, big or little, has its stages of drudgery and triumph; a beginning, a struggle and a victory.” (qtd. in Fickman, vi) Encouragement from a trusted and respected friend who is willing to challenge and console while exhorting, can be an incredible ally when it comes to overcoming these undesired chunks of anxiety.

In *The Nichomachean Ethics*, Aristotle waxes on friendship and determines that a genuine friend is nearly as concerned with the other person as himself. Sharing and

caring does not necessitate putting the interests of the other before self-effacement, but it does impose a modicum of selflessness, or generous and attentive concern for others.

“As Ray Pahl states in relation to Aristotle, virtuous friends 'enlarge and extend each other's moral experience.' He continues, 'the friends are bound together, as they recognize each other's moral excellence. Each can be said to provide a mirror in which the other may see himself'. (Pahl 2000: 22) In this we love the other person for their own sake not just for what they are or what they can offer, and we put the interests of the other before our own. We can also see that we are separate and different from each other. We know ourselves and the other. The moral excellence of friendship, thus, 'involves a high level of development and expression of the altruistic emotions of sympathy, concern and care – a deep caring for and identification with the good of another from whom one clearly knows oneself to be clearly other.' (Blum 1980: 71) Friendship of this kind necessarily involves conversations about well-being... and in this sense, involves sharing in a common project.” (Doyle and Smith)

It doesn't matter what the topic of our stagnation is or how large the obstacle that needs to be surmounted, even if it comes from the person acting as the mentor. “Whenever you're in conflict with someone, there is one factor that can make the difference between damaging your relationship and deepening it. That factor is attitude.” (William James, qtd. in Dungy, 74) We can find our footing and our courage with the help of another person, a shepherd, who has been through similar situations before and can shed a guiding light on our situation with a loving kindness and or a swift kick in the

ass, whichever is necessary in the moment. The shepherd can assist us in developing attentive concern for others and becoming a less narcissistic individual who is willing to go face to face with our shortcomings and graduate to a new level of understanding.

Being a lone wolf limits a person's ability to recognize and overcome faulty assumptions, so regardless of the pain associated we must engage in dialectical discussions to grow. Transformation is an ugly process. We find that we ask for change and then run away from it when it gets tricky. By falling into the process, "New habits can be launched... on condition of there being new stimuli and new excitements." (James, "Talks to Teachers on Psychology" 76-77) The ability to accept and surrender to the myth constructed in concert between subject and guide builds trust, and it does get thorny, but it leads to beneficial progress for both.

Of course, the apprentice must be able to feel out her own way and explore her own positions within safe and open atmosphere where she will not feel coerced. Pressure will be placed on the learner by the coach, but it should be recognized that the student is always the one who is really in control of the choices. Otherwise, it can seem as if the mentor is the one to be afraid of rather than the trusted teammate who, though not to be dependent on, will be there to co-create.

FACING FEAR

“Much of what we call evil is due entirely to the way men take the phenomenon. It can so often be converted into a bracing and tonic good by a simple change of the sufferer's inner attitude from one of fear to one of fight; its sting can so often depart and turn into a relish when, after vainly seeking to shun it, we agree to face about and bear it.” -William James (“The Varieties of Religious Experience” Lectures IV and V)

Fear is the elephant in the room, and it turns out that it is up to us to decide how much the elephant weighs. Often we find ourselves taking actions that lead to poor consequences because we are afraid of some unknown. This trepidation can lead to hasty, whimsical decisions that exacerbate the dread because of increasingly severe ramifications. We get angry, hurt, offended or panicked and find ourselves reacting emotionally rather than giving ourselves the chance to consciously utilize our faculties to take an informed, constructive action. Even more frequently we make a choice to take the passive path when overcome by fear. It can push us into patterns designed to comfort us and deter us from stretching ourselves, rather than seeking to gain traction and continue the process of growth. We seek this inaction because the fear is incapacitating enough to sway us from experiencing the pain that comes with facing the thing we are afraid of. Individually, we choose whether the apprehension is going to provide merely a partial or provisional paralysis or if it will be totally debilitating for a longer period of time. The extent to which an individual withholds himself from addressing the deepest

issues in his life is reciprocally the extent to which his transformation is restricted. “So long as a man imagines that he cannot do this or that, so long as he is determined not to do it; and consequently so long as it is impossible to him that he should do it” (Baruch Spinoza, qtd. in Boldt, 90)

A fitting acronym for fear I once heard in casual conversation is: False Evidence Appearing Real. The idea that the perception of substantiation is nefarious is the key to facing fear. If you are focused on the process itself and taking action, there is no longer an agonizing spotlight lingering on the necessity of reaching the desired destination, therefore pressure and fear subsides. It is the worry about arriving that produces the greatest amount of fear because it is precisely the unknown outcome that is worrisome. Fear inspires anxiety and resistance, which leads to emotional palsy, and for all intents and purposes, to extropy.

When we try to simplify the emotional landscape, we can break things down into fear and love. Interestingly, both of these powerful forces can cause the other to dissipate. An individual who has been head over heels in love will often falls out of it through fear. Thoughts of insecurity are entrenched in every relationship, which is why honeymoon stages never last and the foundation of trust and communication must be strong enough to withstand the disorienting dilemmas that are sure to stand in every person’s path.

“The neurosis in which the search for safety takes its clearest form is in the compulsive-obsessive neurosis. Compulsive-obsessive to frantically order and stabilize the world so that no unmanageable, unexpected or

unfamiliar dangers will ever appear.” (Maslow, “Motivation and Personality” 19)

What we can strive for is a shift in our awareness that takes us from fear to love. Each and every one of us regularly deals with disorder in our lives and this brings about a copious amount of fear. The ego is remarkable in its orientation toward apprehension, and our inability to break our attachment to the ego keeps us consequently chained to that fear. “Resting on your laurels is as dangerous as resting when you are walking in the snow. You doze off and die in your sleep.” (Wittgenstein, “Culture and Value” 35) If we refuse to let go, and hence break free, the feeling of being trapped by the ego grows, and makes it that much more difficult to generate the momentum needed to reach the moment of deliverance. “To show your true ability is always, in a sense, to surpass the limits of your ability, to go a little beyond them: to dare, to seek, to invent; it is at such a moment that new talents are revealed, discovered, and realized.” (qtd. in “Simone de Beauvoir”)

The wonderful thing about this fear is that it presents a challenge that when faced gives us the opportunity to recreate ourselves. We can rewrite our personal myth and alter our place in the world by facing uncertainty, resistance and adversity head on. Opening the doors that fear leaves ajar can be one of the most difficult, yet fulfilling aspects of our lives. By accepting the challenge our fear provides us, we get to enter into a world of reexamination, where portions of the self get to be revolutionized leading to the moment when everything changes and we see ourselves, the world and our place in it in a completely different way. “A man’s limitations are not the things he wants to do and can’t; they are the things he ought to do but doesn’t. The difficult we will do eventually,

the impossible will just take a little more time.” (Author Unknown, qtd. in “Determination”)

It becomes a blessing to take a walk into the unknown and boldly confront what hurts most. The process, by definition cannot be an easy one, but since each and every one of us is a participant in the complex and improvised choreography of life, we find that our dance becomes increasingly valuable and meaningful with each singular adversity and challenge we tackle and overcome. When an individual breaks through the conflict, her thoughts go through a process of reorientation and develop into a firmer, stronger amalgamation that redefines the self, bringing her more joy, assurance and willingness to undertake even more. “It is by going down into the abyss that we recover the treasures of life. Where you stumble, there lies your treasure.” (Campbell)

Of course, it seems that we do deal with the paradoxical issue of going mano-a-mano with our excruciatingly powerful resistance to candidly evaluating our fears, our emotions, our lives and our place in the world. We do everything we can to avoid the large negative force that kills all hope, but it is by facing the possibility of hopelessness that we find hope. For, “There is no hope unmingled with fear, and no fear unmingled with hope.” (Baruch Spinoza, qtd in Day, 122)

In *Profiles of the Future*, scientist and author, Sir Arthur C. Clarke, laid out the first two of what are now called his three laws. The second of which states, “The only way of discovering the limits of the possible is to venture a little way past them into the impossible.” (Clarke, 31)

It is interesting to note the way fear is used in other growth teachings. In the Bible, for example, the Greek word phobeo (φοβέω) is used to suggest that we should be

in fear of God. A better way to understand the word, though, is “to be in awe of.” It can paradoxically be an awe that inspires either fear, reverence, or both. Adversity is our great teacher, and we should revere it rather than fall into fear, because through adversity we learn patience, perseverance and forgiveness. Facing fear is like going to boot camp. We will be broken down, before being built back up again into something better. One of the most important aspects in the role of mentor is the ability to help the apprentice recognize his apprehensions and in turn, face a greater amount of his fear, thus increasing the depth of the transformation. The guide can help the learner give himself permission to live truly as he “knows” it with all of the unexpected ramifications that may come along with it. “The most terrifying thing is to accept oneself completely.” (Jung, qtd. in Larrivee, 39)

In his book, *Dune*, Frank Herbert wrote about the Bene Gesserit rite, a sisterhood who develop extra-human abilities through training and acceptance. They use an incantation called the “litany against fear” in order to steel their minds and let their fear process through them in order to achieve transformation.

“I must not fear. Fear is the mind-killer. Fear is the little-death that brings total obliteration. I will face my fear. I will permit it to pass over me and through me. And when it has gone past I will turn the inner eye to see its path. Where the fear has gone there will be nothing. Only I will remain.” (8)

Once we recognize the benefits of successfully facing fears and growing into a more mature being we find ourselves compelled to continue the process of personal evolution, choosing to seek a greater understanding of our identity and place within this

integral framework of existence. We actually yearn to become better people, with more resilience and more capacity for creation and communication with others. We “know” that engaging the process becomes the most meaningful and fulfilling myth ever written into our lives. We “know” that there is never any testimony without a test. No diamond ever shines without undergoing a tremendous amount of pressure. It is a worthwhile undertaking to be purified and refined by fire.

VULNERABILITY AND ACCEPTANCE

“Acceptance of what has happened is the first step to overcoming the consequences of any misfortune.” -William James (qtd. in Carnegie, 85)

The key to embracing one’s fear comes in the form of vulnerability. Our willingness to acquiesce to the circumstances emerges out of the trust we have built with our guide, giving us the strength to allow hurt, pain or other unforeseen struggles to envelop us. When this occurs, we immediately give power to the process of transformation, consenting to be overwhelmed, and in turn causing our old life to perish and, ironically releasing the hold of any negative overwhelming emotions. We enter another springtime in our personal development and becoming the person we know we are meant to be for the time being.

The value in vulnerability is that it allows for the recognition needed to desire change. It is difficult to embrace that perfection is the enemy in the personal sense. We can never reach the epitome of flawlessness, and it takes great humility to disregard perfection and the pride that comes with it. The more regularly a subject can allow himself to be vulnerable in the face of fear, the greater the frequency transformations will occur. The larger the amount of fear the person is subject to in the process of embracing that vulnerability, the deeper the transformation. “Opportunities to find deeper powers within ourselves come when life seems most challenging.” (Campbell) Martin Buber examines the need for vulnerability in his work, *I and Thou*, which distinguishes I-It and I-Thou relationships. For Buber, the I-Thou is only possible through a making vulnerable and open of oneself. The I-It is not only about controlling others, it is about trying to give certainty to oneself, to make self safe and secure and a finished definite object. I-Thou relationships are very risky because I must be open to the other – be it friend or lover or nature or God – and neither attempt to control the other nor attempt to freeze and constrain myself. Only through opening myself to vulnerability can I actually become fully myself. (Buber)

The right way has always been through the wilderness. It is a matter of implementing voluntary weakness. There is a battle in which we participate as gladiators facing a fierce adversary. The arena where this battle takes place is inside of us and it turns out that we are not only the contender, but the enemy as well. Once we make a resolution to go all the way, to allow our fears to walk all over us, we can doggedly annihilate the foe by accepting our lot as gladiator and the battle is immediately won; the epiphany is on the horizon. “In the face of an obstacle which it is impossible to

overcome, stubbornness is stupid... It debases itself in vain contingency” (Beauvoir, “The Ethics of Ambiguity” 28)

By battling we embrace the move toward greater diversity. While more diversity enables a system to have more resilience, more vulnerability enables a person to recognize additional shortcomings, therefore allowing for added change and thus more transformation. We must continue to recognize the self as the microcosm within the macrocosm. The temptation is for this recognition to be fleeting because the ego puts pressure on us to see ourselves as a whole entity, rather than as a sub-whole or a holon. We can co-create a new expression of existing matter. “It doesn’t matter if the water is cold or warm if you’re going to have to wade through it anyway” (Teilhard de Chardin, qtd. in Wicks, 66)

Transformation enables the shift into the next stage of developmentally holarchic being. It’s not going to happen as fast as you want it to. It’s not always like ripping off a band-aid and getting it over with quickly. Developing the ability to slowly tackle large challenges bit by bit enable a person to develop the perseverance needed to overcome the possibility of failure and even failure itself, entering into the realm of successfully completing a transformation or arduous, lengthy task. “A man who has not passed through the inferno of his passions has never overcome them.” (Jung, “Memories, Dreams and Reflections” 6)

CHOICE AND ACCOUNTABILITY

“Of all the creatures on earth, only human beings can change their patterns. Man alone is the architect of his destiny... Human beings, by changing the inner attitudes of their minds, can change the outer aspects of their lives.” -William James (qtd. in Ferguson, 48)

When we choose to participate in the journey that is life, rather than to merely seek for something that will fix things, wait for things to get better, or strive to accomplish some task that will transport us to a desired destination, we will be submerged in the vitality that comes with living on the edge of chaos. The joy is palpable, and the pain even draws out an element of pleasure, because of the understanding that the illusory suffering is a component of the beneficial stretching that in turn brings more puissance. This is the choice that makes formerly trivial objects and events sparkle with substance and help us to develop truly rewarding relationships with a depth of love previously unachievable. Failure is only failure if you quit, because today's failure often leads to tomorrow's successes. When creating the electric light bulb, Thomas Edison failed thousands of times before he found success. In fact, we can even find encouragement in our disappointments, if we have the chutzpah to see them as stepping stones to something wonderful.

Once we are confident in, and have the ability to remain accountable to our choice, it is important to develop consistency with the new set of principles and actions

that arose from the epiphanic adventure. By piling up the choices we are accountable to regardless of the consequences and unforeseen effects, we begin to develop integrity. This integrity helps us to constantly rewrite our personal myths as we participate in becoming the hero we envision and continue to re-envision.

Because communication is a vital component of the transformative process, it follows that more than one individual may be receiving the exact input she needs for her next personal epiphany at any given time. When two or more people are focusing on their process of change simultaneously we often find synergistic qualities emerge from the interaction. When a group of people are all yearning for more growth and simultaneously making an altruistic choice to assist others in their projects an explosion of insight in all participants can materialize. Many of us have seen and felt this transpire in situations in the classroom, at work or simply with friends. When humble individuals interested in encouraging others to become better people, converge the sum of the growth of all characters combined tends to be far greater than if each individual were to go about expansion separately.

Since the shepherd and the subject have two different perspectives there remains an issue of scale and perspective. Communication between the individuals provides an opportunity to grasp the other person's understanding and relate it to yours, allowing for the ability to recognize scalar properties including similarities and differences between holons. This process invariably gives the subject the status of beneficiary, but also benefits the guide because new tidbits of unaccounted for information are brought to the surface and incorporated into the paradigm leading the way to transformation in both parties. We are liable to not only ourselves, but also to others, and when we don't accept

accountability we not only hurt ourselves, but also fail to be responsive to their part of the process.

When a person experiences their his first epiphany, there is a common desire to continue the growth process and, though concepts develop more complexity and depth, the increase in momentum helps overcome the need for specified one-on-one coaching with a single, particular guide. After enough leaps, the individual may become capable of continuing the cycle, by seeking his own opportunities to guide other learners' growth, hastening the subsequent transformations for both the original learner and the new subjects in the process.

This initial step is meant to entice others to participate in serious contemplation, study, and dialogue regarding possible triggers for transformation. The goal is to understand the very best ways to provide exhortation to various individuals throughout society. By constructing a method for discerning and examining real-world triggers we have the opportunity to take action and apply the philosophical principles inherent in this type of holarchical transformative learning to individuals who may have otherwise never recognized and seized the opportunity to grow, essentially realizing the opportunity to go back to Plato's cave and successfully encouraging others to embark on a journey through a new world outside of the cave.

"And therefore, all of those for whom authentic transformation has deeply unseated their souls must, I believe, wrestle with the profound moral obligation to... speak out... and shine your headlights into the eyes of the complacent. You must let that radical realization rumble through your veins and rattle those around you... Because, you see, the alarming fact is

that any realization of depth carries a terrible burden: those who are allowed to see are simultaneously saddled with the obligation to communicate that vision in no uncertain terms: that is the bargain. You were allowed to see the truth under the agreement that you would communicate it to others... Speak out with compassion, or speak out with angry wisdom, or speak out with skillful means, but speak out you must. And this is truly a terrible burden, a horrible burden, because in any case there is no room for timidity. The fact that you might be wrong is simply no excuse: You might be right in your communication, and you might be wrong, but that doesn't matter. What does matter, as Kierkegaard so rudely reminded us, is that only by investing and speaking your vision with passion, can the truth, one way or another, finally penetrate the reluctance of the world. If you are right, or if you are wrong, it is only your passion that will force either to be discovered." (Wilber, "One Taste" 33-34)

With passion each of us can reach out to nurture increased arête in ourselves and those around us whether they are metaphorically shackled or not. I have constructed a framework for this purpose that includes more detail than could be elucidated in this work and it is my expectation that this foundational material provides a reliable springboard, from which this framework will rise, expand and prosper. As I addressed earlier, the encouragement a shepherd provides a learner in this framework is an example of the microcosm when it comes to transformation. I sound the clarion call to expand the principles

exposed in this thesis as a supplement to the family, the classroom, the business, to communities and to society at large. Organizations also learn in a way that can benefit from an understanding of transformative learning, holarchy, epiphany and the shepherd. By continuing to analyze of how human lives become more satisfying, more rewarding, more flourishing and more fully lived, more details of how to facilitate development by understanding transformation, growth, paradox, partiality, complexity, and systems, will allow us to know the roles we can play in each other's lives to help encourage positive change in every facet of our existence.

WORKS CITED

- Albers, Josef. *Interaction of Color: Revised and Expanded Edition*. New Haven: Yale U, 2006. Print.
- Allen, Craig R. and Holling, C.S. "Novelty, Adaptive Capacity, and Resilience." *Ecology and Society*. Vol. 15, No. 3, Art. 24 (2010), n. pag. EcologyAndSociety.org. Ecology and Society. n. pag. 2010. Web. 18 Aug. 2011.
- Basseches, Michael. *Dialectical Thinking and Adult Development*. Norwood: Ablex, 1984. Print.
- Beauvoir, Simone de. *The Ethics of Ambiguity*. New York: Citadel, 1976. Print.
- Beauvoir, Simone de. *The Second Sex*. New York: Random House, 1976. Print.
- Bergson, Henri. *Creative Evolution*. New York: Modern Library, 1944. Print.
- Bohm, David. *Thought as a System*. New York: Routledge, 1994. Print.
- Bohm, David. *Unfolding Meaning: a weekend of dialogue with David Bohm*. New York: Routledge, 1985. Print.
- Bohm, David. 1980. *Wholeness and the Implicate Order*. London: Routledge, 1980. Print.
- Bohm, David and Peat, F. David. *Science Order, and Creativity*. New York: Routledge, 1987. Print.
- Bohm, D. J. and Hiley, B. J. "On the Intuitive Understanding of Nonlocality as Implied by Quantum Theory." *Foundations of Physics*, Vol 5, No. 1 (1975), 93-109. New York: Plenum, 1975. PDF file.
- Boldt, Laurence G. *Zen Soup: Tasty Morsels of Wisdom from Great Minds East and West*. New York: Penguin, 1997. Print.
- Buber, Martin. *I and Thou*. New York: Scribner Classics, 2000. Print.

Campbell, J. *Reflections on the Art of living: A Joseph Campbell Companion*. New York: Joseph Campbell Foundation, n. pag. 2011. Ebook.

Carnegie Training, Dale. *Leadership Mastery: How to Challenge Yourself and Others to Greatness*. New York: Fireside, 2009. Print.

Clarke, Arthur C. *Profiles of the Future*. New York: Harper and Row, 1962. Print.

Congress, United States. *Congressional Record*, Vol. 146, Pt. 15, Oct. 6, 2000 to Oct. 12, 2000. Washington. United States Government Printing Office, 2005. E-book.

Cran, Cheryl. *50 Ways to Lead and Love It*. Victoria: Trafford Publishing, 2005. Print.

Cranton, Patricia. *Understanding and Promoting Transformative Learning: A Guide for Educators of Adults*. San Francisco: Jossey-Bass, 1994. Print.

Cranton, Patricia. *Professional Development as Transformative Learning*. San Francisco: Jossey-Bass, 1996. Print.

Crosby, Donald A. *Novelty*. USA: Lexington, 2005. Print.

Day, J. P. "More about Hope and Fear." *Ethical Theory and Moral Practice* Vol. 1, No. 1, (1998), 121–123. Netherlands: Kluwer Academic. 1998. PDF file.

"Defining Holism." *State of the Heart Technology*. SOHTech.ac.nz. Center for Human Development Technology and Holistic Science. n. pag. 3 Feb. 2007. Web. 17 Dec. 2010.

Deleuze, Gilles. *The Logic of Sense* New York: Columbia U, 1990. Print.

"Determination." *Selfhelp Magazine*. SelfhelpMagazine.com. Selfhelp Magazine, n. pag. 1 Nov. 1994. Web. 16 Dec. 2010.

Dewey, John. *Art as Experience*. New York: Perigee, 1980. Print.

Dewey, John. *Experience and Nature*. La Salle: Open Court, 1929. Print.

Dorris, Christopher. *Creating Your Dream: Confidently Stepping Into Your Own Brilliance*. Lincoln: iUniverse, 2005. Print.

Doyle, M. E. and Smith, M. K. "Friendship: Theory and Experience." *The Encyclopaedia of Informal Education*. (2002), n. pag. Infed.org. YMCA George Williams C. 22.Sept. 2011. Web. 2 Oct. 2011.

Dungy, Tony and Whitaker, Nathan. *Uncommon: Finding Your Path to Significance*. Carol Stream: Tyndale House, 2009. Print.

Dyson, Freeman. *Disturbing the Universe. Sloan Foundation Science Series*. New York: Basic, 1981. Print.

“Edge of Chaos.” *Wikipedia: The Free Encyclopedia*. En.Wikipedia.org. Wikipedia. n. pag. 16 Jan. 2010. Web 19 Dec. 2010.

Eisner, Elliot. “Back to Whole.” *Educational Leadership*, Vol. 63, No. 11 (2005), 14-18. Sept. 2005. Web. 12 Mar. 2011.

Emerson, Ralph Waldo and Slater, Joseph. *The Collected Works of Ralph Waldo Emerson: The Conduct of Life*. Cambridge: Harvard U, 2003. Print.

“Logos.” *Encyclopedia > Heraclitus*. NationMaster.com. Nation Master. n. pag. 2003-2005. Web. 16. Dec. 2010.

Ferguson, Marilyn. *The Aquarian Conspiracy: Personal And Social Transformation In The 1980's*. Los Angeles: J. P. Tarcher, 1980. Print.

Ficksman, Maxine and Adelizzi, Jane Utley. *The Clinical Practice of Educational Therapy: A Teaching Model*. New York: Routledge, 2010. Print.

Fiddes, Dax. *Manifesting Abundance 101: Creating Prosperity through Self-Realization*. Australia: Mercury, Print.

Fuller, R. Buckminster and Applewhite, E. J. *Synergetics: Explorations in the Geometry of Thinking*. New York: Macmillan, 1975, Print.

Fuller, Richard Buckminster. *Operating Manual for Spaceship Earth*. London: Fiffer and Simons, n. pag. 1968. Ebook.

Fuller, Richard Buckminster. *The Buckminster Fuller Reader*. New York: Cape, 1970. Ebook.

Goethe, Johann Wolfgang von. *The Maxims and Reflections of Goethe*. New York: MacMillan, 1906. Print.

Gunderson, Lance H. and Holling, C. S. *Panarchy: Understanding Transformations in Human and Natural Systems*. Washington: Island, 2002. Print.

Habermas, J. *Knowledge and Human Interests*. Boston: Beacon Press, 1971. Print.

Habermas, J. *The Theory of Communicative Action. Vol. 1: Reason and the Realization of Society*. Boston: Beacon Press, 1981. Print.

Hegel, Georg W. F. *Introductory Lectures on Aesthetics*. London: Penguin, 1993. Print.

- Hegel, Georg W. F. *Philosophy of Right*. New York: Cosimo Classics, 2008. Print.
- Herbert, Frank. *Chapterhouse Dune*. New York: Penguin, 1985. Print.
- Herbert, Frank. *Dune, 40th Anniversary Edition*. New York: Penguin, 2005. Print.
- Herbert, Frank. *God Emperor of Dune*. New York: Penguin, 2005. Print.
- Hickman et al. "Example of holometabolous development, with four life stages (egg, larva, pupa, adult), as seen in endopterygote insects." Diagram. *Anthropods – Introduction*. UC Davis.edu. Natural Reserve System, U California, Davis. n. pag. 5 July 2005. Web. 1 Mar. 2011.
- Hofstadter, Douglas. *Gödel, Escher, Bach: an Eternal Golden Braid*. New York: Basic, 1978. Print.
- Hoffer, Eric. *The Ordeal of Change*. Crossville: Hopewell, 2006. Print.
- Hurley, Dan. "Bizarre and Infamous Join Scholarship in an Archive of Psychology." *New York Times Health*. NYTimes.com. The New York Times. n. pag. 27 Sept. 2005. Web. 18 Mar. 2011.
- James, William. "Letter to W. Lutoslawski." *The letters of William James, Volumes 1-2* (1920), 252-255. Boston: Little, Brown, 1926. E-book.
- James, William. *Talks to Teachers on Psychology*. New York: Holt, 1906. Print.
- James, William. *The Principles of Psychology*. Adelaide: The University of Adelaide Library, 2009. n. pag. E-book.
- James, William. *The Varieties of Religious Experience: A Study in Human Nature*. Adelaide: The U Adelaide Library, 2009. n. pag. E-book.
- James, William. *The Will to Believe and Other Essays in Popular Philosophy*. New York: Dover, 1956. Print.
- Johnson II, Arthur J. *Ignite the Fire Within!* USA: Xulon, 2004. Print.
- Jung, Carl. *Memories, Dreams and Reflections*. New York: Vintage Books, 1989. E-book.
- Jung, Carl. *The Theory of Psychoanalysis*. New York: The Journal of Nervous and Mental Disease, 1915. E-book.
- Jung, Carl. *The Transcendent Function*. Zurich: C.G. Jung Institute, 1957. E-book.
- Jung, Carl. *The Undiscovered Self*. Boston: Little, Brown, 1958. Print.

- Kant, Immanuel. *Critique of Judgement*. Oxford: Oxford U, 1964. Print.
- Kant, Immanuel. *Critique of Pure Reason*. Cambridge: Cambridge U, 1998. Print.
- Kierkegaard, Søren. *Fear and Trembling* (Chapter 3). New York: Penguin, 1986. Ebook.
- Kierkegaard, Søren. *Philosophical Fragments: Johannes Climacus*. Princeton: Princeton U, 1985. Print.
- Koestler, Arthur and Smythies, J. R. *Beyond Reductionism*, New York: Hutchinson, 1969.
- Koestler, Arthur. *The Act of Creation*. London: Penguin, 1990. Print.
- Koestler, Arthur. *The Ghost in the Machine*. London: Hutchinson, 1967. Print.
- Kohlberg, Lawrence. *Stages of Moral Development*. n. pub. Info.PSU.edu.sa. 1971. PDF file.
- Larrivee, Barbara. *Moving Into Balance: Creating Your Personal Pathway*. Santa Monica: Shoreline, 1996. Print.
- Leibniz, Gottfried Wilhelm. *The Monadology*. ForgottenBooks.org: Forgotten, 2008. Print.
- “Living the Dream.” *Hoffman March News*. HoffmanInstitute.co.uk. Hoffman Institute. n. pag. 1 Mar. 2009. Web. 6 Jan. 2011.
- Lunn, Frank F. *Stack the Logs!: Building a Success Framework to Reach your Dreams*. Bloomington: Kahuna, 2004. Print.
- Machiraju, Sridhar. *Theory and Practice of Non-Intrusive Active Network Measurements*. Diss. U California, Berkeley, 2006. Berkeley: U California, Berkeley, 2006. PDF file.
- Maslow, Abraham. *Motivation and Personality*. New York: Harper and Row, 1987. PDF file.
- Maslow, Abraham. *Religions, Values, and Peak Experiences*. New York: Viking, 1970. Print.
- Mazlow, Abraham. *The Farther Reaches of Human Nature*. New York: Penguin, 1993. Print.
- Mezirow, Jack. “Learning to Think Like an Adult: Core Concepts of Transformation Theory.” *Learning as Transformation: Critical Perspectives on a Theory in Progress*, (2000), 3-34. San Francisco: Jossey-Bass, 2000. Print.

- Mezirow, Jack. *Transformative Dimensions of Adult Learning*. San Francisco: Jossey-Bass, 1991. Print.
- Mezirow, Jack. "Transformative Learning: Theory to Practice." *New Directions for Adult and Continuing Education*, Vol. 1997, No. 74 (1997), 5-12. San Francisco: Jossey-Bass, 1997. Print.
- Montessori, Maria. *Education for a New World*. Oxford: ABC-Clio, 1989. Print.
- Montessori, Maria. *The Absorbent Mind*. USA: Owl, 1995. Print.
- Montessori, Maria. *The Montessori Method*. New York: Stokes, 1912. Print.
- NASB. *New American Standard Bible, Updated Edition*. Anaheim: Foundation, 1997. Print.
- "New Psychological Approaches to Overcoming Addictions." *Mental Health News*. MentalHealthy.co.uk. Abicord. n. pag. n.d. Web. 18 Aug. 2011.
- O'Sullivan, Edmund. "Bringing a Perspective of Transformative Learning to Globalized Consumption." *International Journal of Consumer Studies*, Vol. 27, No. 4, (2003), 326-330. Toronto: Ontario Institute for Studies in Education, U Toronto, 2003. Print.
- Palmer, Donald. *Looking at Philosophy: The Unbearable Heaviness of Philosophy Made Lighter, Fifth Edition*. New York: McGraw Hill, 2012. Print.
- Perry, Ralph Barton. *Present Philosophical Tendencies: A Critical Survey of Naturalism, Idealism, Pragmatism, and Realism Together With a Synopsis of the Philosophy of William James*. New York: Longmans, Green, 1912. Print.
- Piaget, Jean. *Genetic Epistemology*. New York: Columbia U, 1968. n. pag. E-book.
- Piaget, Jean. *The Construction of Reality in the Child*. Great Britain: Routledge, 2002. Print.
- Prigogine, Ilya and Stengers, Isabelle. *Order Out of Chaos: Man's New Dialogue with Nature*. Toronto: Bantam New Age, 1984. Print.
- Riegel, Klaus F. "Adult life crises: A Dialectical Interpretation of Development." *Lifespan Developmental Psychology: Normative Life Crisis*, (1975), 99-127. New York: Academic Press. 1975. Print.
- Robinson, T. M. *Heraclitus: Fragments*. Toronto: U Toronto, 1987. Print.

- Schueler, Gerald. *Chaos Theory: Interface with Jungian Psychology; The Order/Chaos Relationship in Complex Systems*. Schuelers.com. Gerald Schuler. n. pag. 1997. Web. 2 Oct 2011.
- Simanek, Donald. *Quotes on Education*. LHUP.edu. Lock Haven U, n. pag. Sept. 2010. Web. 12 Jan. 2011.
- “Simone de Beauvoir Quotes.” *English Forums*. EnglishForums.com. English Forums. n. pag. 2011. Web. 1 Mar 2011.
- Solomon, Robert C. and Fernando Flores. *Building Trust: In Business, Politics, Relationships, and Life*. New York: Oxford U, 2001. Print.
- Teilhard de Chardin, Pierre. *The Divine Milieu*. Portland: Sussex Academic, 2004. Print.
- Teilhard de Chardin, Pierre. *The Human Phenomenon*. Portland: Sussex Academic, 1999. Print.
- Teilhard de Chardin, Pierre. *The Phenomenon of Man*. New York : Harper, 1959. Print.
- Tough, Paul. “What if the Secret to Success Is Failure?” *New York Times Magazine*. NYTimes.com. The New York Times, 1-9. 14 Sept. 2011. Web. 2 Oct. 2011.
- Vida, Judith E. “The Role of Love in the Therapeutic Action of Psychoanalysis” *American Imago*, Vol. 59, No. 4 (2002), 435-445. The Johns Hopkins U. PDF file.
- Weber, Max. “Science as a Vocation.” *Daedalus*, Vol. 87, No. 1, Science and the Modern World View (1958), 111-134. Cambridge: MIT on behalf of American Academy of Arts & Sciences, 1958. Print.
- “When Is A Man Old?” *The Standard, Volume 86*. Standard, Original from the U Michigan, 1920. E-book.
- Whitehead, Alfred North. *Dialogues of Alfred North Whitehead*. Boston: Nonpareil, 2001. Print.
- Whitehead, Alfred North. *Science and the Modern World*. New York: MacMillan, 1962. Print.
- Wicks, Robert J. *Living Simply in an Anxious World*. New York: Paulist, 1998. Print.
- Wilber, Ken. *A Brief History of Everything*. Boston: Shambhala, 2007. Print.
- Wilber, Ken. “Excerpt G: Toward A Comprehensive Theory of Subtle Energies. Part I. Introduction: From the Great Chain of Being to Postmodernism in Three Easy Steps.” *Ken Wilber Online*. Wilber.Shambhala.com. Shambhala. n. pag. 2011. Web. 1 Mar. 2011.

Wilber, Ken. *One Taste: Daily Reflections on Integral Spirituality*. Boston: Shambhala, 2000. Print.

Wilber, Ken. "Sense & Soul: An Integral Spirituality." *Ken Wilber Blog*. KenWilber.com. Ken Wilber. n. pag. 30 Mar. 2007. Web 1 Mar. 2011.

Wilber, Ken. *The Eye of Spirit: An Integral Vision for a World Gone Slightly Mad*. Boston: Shambhala, 2001. Print.

Wilber, Ken. *The Integral Vision: A Very Short Introduction to the Revolutionary Integral Approach to Life, God, the Universe and Everything*. Boston: Shambhala, 2007. Print.

Wilber, Ken. *The Spectrum of Consciousness*. Wheaton: Quest, 1993. Print.

Wilson, Edward O. *Consilience: The Unity of Knowledge*. New York: Vintage, 1999. Print.

Wilson, Edward O. *On Human Nature, Revised Edition*. Cambridge: Harvard U, 2004. Print.

Wilson, Edward O. *The Ants*. Cambridge: Belknap of Harvard U, 1990. Print.

Wittgenstein, Ludwig. *Culture and Value*. Chicago: U Chicago, 1984. Print.

Wittgenstein, Ludwig. *Philosophical Investigation*. Oxford: Blackwell, 2001. E-book.

Wittgenstein, Ludwig. *Tractatus Logico-Philosophicus. Revised Edition*. London: Routledge, 1961. Ebook.

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