

Antioch University

AURA - Antioch University Repository and Archive

Dissertations & Theses

Student & Alumni Scholarship, including
Dissertations & Theses

2009

Holographic Leadership: Leading as a Way of Being

Janet L. Byars

Antioch University - PhD Program in Leadership and Change

Follow this and additional works at: <https://aura.antioch.edu/etds>



Part of the [Cognitive Psychology Commons](#), [Industrial and Organizational Psychology Commons](#), [Leadership Studies Commons](#), [Organizational Behavior and Theory Commons](#), and the [Other Psychology Commons](#)

Recommended Citation

Byars, J. L. (2009). Holographic Leadership: Leading as a Way of Being. <https://aura.antioch.edu/etds/638>

This Dissertation is brought to you for free and open access by the Student & Alumni Scholarship, including Dissertations & Theses at AURA - Antioch University Repository and Archive. It has been accepted for inclusion in Dissertations & Theses by an authorized administrator of AURA - Antioch University Repository and Archive. For more information, please contact hhale@antioch.edu, wmcgrath@antioch.edu.

HOLOGRAPHIC LEADERSHIP: LEADING AS A WAY OF BEING:
HOLOGRAPHIC LEADERSHIP INTEGRATES VALUES-BASED LEADERSHIP INTO A
PRACTICAL UNDERSTANDING OF AN ENERGETIC HOLOGRAPHIC WORLD.

JANET L. BYARS

A DISSERTATION

Submitted to the Ph.D. in Leadership & Change Program
of Antioch University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

October, 2008

This is to certify that the dissertation entitled:

This is to certify that the dissertation entitled:

Holographic Leadership: Leading as a Way of Being:

Holographic Leadership integrates values-based leadership into a practical understanding of an energetic holographic world.

prepared by

Janet L. Byars

is approved in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Leadership and Change.

Approved by:

Chair: Dr. Carolyn Kenny

date

Committee Member: Dr. Mitch Kusy

date

Committee Member: Dr. Rollin McCraty

date

External Reader: Dr. Jonathan Reams

date

Copyright 2008 Janet L. Byars
all rights reserved

Dedication:

To my friends and family who have lovingly held the field for my work.
Thank you for your Joy, Beauty and Grace.

And

To my Mother, who taught me it is the state of mind I choose.

Abstract

Holographic Leadership integrates values-based leadership into an understanding of an energetic holographic world. It is a world where the unseen is the primary influencer, where the smaller is more powerful (Bohm, 1994). I will synthesize many diverse ideas into an exploratory theory that will suggest new insights into sustainable leadership. I will propose a new model of practice from which to work. I suggest that it is through an internal state of physiological coherence and psychological balance that a leader can truly learn to “hold steady” (Heifetz, 1994), creating an intentional holding environment, a coherent group dynamic, which draws forth potentials from the unseen world. My hybrid dissertation marries theoretical suppositions with a model of practice, and is based on my own heuristic knowledge from the business world.

The electronic version of this dissertation is at OhioLink ETD Center, www.ohiolink.edu/etd.

TABLE OF CONTENTS

Abstract	ii
Table of Contents	iii
Table of Figures	v
Prelude: A Story of Power and Possibility	1
Chapter I: An Introduction	20
My Position as a Researcher	23
My Epistemological Framework	30
Methodology	35
Model of Practice	38
Summary and Glossary of Terms.....	38
Chapter II: Intention, Integrity, and the Field of Leadership	45
Introduction	45
From Service to Self-interest and Back Again.....	45
Intention and Integrity.....	49
Field Dynamics of Organizations.....	50
The Self as a Leader and an Agent of Change	52
The Field of Leadership	69
HeartMind of the Leader.....	75
Summary.....	83
Chapter III: Coherence: The Flow of Leadership and Change	85
Introduction	85
Wholeness and Fragmentation	86
Field Dynamics.....	91
The Self as a Leader: The HeartMind of a Leader	101
Physiology of Leadership	105
The Heart Field as a Bridge	111
Out of Chaos: Clear Critical Thinking	116
Intrapersonal Aspects of Leadership.....	119
Intention as an Agent of Change	123
Integrity: The Power of Choice	127
Iteration and Integration	133
Holographic Leadership: Theoretical Propositions	136
Conclusion	139
Chapter IV: A Bridge to the Implicate Order of Leadership.....	143
Introduction	143
Drawing on the HeartMind of the Leader.....	143
Holographic Leadership Model: Intention, Integrity and Integration	146
Holographic Leadership: Implementation Model	149
Wholeness and Awareness.....	151
Alignment.....	152

Clarification of intention and vision.....	152
Self-directed Change Program Beginning with Leaders.....	153
Pre-assessment.....	153
Education and Ttraining.....	154
Holding the Field.....	161
Iterative Acceptance.....	163
Transformation.....	164
Holographic Leadership and Organizational Transformation.....	166
Holographic Leadership and the Heifetz Model.....	169
Summary and Conclusion.....	170
Chapter V: Holographic Leadership and Future Possibilities.....	173
Introduction.....	173
Fast Forward Leadership.....	175
Contributions to Leadership and Change.....	176
Future Possibilities and Research.....	179
Conclusion.....	183
References.....	186

Table of Figures

Figure 2:1. Kegan's orders of consciousness.....	55
Figure 3:1. Love and power as transformers of energy and structure.....	96
Figure 3:2. HeartMind.....	116
Figure 3:3. Map of Scale of Consciousness.	128
Figure 3:4. Levels of Integrity descriptors (Hawkins, 2006).	131
Figure 3:5. A coherent holding environment.....	135
Figure 3:6. Holographic Leadership Theoretical Model.	136
Figure 4:1. Holographic Leadership model for practice.	148
Figure 4:2. Holographic Leadership Implementation Model.	151
Figure 4:3. Activation Grid.....	157
Figure 4:4. BarOn emotional intelligence components.	160

Prelude: A Story of Power and Possibility

This is a story about the Universe; a story about accepting power and recognizing possibility. It is written at the archetypal level where word counts and page numbers have no meaning. It offers a new paradigm for life and for business; one that replaces the tale of fear in which we currently live; one that replaces the Darwinian belief that life is a struggle. Many of you may laugh and think it is a fairytale. That is true, and like most fairytales it is based in Truth.

It is Gertrude Marie's story of transformation. A story about a woman who learns to see, and in so doing discovers a world of beauty and joy. It's a heroine's journey, into the world of chaos and fragmentation, which transforms into color and light.

Once upon a time the stork delivered a baby to the wrong house, only of course, she didn't as there are no accidents. The baby girl was dropped into a family of women. Yes, there was a father to provide and occasionally interact, but otherwise the girls, six to be exact, were dominated by their mother, Rachael.

All of the girls were really powerful and beautiful women, but much of their childhood was focused on survival. They had to face their fears to survive, drawing from within. It was their only choice.

There were many adversities presented for all the girls, but specifically for the fifth girl. She was different, not quite like the rest. Her brain worked in an unusual way. She was creative and bright, but never really learned which was her right, and which was her left.

The 5th girl was also a bit different as she had the capacity to see. She could see patterns and the meaning beneath the surface. She knew the world was actually different than from what most people saw, but she was confused as no one she knew saw as she saw.

As she grew up and moved away she began to play with new and different ways of living. College opened up her world, as she no longer struggled in a fog of negativity. She explored the world of creativity and communication.

Set free from so many limitations she focused on her goals, her degree, and her professional success. She worked hard and did it all right, graduating a semester early. Gertrude began climbing the ladder faster than she ever expected. At 24, she made her professional goal, 6 years early! She was stunned. She was stunned because she hated it.

She had done everything right, played the game, and worked the plan. Gertrude was lost as to what to do. She froze, afraid to move, afraid to make another mistake.

Gertrude was the Creative Director of Pan American Broadcasting. For many years she struggled to understand the corporate mentality. Everyday she went to work, dealing with a reality she did not believe, working in a place she did not belong.

Friday mornings were the worst, because of the weekly leadership meeting. That day was no exception. John Simpson was the Vice President of Sales. He was an idiot and the most narcissistic person she had ever met. He presented the sales plan for the next year. His ideas were based on manipulation and short term goals, but no one else appeared to see this. It would likely increase sales, but in the long term it would lose money and position for the company. Gertrude had a friend who would have seen this too, a companion in the nonsense, but she was on vacation. So Gertrude sighed and counted the minutes until she could go home.

It was Gertrude's job to take the sales plan and create the materials to make it happen. Once again, she was doing the something she did not believe in. Something that she knew was wrong. She knew by now that the world was a reflection of who she was, both personally and in

business. She knew that one's integrity and intentions were the driving force of the Universe. She knew what she was doing did not line up.

She also knew that thinking John was a narcissistic idiot was wrong. She knew that seeing him as an "other" limited her capacity to see the whole. The whole is where the solution to each problem exists. She had been reading about the nature of reality. She had read that in the quantum world wholeness and interconnection were primary, that quantum reality does not divide mind from matter, the observer from the observed, and the subject from the object.

So she understood this process does not have her step out of a situation, to make the outside world wrong. This process had her look inward. She sat pondering the situation, "What does that really mean? How do you actually live like this?"

She left work, confused and frustrated. On her way home, she stopped at her favorite place, Charleston Falls, a beautiful nature preserve; a place free from all the chaos of everyday life. She changed her shoes and began walking into the forest.

In her mind, she was still caught in the mire of illusion and delusion. She struggled with the reality she saw at work. Like walking in a hall of mirrors, constantly hitting the wall at every turn. She was exhausted. Finally she stopped fighting and sat in one place. She surrendered all her pushing and attempting to force reality into her own vision. As she rested, she began to cry.

She knew the Universe was not as she had been told, limited, cold, but she was tired of looking foolish. She was tired of being ridiculed for not playing the game others played. She felt hopeless and tired.

"Was all this effort for nothing? Was I really not going to be able to get it?" She had seen too many glimpses of a Universe of peace and balance to believe it did not exist.

She had shared these visions with others and they laughed. Yet she had seen the miracles of this interconnection so many times. “What was I missing? Why was it so hard to find?” Gertrude sat there for a long time too tired to get up, and too tired to move or try again.

As she stayed quiet the emotions continued to come. Anger, fear, guilt, and shame ran through her. She was washed in the physical reality of each state. She let them come, no longer having the energy to stop them, no longer holding them back. She had looked foolish so many times trying to see this other world that it made no difference if she looked foolish again.

As she rested her breathing became rhythmic and quiet. She felt the rhythm of her breathing and her heart align. She closed her eyes. Her breathing continued to slow, moving smoother and deeper.

She felt it first, a beautiful Light, soft and gentle. It enveloped and filled her with peace. She blinked her eyes to make sure it was really there. Yes it was real, and the forest was bathed in luminous color. Her perception changed. Her exhaustion was gone.

She was filled with joy. She knew the reality of the Truth. She was no longer confused. She had a knowing that there was a way to blend the truth of her heart with truth of her mind. She knew now this was her real work that the position she held was simply a place from which to begin.

Gertrude stood up and began to walk the path. As her eyes were still adjusting she almost stumbled over a dog sitting in the middle of the path. He sat there with his eyes twinkling up at her. “Where did you come from?” Surely she would have noticed him sitting there.

The dog’s tale wagged with joy. He was friendly and clean. He did not appear to be lost. Gertrude checked his collar, David Bohm 937-132-4563. She gave him a loving pat and let him be.

Taking in the beauty and peace of the forest Gertrude continued her walk. She felt lighter and saw the beauty that filled the forest.

The dog followed her. When she arrived at her car, the dog wanted to come with her. She reasoned it would be OK, she would call the owner. She tried for several days and even contacted the Humane Society. No luck, the dog had adopted her.

She began to call him DB for short. He fit into her life. She enjoyed walking with him. It gave her time of peace and quiet. She remembered the unusual Light she had seen and felt. She remembered the sense of knowing, the feeling of peace. The feeling of joy and being connected continued. The weekend flew by, filled with joy and playing with DB.

Unfortunately the frustration returned on Monday as she once again faced the reality of everyday living with the challenges of the corporate world.

She had been to the trainings and seminars on how it was suppose to be. Good leadership is based in appreciation and making a valuable contribution. The days of command and control were supposed to be gone. It is supposed to be a relationship based on influence, people working together in a non-coercive way; one where people could respectfully disagree and work from mutual purposes.

But Gertrude knew this was not the case at Pan American Broadcasting. She knew no matter what the level of competence of the people involved, if trust was lacking nothing would happen. And she knew nothing good was happening.

She remembered reading about Servant Leadership requiring an inward reflection, that problems in the world were viewed as in here, inside her, not out there. This all fit with the quantum view of wholeness and interconnection, but how did this work?

Her job was supposed to be about creating an environment of creativity for her employees, to work with them, to co-create, and bring forth great ideas.

But the organization actually prevented this possibility. It set up directors against each other. It had everybody fighting over the same resources. “How had the sales department become her enemy?” Everyday the reality of Gertrude’s work was a place of chaos and fragmentation, every one pushing and pulling, like a parade of small boys fighting for attention.

When Gertrude left work Monday evening, she was once again exhausted, tired of all the pushing and pulling for power, tired of all the games. As she opened the door to her condo, she was greeted by a wagging tail and joyful eyes. She remembered the weekend, the vision of the light. It had been real! She realized she had a touchstone to this very special event. It had to be true, she had DB!

The rest of the week was lighter. At least Gertrude had a new dog. She still had no response from the owner, and no return call from the Humane Society. DB appeared to be very much at home. He answered to DB and even started sleeping at the end of her bed. Gertrude too adapted to DB. He was her companion and, like most dog owners, started talking to him.

“DB, what is the deal with people? Why do they act like that? How do I even begin to live the vision shown to me in the forest?”

DB just wagged his tail, smiling a dog smile.

Gertrude and DB settled into a routine. Every evening, after greeting DB, she went about her daily living and venting about work. Every evening, DB and Gertrude went for a long walk, many of them in the forest where they had met. There were no other visions, no other unusual events, just an abiding peace and joy, which Gertrude could not explain.

As they were out for these walks the memories of stress faded. The world became more peaceful, her mind clearer. As Gertrude walked, she set an intention to work from what she had learned in the forest, but how, she did not know. She would work from a perspective of wholeness and interconnection. She would work from appreciation. She wondered, “What does that look like?”

She began talking to DB again, “How do I stop myself from reacting to all that I see at work. How can I hold on to the vision as I work around people who would laugh at me on a good day, and purposely sabotage me the rest of the time? How do I actually work from wholeness?”

When they returned home, they settled in for the evening, Gertrude reading in bed, DB lying across the end.

After a bit, she heard a strange voice; “Did you really want to know the answer to all those questions you asked?” Gertrude stopped and listened. She had never heard the neighbors before. She lived in a quiet neighborhood. “Where was the voice coming from?”

She heard it again, “Did you want to know the answer to all the questions you asked, or were you just venting?”

Gertrude listened once again. What was going on?

“Hey, over here. It’s me DB. . . . Did you really want the answers?”

Gertrude stared at DB in disbelief. She had had visions and dreams, but a talking dog! Come on, this was too weird!

With Gertrude’s attention DB began to answer the questions she had vented earlier that day.

“Thought actively participates in forming our perceptions, our sense of meaning, and our daily actions. Our collective thoughts and knowledge have become so automated that we are in

large part controlled by them, with a subsequent loss of authenticity, freedom, and order. Until thought is understood – better yet, more than understood, perceived – it will actually control us; but it will create the impression that it is our servant, that it is just doing what we want it to do.

Thought doesn't know it is doing something, and then it struggles against what it is doing. It doesn't want to know that it is doing it, and struggles against the result trying to avoid those unpleasant results while keeping on with that way of thinking. This is sustained incoherence.

So, whenever we repeat something it gradually becomes a habit, and we get less and less aware of it. If you brush your teeth every morning, you probably hardly notice how you are doing it. It just happens. Our thoughts do the same thing, and so do our feelings. This is a key point.

All these problems, the whole depressing series of them, are the result of the way people have been thinking, but people don't see that. They say, We're just thinking. Out there are the problems. The thinking is telling us about those problems, what they are (Bohm, 1994)."

Gertrude's mind was spinning, "So my thinking is the problem?" She was so stunned by what was happening she could barely think.

DB was calm and matter of fact in his response, "Yes, and the incoherence that it creates. Thought produces experiences without our being aware that they are produced by thought. That's one of the basic mistakes. Thought produces something and says, 'I didn't produce it, it's really there.' (Bohm, 1994, p. 52)"

Gertrude was starting to regain some composure. She knew she had better write this down or she would never remember. It seemed really important, but she was not sure what it all meant.

DB lay back down at the end of the bed. He could see she had had enough.

Gertrude stared off into space. She had heard when the student is ready the teacher appears, but this . . . Gertrude sat shaking her head.

She finally fell into a deep sleep.

Gertrude was excited and a little scared by the conversation she had with DB last night. She needed to talk. There was one person at Pan American, who she could really trust, that was Jeannine the Director of Finance. They had been friends for many years. She had heard all of Gertrude's crazy ideas about the Universe and even read some of the same books. She would be the only person Gertrude could tell about the phenomenal events of the last ten days.

Jeannine shared Gertrude's view of the Universe, as whole and connected. She too had learned the value of good leadership. She knew the importance of listening for essence. Gertrude knew she would hear her out and not judge her.

Yesterday was Jeannine's first day back from vacation. Gertrude found her buried under a pile of work dumped on her while she was gone. They agreed to meet after work. Gertrude could not wait; she had so much to share.

At 5:05 pm Gertrude left her office and met Jeannine at hers. Gertrude mentioned she had found a dog, and Jeannine agreed to follow her home so she could let DB out before they had dinner.

DB greeted them both with a wagging tale and joyful eyes. Jeannine liked him right away. Jeannine, Gertrude and DB started out on a walk, shorter than usual as Gertrude could not wait to tell Jeannine the whole story.

Gertrude started by sharing the vision in the forest and her intention to work from the wholeness and interconnection she now knew was real. Jeannine listened carefully. She too had

had some unusual experiences. She could see the emotion in Gertrude's eyes as she shared the joy and peace she had felt in the forest. Jeannine began to feel it too.

After the walk, Gertrude and Jeannine ordered a pizza and opened a bottle of wine. Sitting in Gertrude's living room, she shared the weirdest part of all. Gertrude had written some notes of what DB had told her so she would not forget. She read those to Jeannine.

After hearing the part where DB spoke to Gertrude, Jeannine was perplexed. She began to look at what had been said, before what had happened. She had heard something like this before in a leadership seminar on learning organizations. They referred to it as mental models, ways of thinking that limited clear perception. So at least the ideas that DB said were normal. Jeannine also liked Gertrude's intention to work from wholeness and interconnection. They agreed to do this together, to help each other hold a clear vision, in spite of all that they saw and felt at work.

She didn't understand the idea of talking to a dog, but would let that be. DB was certainly not talking now.

Jeannine and Gertrude agreed to meet twice a week for breakfast to hold a clear vision to strengthen their intention, to talk about what they were learning, and most importantly, to figure out how they could do this within the lunacy of Pan American.

Gertrude felt even more happiness and joy. She now had a plan! She had a partner to work with. She had a way to step out of the madness. She did not know how long it would take, but she knew she had started the journey.

They met on Tuesday and Friday mornings. Fridays, especially the first one, focused on the leadership meeting, and their strategy for staying in coherence and wholeness. They would have to give up the griping about the others. This would take a great deal of attention and

intention. It was easier to complain. Tuesdays were mostly about what they had read, what they had learned over the last week.

The next Tuesday, Jeannine talked about a book she had read on leadership and the new science, in it the author talked about organizational fields that interconnect the group. Jeannine summarized, “The author defines these fields as unseen energy, stating that an organization is a field, a collection of people, choices, solutions, and problems flowing around creating a field of energy. She states that these fields can influence behavior, can cohere and organize separate events (Wheatley, 1994).”

This certainly made sense. How else could such unproductive behavior appear normal.

Jeannine read from the book, something similar to what Gertrude has said from her conversation with DB.

The more present and aware we are as individuals and as organizations, the more choices we create. As awareness increases, we can engage with more possibilities. We are no longer held prisoner by habits, unexamined thoughts, or information at which we refuse to look.

Every act of observation loses more information than it gains. Whatever we decide to notice blinds us to other possibilities. In directing our attention to certain things, we lose awareness of everything else. We collapse the world of possibilities into a narrow band of observation. (Wheatley and Kellner-Rogers, 1999, p, 26)

Gertrude and Jeannine’s conversation had to come to an abrupt end as work impinged on their peaceful reverie; but their resolve and their intention were gaining strength. Both women were now feeling greater peace and clarity.

As Gertrude drove home she reviewed all the ideas discussed with Jeannie. This process of discovery had become very exciting . . . but, a conversation with DB? “Did her dog really talk to her? Maybe it was a dream?”

With her meetings with Jeanine and her walks with DB, Gertrude’s life and work felt lighter. She knew nothing had changed, except of course, her perception, and the change was

really helping. The stress and dread she used to feel going into work was almost gone. Her ideas were more creative, her thoughts more fluid. Even her staff had begun to notice.

She continued her walks with DB in the forest, and her occasional venting.

Late one evening she heard the voice once again.

“It looks like you and Jeannine are doing well with understanding your perceptions as an extension of your thoughts. So let’s talk some more about this.”

Gertrude stared at DB.

“Thought is a system. That system not only includes thoughts, it includes feelings, it includes that 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. So we have this system of thought. Now this system has a fault in it – a systemic fault. It’s not a fault here, or a fault there, but it is a fault that is all throughout the system. We have systemic fault; and you can see that this is what has been going on in all these problems of the world – such problems that the fragmentation of nations has produced. In dealing with it, we use the same kind of fragmentary thought that produced the problem, just a somewhat different version of it.

This whole system works by a set of reflexes. It is a basic form of conditioning – to repeat something quite often, leaves a mark in the system, in the nerves, and then the reflex has been altered.

These conditioned reflexes can affect feelings. These feelings trigger chemical reactions in the body, that effect thoughts, then one thought leads to another and you get a chain reaction. We think we are controlling our thoughts and producing thoughts, but this is generally not so. The vast part of our thoughts just comes out of the reflex. So consider that this whole system, which we call thought, works as a system of reflexes.

Now these reflexes can serve us if we are not too ridged, but they don't work if they are incoherent. Remember, the key point is to break the old mold of thought. From there it is not very difficult to go to a new thought. Newton was able to ask the question which he wasn't supposed to ask. Then, the pattern of thinking was broken. Your questions contain hidden assumptions, and that is the point. Therefore, when you question the question itself, you may find that you are questioning a deeper assumption non-verbally. To question the question eventually has to be a non-verbal act which you can't describe. The first flash of insight is non-verbal (Bohm, 1994).”

DB stopped talking but Gertrude did not notice she was lost in her thoughts.

Gertrude knew this is what she had experienced in the forest, a flash of insight, something beyond words. When she was in the forest, she had been so upset she let everything go, and the light filled her and she knew the wholeness without any words to describe it.

This letting go of what she had expected appears to have been a key to seeing the wholeness. She had expected the world to be chaos and fragmented so she kept seeing this?

Gertrude reviewed and tried to take in what she had heard. Thought was a system, with a fault in it. We have to learn to observe, to step back and see when we are really thinking and when we are really just reacting. Because perception follows thought, we will see what we think about.

These reflexes were biochemical so they in turn effect the body and one's feelings. Wow, no wonder it all seemed so real! We think a thought and the body creates the matching feeling. So, to really see one must break the reflex.

The first step would be, to manage the reflex, and then to somehow watch and correct our thoughts. Also, to remember that every thought we think is not real, just because we think it is.

Gertrude remembered hearing about a concept called a meme, where through repetition something now appears true. This must be what happens with thought. We culturally decide what something means and repeat it until it appears to be a truth. So this is actually the habit we need to step back from. Gertrude went to sleep once again with her head spinning.

The next morning Gertrude remembered she had read about some techniques that worked to reset the nervous system and helped balance out the chemical responses of the body. This seemed to be exactly what she needed to break the biochemical reflexes. She couldn't wait to talk to Jeannine. They had only been working together on this intention for a month, and already so many things seemed to be falling into place. It was looking like there was something to this thought as a perception thing. None of the ideas were really that new; she had just never put them together like this before.

At Friday's breakfast, both women were full of excitement and information they had learned in the last few days. Gertrude shared with Jeannine what she had learned from DB. "Our thoughts are a system that works by a set of reflexes. That it is a form of conditioning, and repeating something quite often, leaves a mark in the system, in the nerves, and then the reflex has been altered (Bohm, 1994)."

Jeannine had been reading more about fields and their dynamics. "The field of a business is created by the iteration, by the totality of all the thoughts, choices, and actions of its members. It is operating from wholeness that will transform leaders and their organizations. It offers a sense of 'knowingness,' a sense of connected wisdom, confidence, and clarity of action.

The Machiavelli mental model is an example of such a field. It operates at a frequency (attractor pattern) in a business. These frequencies are dynamic. They organize space-time. One

has the opportunity to pick this frequency, or others like the frequency of servant, values-based leadership.”

Both remembered reading the information about the emotional refocusing and restructuring techniques, and agreed to find out where they could learn it. It seemed like the best way to break the patterns of limiting thoughts that was running amuck in their minds.

This was all so exciting, since they had agreed to meet and work with the intention of wholeness the flood gates had opened. So many things appeared to be connecting.

A few hours after breakfast both women were in the leadership meeting. There was already a noticeable difference in how they responded and participated.

The undertone of anger and hostility was gone. Both were genuinely interested in doing their best and supporting the whole of the organization. Even when the shots came, and the nastiness filled the room both Gertrude and Jeannine stayed true to their intention of wholeness. This process was getting easier the more they practiced.

The change in their responses was also beginning to get some attention from some of the other directors, but they had agreed they would keep it quiet until they understood better what was happening. In the hall, after the meeting, the COO came up to them and complemented them on their positive participation in the meeting. Gertrude and Jeannine both smiled and thanked him. It was working!

Time flew by, the positive results built. Yes, there were times when both of them fell into the nonsense, but it did not last. As soon as they remembered they helped pull each other out of the negativity. They refused to see it as the truth.

Gertrude and Jeannine worked to clear their own limited thoughts, and their reflexes that held them in place. Their intention had actually only been for work, but it was now positively

effecting all areas of their lives. They learned the emotional restructuring techniques and the importance of coherence and clear critical thinking. This state of coherence made letting go of the negativity so much easier. It seemed that the uncontrollable was becoming controllable by controlling their internal state with what DB had called 'biochemical reflexes.'

It seemed that thought is what breaks up the perception of wholeness. The more fragmented the thoughts the more fragmented the perception. If the leader is in a coherent state she offers coherence to her employees. If she is out of coherence she significantly contributes to the employee's chaos. With coherence all are able to align with the wholeness together. The primary contribution made by each and every person is their presence, the frequency from which they operate.

So, basically they learned that this process is one of integration; coherence in one's physiology brings balance to one's feelings, teaches a way to override the biochemical responses of our complex emotional reflexes, and integrate one's abstract mental capacities with one's heart.

Gertrude and Jeannie had begun to call this the HeartMind. Physiological coherence and psychological integration increases capacity for trust, ethical choices, flexibility, openness and reduced reactivity.

Gertrude and Jeannine were happy that this does not require a leader to clear all their limiting beliefs, prejudice or anger before they began. It only requires them to withdraw the value placed in those beliefs, and to withdraw this attention every time they became aware of their limited beliefs.

They had not yet shared the concept with the leadership team. They both instinctively knew that modeling it would be more important than teaching such an abstract concept. They did not want to invite an attack or unnecessary ridicule.

To celebrate Gertrude and Jeannine left work earlier than usual and went for dinner and a drink. Both were full of enthusiasm and awe of what they had done so far. It was so much easier than either had ever expected. With the simple choice to work from the intention of wholeness and appreciation, significant changes occurred in their perceptions of reality and their ability to respond to the events presented.

This whole process offered them the reflective space necessary for clear reality testing, improved awareness of their actions and the consequences of those behaviors. It translated into the capacity to take responsibility even at the most difficult times by enabling each of them to focus on what was important and not get lost in emotional reactions.

They had learned that trying to figure everything out in their heads alone resulted in a lot of incoherent mental pushing and pulling. Creating a joint venture between one's heart and one's head creates alignment and puts power behind the chosen goals. Getting one's head in sync with one's heart and harnessing the power of coherence gives the energy efficiency needed to achieve changes that have not been possible before.

After dinner they drove back to Gertrude's house and took DB for a walk. Gertrude could feel the beauty in the forest as it had been the night of the vision. She could almost see the luminous light. They walked happily down the path. DB stayed unusually close to the women. He appeared to be trying to get Jeannine's attention. Jeannine did not notice.

“Hey Gertrude, why don’t you use your middle name? The name Marie has such color and light.”

Marie smiled and agreed. She had felt a change in her; she had a new way of being. She had become a new person.

Jeannine and Marie continued down the path into the forest. Then Marie heard it again; Jeannine too.

“You got it! People either do or don’t you know!”

It was DB. He too seemed to feel they had something to celebrate.

Marie went to bed that night feeling deeply connected to the Universe. In this deep sleep she dreamed.

“The Universe is Love. At our birth, we are given a prepared canvas on which to paint our dreams, our world. We color our world based on the emotional frequencies we pick. We paint our world first by which our parents taught us. We can paint our whole lives in black and feel oppressed, or we can paint in the most beautiful rainbow of colors, yellows, purples, and reds and be blessed by the joy of their presence.

The canvas is prepared by our birth, through our parents, and the circumstances of our life. It is the color and light with which we paint, the brilliance and frequency we choose which takes us from the moment of entry to where we are now. It is these choices that shape our world.”

Many of us choose to surround ourselves with others who see the world through the same lens, and paint from the same pallet. This allows us to affirm that what we have chosen is right. Of course our choice is right, as we are free to choose any color, any frequency, and any emotion. The question is: “Is this the color? Is this the life I want?”

By releasing the attachment to the frequency of our emotions – to the meaning we have placed on the things and events around us, we are free to recognize the perfection of what is; and we are free to create whatever we would like from here. To see the Love that stands behind all that is, is the freedom we seek, and provides us the power from which to draw all that we wish to see on our canvas of life. It is here we become artists of Color and Light.

Marie woke up with a deep sense of joy. She was beginning to see the difference between essence and her perception. She began to see the world differently. Accepting her place in this system is a key to helping change it. Marie was accepting her power. True power comes from one's internal capacities and seeing the wholeness of all that exists. There is no separation from ideas and intent, so the wholeness that is the Universe is brought forth with the intention of positive change. But without recognizing the entire process, the wholeness involved, the energy dynamic is often cut off.

Marie realized she had struggled because she saw the world differently. This was a great blessing, for now she knew how to see the truth. She began to use her knowledge and her visions together. She began to release her doubt in herself and her place in the world. She began to walk the path of beauty.

Marie was born into a family so focused on the external world that they missed the Universe. She discovered a key to the Universe. She knew her place. She was an artist unto this world. She was here to cast perceptions into a new light, to transform limitations.

Chapter I: An Introduction

Why are some organizations mired in internal strife while others inspire and challenge their members to creativity and growth? How does leadership influence organizational culture? Are inspirational leaders born that way or can they be taught? These are not new questions but, to date, we struggle for the answers. My dissertation explores from a theoretical base how we can integrate the contributions of the new science into leadership and change. My dissertation pulls together scientific and organizational research into a new theoretical model that addresses these questions and further provides a model of practice from which to work a step-by-step process for improving organizational performance.

My basic premise is that leadership and organizational change are a function of field dynamics, an energetic holding environment of a group, and the intrapersonal -- physiological and psychological functioning of the leader(s); that sustainable leadership is achieved by cultivating an orderly and consistent energetic field dynamic that coheres the whole. I operate from a stance of wholeness, an energetic interconnected field, which is more than the sum of the parts (Bohm, 1980). Embedded within this stance is that we are part of the whole. We are not outside of our organizations looking in (Bohm, 1980; Zukav, 1979).

As a business consultant, coach and clinical counselor I have spent many years addressing the stress and fragmentation that is endemic in the culture of business and organizations. Fragmentation impairs our capacity for clear, critical thinking and creativity (Bohm, 1980; Childre & Cryer, 2004; Lovelace, Manz, & Alves, 2007). Thus, the focus of my research and the leadership model presented herein is the coherence necessary to bring our work environments to a place that supports a clear, creative state.

I call my theoretical construct Holographic Leadership. In it I weave together many diverse areas of knowledge, extending from creativity to science. I build on Bradley's work of coherent field dynamics, the power and affective energy of a group (Bradley, 1987, 2002), with Heifetz (1994) and Greenleaf's (1977) work on positive, values-based leadership and change. I introduce the HeartMind of a leader as a point of synchronization with the field dynamics of the group cohering the holding environment for an organization. I emphasize that the intrapersonal functioning of the leader is critical to the process of both leadership and change. My thesis suggests that a coherent HeartMind facilitates the creation of a coherent holding environment for an organization.

I submit the degree to which you manage yourself is the degree to which you can bring forth a coherent, intrapersonal "Flow state" (Csikszentmihalyi, 1990) for yourself and your organization. Our internal, physical state can be in coherence or out of coherence depending on our mental/emotional state. I build on Csikszentmihalyi's Flow theory. Flow theory was introduced by Csikszentmihalyi as an extension of his work on creativity. He discusses the importance of the flow state as an optimal state of intrapersonal functioning. It is this state that facilitates both creativity and innovation within an individual and within a group.

A state of coherence is significant in our capacity to function, think, remain calm, and have increased physical stamina (Childre & Martin, 1999). It is from the perspective of wholeness (Bohm, 1980), and the capacity for intrapersonal coherence, that allows each of us to stay in a problem longer, to see and manage more of the elements of a problem, and to see the solutions that exist within the whole (Childre & Cryer, 2004; Heifetz, 1994; Wheatley, 2005). This is the basis of my exploratory theory, the capacity to physically and emotionally "hold

steady” (Heifetz, 1994), and to move into a state of flow (Csikszentmihalyi, 1990) while looking for solutions to constant new problems that are generated in permanent white water (Vaill, 1996).

I also draw upon a great body of previous research on how the attention and intention of leaders shapes organizations (Heifetz, 1994; Lewin, 1951; Tiller, 1997; Tiller & Dibble, 2007; Tiller, Dibble, & Kohane, 2001; Tiller, Dibble, Nunley, & Shealy, 2004a; Tiller, Dibble, Nunley, & Shealy, 2004b; Tiller, Dibble, Orlando, Migli, Raiteri, & Oca, 2005; Weber, 1949; Wheatley, 1994; Zukav, 1989). I focus on the intrapersonal aspects of leadership, the physiological and psychological states necessary for a transformational shift (Burns, 1978; Kegan, 1982, 1994; Maslow, 1998; Maslow, Stephens, & Heil, 1998).

My theoretical model offers that physiological coherence and level of integrity are highly correlated. Working from guilt, anger, greed, or pride is inconsistent with a state of integrity (Hawkins, 1995, 2002). I suggest that the level of coherence and integrity of the leaders has a direct bearing on the conditions within an organization.

My proposed model of practice for leadership will work from an internal locus of control (Adeyemi-Bello, 2003; Howell & Avolio, 1993), self responsible, self-motivated, emotionally balanced, emotionally intelligent (Childre & Cryer, 2004; Childre & Martin, 1999; Childre & McCraty, 2003; Goleman, 1997, 2000; Stein & Book, 2000). I hope this work will become a practical way of teaching what Csikszentmihalyi (1990) calls Flow and Scharmer (2007) calls Presencing. “Presencing is a movement where we approach our self *from the emerging future*” (Scharmer, 2007, p. 163).

Csikszentmihalyi’s flow state allows for the shift necessary for a higher order of leadership (Csikszentmihalyi, 1990; Kegan, 1982, 1994; Maslow, 1998; Maslow et al., 1998). Csikszentmihalyi (1990, 2003) has spent a great deal of his professional focus attempting to

understand how this flow state emerges. He has described it from an external perspective, but was less clear from an internal perspective. His work clearly indicates that this state can emerge naturally. What has been elusive is how it emerges. My work suggests that this natural emergence can be facilitated from a state of psychological balance and physiological coherence (Childre & Cryer, 2004; Childre & Martin, 1999; Childre & McCraty, 2003), and the path to achieving this coherence can be taught.

My Position as a Researcher

Over the course of the last 30 years I made a polar shift in the views and understanding from which I present here. I began my college education very much as an empiricist. If I could not see it, it did not exist. I have traveled a long journey of self-awareness during this time. I have been educated in both subjective and objective aspects of our world. I have had many transformational shifts and moments of insight which have moved my focus into the domain of potential (Bradley, 1987).

I began embedded in the culture of “physical reality,” seeing made it real. Through the years this view became more objective and the awareness of field dynamics became more prominent in my world view. These ideas have presented themselves to me over the years. I have learned to “see” the energy dynamics discuss in Chapter III. Not in the hallucinatory meaning of that word but in a knowing, like a physician of many years who can feel a tumor and know whether it is cancer. Writing this dissertation has had me examine my embeddedness in the field dynamics, which I discuss as the basis of Holographic Leadership. I now see physical reality embedded in the energetic nature of reality, a continuum of energy and matter. My work here attempts to integrate this view in a practical and meaningful way.

My dissertation offers an objective linear explanation of a subjective nonlinear reality and then discusses how they intersect and interact. I take a broad perspective, a macro perspective, of how a field of leadership affects a group, much like the behavior of an iron filing within a magnetic field (Hawkins, 2002; Kaplan, 1998). I present ideas that suggest that this field of leadership defines the culture and the holding environment of an organization. The micro perspective is the connection to the field that comes from our own internal functioning. The HeartMind of the leader, the internal, intrapersonal functioning, physiological and psychological, becomes primary in consciously engaging the field of the organization. My thesis suggests that our intrapersonal functioning intersecting the field, the micro intersecting the macro, becomes the basis of leadership in an energetic, emergent world.

It is my intention to bring the subjective and objective into relationship to each other as I have done in my own life. I build on Thomas Kuhn's concept of a paradigm shift. Paradigm shifts upset the balance of the current interactions of a group or field of study (Kuhn, 1986).

My exploratory theory/model of practice joins a shift that began in the world of science in 1927, the Copenhagen Interpretation of Quantum Mechanics (Zukav, 1979). It will work from an understanding of the universe that presupposes wholeness and interconnection. This understanding has grown and developed in many ways over the last 80 years.

Creating exploratory theory is a form of making meaning. It offers a new view of the world. Kaplan states that "Theories put things known into a system" (Kaplan, 1998, p. 302). He discusses theory as "not just the discovery of a hidden fact; the theory is a way of looking at the facts, of organizing and representing them" (Kaplan, 1998, p. 309).

Kaplan (1998) stresses that a new theory adds some knowledge and transforms what was previously known, clarifies it and gives it new meaning. I focus on offering new meaning to

knowledge that exists, theoretical propositions that are drawn together to offer a new way of being in our organizations.

In summary, Kaplan (1998) sees theory as providing the ground for recognizing significant patterns that make up new theory. That is an intention of my work, to look at underlying patterns, and to integrate many diverse areas of knowledge.

My theoretical propositions and model of practice are based on a phenomenological experience of the universe, both in its creation and in its expression of emergent knowledge. Phenomenology focuses on our understanding of the subjective and personal experience we each have (Bentz & Shapiro, 1998; Kenny, 1989). This personal subjective experience has been central to my creative process and to the present work. It is through the subjective experience, a process of emergence, that insight, intuition, and creativity are found. It is here that I hope to find the innovation that is needed in business today.

My dissertation builds on contemporary understandings of what constitutes knowledge. Jarvis (1999) discusses his concept of tacit knowledge which appears to be the closest to emergent knowledge.

Tacit knowledge is learned from experience, either preconscious – that is, without having entered the conscious mind – or consciously, and has been forgotten or even suppressed. . . . Through learning from practical experience, practitioners take the content of what they are taught and what they acquire in practice, and they build their own theory. (pp. 48-49)

Emergent knowledge includes tacit knowledge, but is sourced from deeper within the whole; it allows us to draw on the energetic whole of the group for creativity and insight.

I have both training and experience in the creative process, and also the clinical aspects of how the mind works. It is this training and experience that has shaped my work, shifting back and forth between these two views, subjective and objective, until they have merged. This

experience has helped me become more aware and able to “describe the knowing,” (Jarvis, 1999) that is contained in this dissertation. My experience and training have offered both subjective and objective knowledge that has been combined in my reflective theory building process.

Schön (1995) refers to tacit knowledge as “knowing-in-action.” He suggests that “such knowing-in-action makes up the great bulk of what we know how to do in everyday and in professional life. It is what gets us through the day” (p. 5). It is my knowing in action that is the basis of my work. It encompasses and extends beyond what Jarvis (1999) and Schön (1995) consider practical knowledge. I add to their understanding, a quantum-holographic whole, where information is embedded, much like Kegan’s (1982) cultures of embeddedness. A quantum-holographic whole allows for knowledge that is beyond our individual self. Physiological coherence allows for higher states of creativity and insight (Childre & Cryer, 2004; Childre & Martin, 1999). Together the field of information and the internal state of physiological coherence offers a greater capacity for emergent knowledge, creativity and insight.

Emergent knowledge is the insight and creativity that comes to each of us as we release our frantic thoughts and hold a clear state of coherence. For emergent knowledge to be considered, an energetic view of reality is presupposed. My dissertation refers to a reality that suggests a connection and awareness beyond the limits of our current empirical model of business practice.

My dissertation has a base within the positivistic world. It will use many positivistic-based research studies. This dissertation takes “the knowledge, consisting primarily of facts, derived from observation, taken into sciences organized according to theories formulated as general laws” (Bentz & Shapiro, 1998, p. 177), and expands this set of concepts into the energetic whole.

As a cognitive-behavioral therapist for over 15 years, I am aware of how our perceptions shape our reality, that in changing our perception, we change our experience of the world. This process discussed within the epistemological framework is integral to my theoretical stance.

As a result, hermeneutics also becomes primary in my theoretical approach. My process involves looking at the meaning we have given different experiences and looking again, and at times, changing our perspective. This process of looking for meaning, normally in the written word, is expanded to the many ways we have made meaning. It is also the process of making our subjective views objective, which is significant to my work.

Carolyn Kenny (1989) offers a similar view of phenomenology and hermeneutics. In her concept, the field of play, she discusses the importance of seeking discovery and essence in the human experience. In fact, it is in discovery that we find the truth, and that links us back to our own creativity and experience. This is the heuristic frame from which I am working, seeking an internal truth to discover new ways to lead organizations.

I hope that my model of practice offers to the world of business a way to harvest our own phenomenological experiences into useable innovative ideas, and help leaders and organizations move into sustainable, positive business environments. The states of physiological coherence and psychological integration are necessary to be able to distinguish these creative ideas from the backdrop of permanent white water (Vaill, 1996). One of my presuppositions is that the solutions for our current state of business are available through the quantum-holographic field. What we appear to still need is an access point, a way to clear our perception, and a willingness to see possible solutions.

Another underlying assumption within my exploratory theory/model of practice is that the world is not random. It is in fact an orderly field dynamic (Bohm, 1980; Bradley, 1987, 2002;

Harung, 1999; Sheldrake, 1995; Stapp, 2007; Tiller, 1997; Wheatley, 1994). This is part of the transformational change I discussed above. I assume a physical reality and a projected construction on which we at look and call “real.” This projected construction is how we have made meaning. By assuming what we think is real we have limited our perception (Bohm, 1980, 1994; Senge, 1994; Wheatley, 1994).

Both quantum-holographic field theory and cognitive-behavioral therapy suggests our capacity for clear thinking significantly affects our worldview, our capacity to see problems clearly and to solve them (Bohm, 1980; Ellis and Harper, 1997; Pribram, 1986). My exploratory theory includes both of these perspectives; the quantum-holographic field dynamic as an overarching perspective of wholeness, and cognitive-behavioral as a practical exercise to remove our barriers to wholeness.

This is in line with social construction theory. A social constructionist seeks to increase power of perception and understanding as an end in itself, whether it is rooted in interpretive, explanatory or emancipatory objectives (Torraco, 2002). I, too, seek to increase our power of perception and understanding from an interpretive and explanatory objective, as a point of departure, leading to new model of business practice.

I emphasize the value of suspending our beliefs (Bohm, 1994; Scharmer, 2007; Senge, Scharmer, Jaworski, & Flowers, 2004) in order to increase our perceptions of possibilities. This implies that there is something we project onto and something beneath that projection. Understanding how our own fragmentation (Bohm, 1980, 1994; Wheatley, 1994) and mental models (Ellis & Harper, 1997; Senge, 1994; Senge et al., 2004) affect our perception of reality is an important component to my model of practice. I offer a broader view of our world and the

nature of reality than is normally accepted. I offer a way for each person to be more conscious in how they engage.

My theoretical perspective with an energetic basis is postmodern. “The postmodern tends to be characterized by an eclecticism of styles, combining forms from different eras and geographical locations, which at prior times would have been thought to be incompatible” (Bentz & Shapiro, 1998, p. 172). I am combining paradigms of thought that are traditionally seen as incompatible. So this part of the definition fits with my perspective of integrating the subjective with the objective real world, the quantum with everyday world of work.

Kegan (1994) offers a broader perspective of postmodernism, which is more in line with my use here.

I am going to suggest that what we call ‘postmodernism’ is not just a different way of thinking, it is identifiable on the continuum of the evolution of consciousness; that the different ‘strand’ or ‘faces’ of postmodernism others have identified correspond to slightly different places on this continuum; that what postmodernism is ‘post’ to is the fourth order of consciousness. (p. 317)

I explore these orders of consciousness in Chapter II, as they relate to our capacity for leadership and recreating our organizations.

Postmodernism has a component that suggests, “the human identity or self is seen as a fictional construct, and indeed fact and fiction are indistinguishable,” (Bentz & Shapiro, 1998, p. 172) which does not fit my perspective. Clearly, our own self-perception can become distorted and fictionalized; this is the reason for reality testing to be a construct of my theoretical proposition, but in my view, our self, our conscious awareness, very much exists.

I illustrate a way to generate more ideal conditions for business and draw forth probabilities - the ability to generate creative, innovative holding environments for our organizations. These conditions are aligned with outcomes, the self-chosen intention of the

organization. It is a process of drawing forth, through the use of intention, and integrity that creates conditions aligned with the desired result. I am not suggesting that I present the definitive explanation of reality, only that there is so much more to this than we currently know.

My Epistemological Framework

Both objective and subjective knowledge is valued in my work; this is the intent of introducing concepts such as emergent knowledge. As in the other areas discussed in this chapter I see knowledge as a continuum, like a field of information between potential and structure (Bradley, 1987). It is my experience that emergent ideas can lead to tangible realities; this is the work of an artist. My epistemological framework is the quantum-holographic field of information.

My contribution is the work of a “practitioner-researcher” (Jarvis, 1999), shaped by my own experiences and training as an artist and as a clinician. “Through learning from practical experience, practitioners take the content of what they are taught and what they acquire in practice, and they build their own theory. This theory is pragmatic, necessarily dynamic, and relative to the practice situation” (p. 49). I offer an exploratory theory that attempts to offer what Jarvis suggests. It is the culmination of my personal and professional experiences, subjective and objective.

For me, the creative process of problem solving is very different from that of the left-brain, analytical, logical process. In the world of fine arts I was trained to take in as much as possible to find the best solution, the most creative idea.

In the world of fine arts emergence and insight are very much known and valued. Emergence does not need to be explained to an artist. From a creative perspective, emergence is

the process of considering all that is possible and allowing inspiration, the highest and best to come forth. My work here is a process of emergence.

My clinical side has lent itself very easily to leadership and change as much of the work has a psychological background. My clinical training has also facilitated my ability to see patterns in individuals as well as in groups. Seeing patterns in a group for me is an extension of both my clinical and creative training, each from very different perspectives. It is the process of seeing and working with patterns that is at the core of my present work. Many of the problems of business have been around for a long time and are repeated in many different types of organizations. Bohm, (1994) would call them reflexes. So my hope is that the model I propose, grounded in strong theoretical principles, will offer a way of looking at these problems with more breadth and depth.

The quantum-holographic view challenges the Cartesian, dualistic nature of the universe.

Pribram (1986) presents this point as follows:

Matter is constituted of energy, which in several forms interacts to produce that which we normally experience in ordinary perception. Normal experience is characterized by Euclidean geometry and Newtonian mechanics. Thus, the material nature of matter is limited to the ordinary world of experience, unless one wants to adopt the bias that energy is material because it can be converted to matter as indicated by Einstein's equations, $E = mc^2$. But then why would we have to call such a transformation a conversion? Does not the materialist bias cloud rather than clarify the fact that, as yet, we do not know how to properly characterize such energy forms? (p. 211)

Pribram (1986) offers an expanded view of the nature of matter, and questions our limited view of the ordinary world. He uses "transformation" to describe the process of emergence, the transition from energy to matter, and matter to energy (Bar-Yam, 2004). It is from this understanding of an interconnected whole, a quantum-holographic field (Bradley, 1987, 2002, 2006) that emergent ideas come. Ideas do not separate from the whole; they are

simply brought into relief due to the nature of our perception. Focusing on the fragrance of a rose, does not take away from its full expression.

The concept of perception framing our experience is also a basic premise of my worldview. This comes directly from my clinical training and experience. I have seen such a process of reframing, or disputing cognitive distortions (Dyer, 2001, 2004; Ellis & Harper, 1997) significantly change people's lives. We project meaning onto events, people, and things, then respond to it as though it were the Truth.

Bohm (1990) developed an understanding of the universe that includes an implicate order. "The essential feature of this idea was that the whole universe is in some way enfolded in everything and that each thing is enfolded in the whole" (Bohm, 1990, p. 273).

Bohm (1980) states,

This new form of insight can perhaps best be called Undivided Wholeness in Flowing Movement. This view implies that flow is, in some sense, prior to that of the 'things' that can be seen to form and dissolve in this flow. One can perhaps illustrate what is meant here by considering 'stream of consciousness.' This flux of awareness is not precisely definable, and yet it is evidently prior to the definable forms of thoughts and ideas which can be seen to form and dissolve in the flux, like ripples, waves, and vortices in a flowing stream. (p. 14)

Bohm (1990) in a later work began to refer to the inclusive, interconnecting field as the holomovement. For my work I prefer his earlier description, an "Undivided Wholeness in Flowing Movement" (Bohm, 1980). The principle of wholeness as primary is important to my epistemological frame, theoretical propositions, and model of practice. Reams and Roy (2007) shares this view of wholeness.

If we start with an assumption of wholeness, if we engage in inquiry with a view from wholeness, then we ask different questions. Rather than looking for the causes of an assumed pathology, we might look for the processes that are responsible for laying down the categories of division and separation in each occasion of cognition. If we can

understand this process at a very deep level, then we might be able to intentionally shift our awareness from the local and the particular, to the non-local, atemporal and universal. (p. 9)

Bradley (2002) offers this perspective. “The principle of holographic organization is based on a field concept of order, in which information about the organization of a system as a whole is enfolded into the field and distributed to all parts.” (p. 10) Holographic organization of the universe is present always, everywhere. Yet, “conventionally we seem to be locked into the categories of thought that constitute a fragmented perspective – a view which is limited by the particulars that define it – a separated individual observer, a discrete here and now” (Reams & Roy, 2007, p.9).

Karl Pribram (1986) also offers an interesting comparison of our traditional reductive materialism view with a phenomenological view.

Looking upward from one’s experiences involves validating the experience with that of others. Experienced ‘phenomena’ are described and compared. Emphasis is on the existence of the experience per se, its existential nature, and when precision is attempted the emphasis is on the structural relationships among phenomena. Consensual validation, enactment, and structural analysis of relationships constitute the tool of enquiry, not separation into parts causally related to one another as in the reductive sciences. Thus, the language of phenomenology, existentialism and structuralism is ‘mental’ because it is experience per se that constitutes the focus of interest.

Recognition of the procedural difference that is responsible for dualism in the ordinary world of experience allows one to transcend this dualism without denying its usefulness to deal with the problems of that ordinary world. I propose dualism can be transcended by carefully combining techniques and results in both the reductive and phenomenal approaches to enquiry. (p. 211)

Once again a transcendent view of wholeness is integral to how we can experience the world and offer a new paradigm of leadership. David Bohm states that: a “new way of thinking, consistent with modern physics does not divide mind from matter, the observer from the observed, the subject from the object” (Bohm, 1994, p. 272). In addition, Bohm states,

All of this can be summed up in terms of a new notion of quantum wholeness, which implies that the world cannot be analyzed into independently and separately existent

parts. This sort of (Newtonian) analysis will have at most an approximate and limited kind of applicability, i.e. in a domain in which Newtonian physics is approximately valid. But fundamentally, quantum wholeness is what is primary. (p. 275)

My exploratory theory/model of practice is a manifestation of 20 years of my reflection and practice as an artist, clinician, businesswoman, and now, a scholar. It is a response to my own transformational shift (Burns, 1978; Kegan, 1982, 1994; Maslow, 1998; Maslow et al., 1998). I am a leader who has had a transformational shift, a knowing that wholeness is real, and am struggling to work within this knowing. My mixture of clinical theory and creative practices reflects what I have learned as I have helped individuals and businesses find creative ways to resolve their problems. My epistemological stance is well summed up by Hawkins (1995),

The leading edge of human inquiry is the search of a unified field theory of consciousness that would include all possible human experience and observations, both objective and subjective as a continuum rather than a dichotomy. A larger and more inclusive context of reality, therefore, provides for a continuum in which subjective and objective are seen to be descriptive modes rather than self-existent independent realities. The classic epistemological conundrum dissolves when one transcends the artifact of the categories of opposites so that subjective and objective, mystic and scientific, 'in here' and 'out there' dissolve in the identity of truth with oneness and totality. (p. 34)

My dissertation is a hybrid work building a strong theoretical stance and attempting to offer an accessible model of practice for the everyday world of business. This work is a presentation, the beginning of a new way of leading. It starts with a values-based, systems theory perspective and moves deeply into field dynamics. Empirical testing is beyond the scope and limitations presented here. It is a heuristic work of a practitioner-researcher. I am licensed or trained to use the techniques that are discussed here. The review of literature, the research, and my experience show them to be valuable ways to increase intrapersonal functioning. My contribution is the unique blend, the potential for the sum that is greater than the parts. The

insight I have gained through my practice has come from my training and from using the techniques in various ways over the course of many years. There has yet to be a formal study or a full execution of the approach suggested here.

Methodology

Holographic leadership is a process of leading an organization into a coherent whole. The chaos and fragmentations currently exhibited in our world (Bohm, 1980, 1994) today also makes this process of leadership a process of change. The initial focal point for this process is our internal state, physiological and psychological. In Holographic Leadership our internal state becomes an act of leadership and an agent of change.

The purpose of my theory/model of practice is to offer a new base of knowledge for businesses and organizations from which to work in a simple manner with practical language.

The phrase “knowledge base” is defined in Torraco and Holton (2002) as,

The collection and integrated system of intellectual and practical concepts, components, principles, theories, and practices that under-grad and form the foundation of a discipline of field of study and practice. A knowledge base defines the unique body of knowledge and thus the boundaries of knowledge for thought and practice in a field. (p. 132)

I am taking the principles, theories, and practices from leadership and organizational change, and the new sciences, and integrating these into an expanded view of the whole. I offer integrated theoretical propositions and a model for implementation.

I offer this based on my own experiences, and the process of reflection I discuss in positioning myself as a researcher. Torraco and Holton (2002), citing Mott (1996), offers this perspective on reflective theory building, which is the process from which I am working.

“Reflective theory building is the process . . . In which the practitioner consciously reflects on

the challenges of practice, reiteratively engages in problem posing, data gathering, action, evaluation, and reflection, and then shares knowledge produced with others in the practice” (p.132).

Schön’s work is based on Lewin’s (1951) “reflective transfer.” “The new categories of scholarly activity must take the form of action research” (Schön, 1995, pp. 6-7). Action research is a process where the outcome emerges from the knowledge and experience of those involved. My process here is an emergent process of the last 30 years, starting as a young adult and being shaped by my education and professional experiences.

From this base of Action Research, Schön (1995) offers his recommendations for new forms of scholarship. He offers an understanding of tacit knowledge that comes from reflection-in-action, and can give rise to actionable theory. He suggests three new forms, the scholarship of integration, the scholarship of application, and the scholarship of teaching. I accept and build on these forms of scholarship, specifically the scholarship of integration and the scholarship of application. The scholarship of teaching will offer opportunities for future application.

The scholarship of integration gives meaning to isolated facts, “putting them into perspective . . . making connections across disciplines, placing the specialties in larger contexts, illuminating data in revealing ways . . .” (Schön, 1995, p. 1). This is a perfect descriptor of the intention for my dissertation, to make connections between the disciplines and create an expanded whole, hopefully to reveal new understanding for practice.

In the scholarship of application, the scholar asks “How can knowledge be responsibly applied to consequential problems? How can it be helpful to individuals as well as institutions” (Schön, 1995, p. 1)? This is the intention for my model of practice. These two forms of scholarship offer the base for my hybrid dissertation.

Torraco (2002) talks about a “good fit” between the theorist and the method of theory construction.

Theorists tend to pursue their work in ways that reflect their deep-seated values and assumptions about what constitutes knowledge (epistemology), the nature of being or existence (ontology), what constitutes values (axiology), and other basic ideological and philosophical beliefs. These beliefs are fundamental to the theorist’s choice of research, purpose, subject, and methodology. The theorist’s personal intention and choice in these matters notwithstanding, some theory building methods are better suited for the particular methods of theorizing than others. (p. 356)

This work reflects my value of integrating and understanding a sense of wholeness, where both the energetic unseen world is placed in relationship to the world of matter. I use a multiparadigm format as it fits the nature of who I am, creative and clinical, with its subjective and objective focus. My work evolves using both the external world of positivistic data and the internal world of subjective reality.

This subjective reality is an important component to what Schön’s knowing-in-action, and his suggestions for scholarship. My work is heuristic in nature, the creative process of emergence applied to the world of leadership and business. “Reflection-in-action occurs in the medium of words. It makes explicit the action strategies, assumptions, models of the world, or problem-settings that were implicit in reflection-in-action” (Schön, 1995, p. 6).

Schön’s scholarship of application is the frame in which my model of practice sits. Model building and theory construction are often used interchangeably. Both Whetten (1989) and Dubin (1976) consider models as a part of theory construction. Kaplan (1998) considers model building a separate function. Models in Kaplan’s view begin to examine and look at a new network of facts. He states models are “conscious, explicit, and definite” (Kaplan, 1998, p. 268).

The model allows the scientist to make clear to others just what he has in mind. Science is a cooperative enterprise: every scientist is deeply dependent on his colleagues for criticism or corroboration of his findings. Moreover, science is a cumulative enterprise:

the scientist builds on what others have already established, and contributes, in turn, as basis for still further construction. (p. 269)

My model of practice works from the cumulative theoretical propositions, and begins to move it into an operational form. This is referred to by Kaplan as an interpretive model. “An interpretive model is thus a model *for* a theory, while a formal model is a model *of* a theory (Kaplan, 1998, p. 267). He also states that an interpretive model presupposes an explicitly stated formal theory. My theoretical propositions offer an expanded view of existing theory and create a base for a new way of being, a new model of practice.

Model of Practice

The model of practice described in Chapter IV is my view of what Holographic Leadership can look like. It is not yet objective; it is an extension of objective data blended with my own subjective experiences. The practices delineated in the model focus on increasing our internal coherence and balance. Consistent, coherent thinking and behavior offer a way in which to reduce fragmentation and draw forth an orderly energetic field dynamic for our organizations. The model of practice is a series of strategically placed techniques used in concert to reduce individual and organizational chaos. The model, building from the literature presented, offers an integrated perspective into a step-by-step format.

My model of practice provides practical, actionable steps for leading and managing organizations at the energetic level. It focuses first on development at the individual level, and then moves into a group focus. The group focus offers an increased awareness of an interconnected, energetic universe.

Summary and Glossary of Terms

My dissertation has five chapters. To facilitate greater understanding a metaphorical prelude is included. The prelude offers a simple, holographic representation of the components

described in the dissertation itself, a mythic tale of transformation and what business can be.

“This notion of a metaphor can serve to illuminate the nature of scientific creativity by equating, in a metaphoric sense, a scientific discovery with a poetic metaphor” (Bohm & Peat, 1987, p. 33).

Chapter II is the literature review focusing on values-based leadership and change; field theory and the new science. It offers a brief review of the development of values-based leadership and a discussion of the new science. These two concepts will be integrated, building from the simple scientific concepts to the most cutting-edge and challenging. It begins to integrate these two diverse areas of research.

Chapter III discusses the rationale behind blending values-based leadership with the new science. It delineates the theoretical constructs and integrates these into a theoretical model. I will discuss the specifics of each idea suggesting a perception of the whole. I explain the nature of these relationships and the interplay of the concepts.

Chapter IV offers an integration of the concepts and literature presented in Chapters II and III into my model of practice. It sets the theoretical proposition more deeply into leadership and change. From this base, I set out a model of implementation offering a simple application of how to work from this new integrated perspective. The protocol will offer a practical system, the daily behaviors to take it into businesses and organizations for the purpose of developing leaders and implementing positive and sustainable change.

Chapter IV discusses my contribution to the field, and future research possibilities. The final chapter offers the implications of this new way of being; how Holographic Leadership could potentially affect leadership, change and organizations as a whole. I suggest ways in which

the model could be applied and the limitations of its use. I discuss how the protocol offers increased opportunities for sustainable change and leadership.

Definition of terms: A glossary of terms for easy reference.

Attention will refer to the object of conscious awareness, the selection of focus.

Coherence is used in both a physiological and system meaning. For an individual it refers to clarity of thought and emotional balance, the quality of being orderly, consistent, and intelligible (a coherent argument). For a system it refers to the synchronization between multiple systems. A constructive waveform produced by two or more waves that are phase or frequency - locked, such as a laser (Childre & Cryer, 2004).

When a system is coherent, virtually no energy is wasted because of the internal synchronization among the parts. In organizations, increased coherence enables the emergence of new levels of creativity, cooperation, productivity, and quality at all levels (Childre & Cryer, 2004, p. 241).

Global Coherence is coherence as a distinctive organization of parts, the relations among which generate an emergent whole that is greater than the sum of the individual parts. For example, organizing words in a coherent sentence, the meaning and purpose conveyed by the arrangement of the words is greater than the individual meaning of each word (Thurber, McCraty, Shaffer, Allen, Wilson, & Sawyer, 2008). This can also be referred to as synchronization.

Psychophysiological Coherence is a more organized electromagnetic heart field demonstrated by sustained positive emotions (McCraty, 2003).

Domain of Potential is the energetic reality of energy and information, a Quantum-Holographic field, where potentials are embedded and can be drawn forth into the domain of structure (Bradley, 1987).

Domain of Structure is the cultural context and dimensions of space and time, the “real” world for the empiricist, something that is seen, measurable, and tangible. For the most part it is the world of matter. In my work, it represents only a small part of what is considered real.

Entrainment is similar to coherence and is where comparable (living or nonliving) systems are pulled into the same rhythm by the strongest rhythm (Childre & Martin, 1999, p. 38).

Emergence was defined by Goldstein (1999) in the inaugural issue of *Emergence* as “the arising of novel and coherent structures, patterns and properties during the process of self-organization in complex systems.” (p. 49) The common characteristics of emergence are: (1) radical novelty (features not previously observed in the system); (2) coherence or correlation (meaning integrated wholes that maintain themselves over some period of time); (3) A global or macro “level” (i.e., there is some property of “wholeness”); (4) It is the product of a dynamical process (it evolves); (5) it is “ostensive” — it can be perceived; and (6) it is supervenience — downward causation (p. 50).

There are many other different interpretations within the sciences. My dissertation will use one consistent with the major premise of wholeness as primary. Emergence resides in the properties of the ensemble rather than of any individual state. Emergence involves something coming into matter, physical reality, as a result of ensemble of the whole, rather than any individual state (Bar-Yam, 2004). Emergence is the transformation of energy and information, Domain of Potential, moving into time/space, Domain of Structure (Bradley, 1987).

Emergent knowledge is the insight and creativity that comes to each of us as we release our frantic thoughts, and hold a clear state of coherence.

A *Field* is an energy dynamic within the universe, “[a] region of physical influence. Fields interrelate and interconnect matter and energy within their realm of influence. Fields are not a form of matter; rather, matter is energy bound within fields” (Sheldrake, 1995, p. 367).

Field Group is a group which holds the intention of the organization through the practices that make up Holographic Leadership.

HeartMind - The HeartMind is an extension of the leader(s) heart field, the primary oscillating system of a group, from which one accesses the socioaffective field (potential energy and power) in a social collective, and from which the group synchronizes. It is the integrated wholeness of the leader, including their bioenergetic fields, which when in a stable coherent mode, offers a greater possibility of global coherence for the group.

Heart Wisdom is an extension of the Institute of HeartMath’s heart intelligence. “The heart as an intelligent system with the power to bring both the emotional and mental systems into balance and coherence,” (Childre & Cryer, 2004, p. 245) and emergent knowledge; wisdom that emerges from a clear calm state.

Heisenberg Uncertainty Principle states that to observe a system is to change a system (Zukav, 1979).

Holding environment is a psychosocial environment according to the traditional meaning (Kegan, 1982; Winnicott, 1965). A holding environment as it relates to business is “any relationship in which one party has the power to hold the attention of another party and facilitate adaptive work” (Heifetz, 1994, p.105).

My dissertation offers a new, broader definition of a holding environment as an energetic field of embeddedness. It represents the primary conditions of emergence for an organization.

Holographic Leadership is leadership that works from a model of quantum wholeness. It assumes interconnection, and that with clear, integrious, conscious intention and a coherent state one can draw from the quantum probabilities in accord with the intentions of the group. This holographic model offers the opposite view, of reductive materialism, one that suggests that by getting the whole into balance the various parts fall into place.

Integrity is the degree to which the organization's leadership holds to the defined intention, the expression of real values. It encompasses the alignment of behavior and stated values. By defining the level of commitment, the level of integrity, defines the organization's ability to change, and the type of change that is possible. For this dissertation, integrity also assumes a group or system focus, the good of the whole, including one's self. It transcends the focus on "me" which is more present in the Machiavellian model of leadership.

Intention is the guiding force of the organization. It is the basis or vision that gives framework to an organization's mission and vision, and provides a reference point for the leader. Intention shapes reality by shaping perception (Wheatley, 1994). "What you choose, with each action and each thought, is an intention, a quality of consciousness that you bring to your action or your thought" (Zukav, 1989, p. 136). This is the process of intention as a function of the Heisenberg Uncertainty Principle, the observer affecting the observed. Intentions can be conscious, unconscious or both. According to Zukav, our true intention (the strongest intention) is determined by our behavior.

Mental Models are ". . . deeply ingrained assumptions, generalizations, or even pictures of images that influence how we understand the world and how we take action. Very often we are not consciously aware of our mental models or the effects they have on our behavior" (Senge, 1994, p. 8).

Quantum-Holographic Theory is a theory of physics that discusses how information is processed. Holographic fields are based on “a field concept of order, in which information about the organization of a system as a whole is enfolded into the field and distributed to all parts” (Bradley, 2002, p. 10).

Socioaffective field is built from the work of Bradley and Pribram as a quantum-holographic social field of a group that holds both the affective and power dynamics of a group (Bradley, 1987, 2002, 2006; Pribram & Bradley, 1998).

Suspending is what Bohm referred to as “hanging our assumptions in front of us” (Senge et al., 2004, p. 29). “By doing so, we begin to notice our thoughts and mental models as the workings of our own mind. As we become aware of our thoughts, they begin to have less influence on what we see. Suspension allows us to “see our seeing” (Senge et al., 2004, p. 29).

Wholeness is a concept discussed at length by David Bohm. A view from wholeness is the understanding of an energetic interconnected field of which we are part, and our response to our interaction (coherent or fragmentary) with it (Bohm, 1980).

Chapter II: Intention, Integrity, and the Field of Leadership

Introduction

In this chapter, I provide a review of the leadership literature with the purpose of developing the concepts of intention and integrity in defining an organization's culture and one's individual leadership. I start with a review of values-based leadership, discuss the meaning of intention and integrity within values-based leadership, review the impact of "self" on one's capacity to lead, and weave these concepts into field dynamics to describe the HeartMind of the leader. Through this discussion, I bring forth the proposition of the HeartMind of the leader as a primary point of synchronization for the holding environment of their organization. I begin the discussion of an orderly and consistent field dynamic that coheres the whole, and draws forth sustainable, adaptive, and creative work.

From Service to Self-interest and Back Again

The original leadership literature can be found in all of the major religious texts. Often referred to as "ancient wisdom," most people can quote its doctrines with or without any religious training. It is a part of every culture, even if the sources differ. Dorothy Marcic (1997), in *Managing with the Wisdom of Love*, states,

We have been given this ancient wisdom, these precepts for right living and for creating healthy societies, by all of the great religious leaders. The phrasing may be different, but the message is essentially the same: love your neighbor, be honest, live in justice, control your impulses, avoid corruption, let your intentions be pure and serve your fellow humans. (p. 3)

Values-based leadership stands in sharp contrast to the command and control, the ends justify the means style of leadership described by Nicolo Machiavelli (1950) in *The Prince*.

Machiavelli describes the conduct and bearing of a prince, specifically how one gains and keeps power. Max Lerner has described Machiavelli as "the father of power politics"

(Machiavelli, 1950, p. xlii). Machiavelli delineated and studied the nature of manipulation. He offered it as the preferred manner of getting what you want from others. Joanne Cuilla (2003) discusses Machiavelli's work, and provides this short review.

Machiavelli believed that effective leaders are not governed by traditional moral norms, but only by the principles that lead to success. So, leaders only need to appear moral and religious. It is not necessary that they actually be moral and religious. (p. 38)

Machiavellian principles were the rule of the day, deeply embedded in our business culture for nearly five centuries (Burns, 1978; Greenleaf, 1977; Moore, 2005).

The late 1970's marked a return to ancient wisdom in leadership literature with a shift toward values and integrity (Burns, 1978; Greenleaf, 1977). This shift has come to be called values-based leadership. Integral to values-based leadership is the concept of "Servant Leader" (Greenleaf, 1977).

A fresh critical look is being taken at the issues of power and authority, and people are beginning to learn, however haltingly, to relate to one another in a less coercive and more creatively supporting ways. A new moral principle is emerging, which holds that the only authority deserving one's allegiance is that which is freely and knowingly granted by the led to the leader in response to and in proportion to the clearly evident servant stature of the leader. (pp. 23-24)

James Macgregor Burns (1978) objected to the worldview that the end justifies the means; he incorporated concepts such as justice and equality into the field of leadership. Burns opened possibilities for questioning how a leader's attitudes and behaviors affected the organization, its employees, and their working conditions. This was not generally allowed in the traditional command and control paradigm, where the leaders' attitudes and behaviors did not require justification (Wheatley, 2005). In his discussion of a more traditional leadership style Burns states:

Much of what commonly passes as leadership – conspicuous position-taking without followers or follow-through, posturing on various public stages, manipulation without general purpose, authoritarianism – is no more leadership than the behavior of small boys

marching in front of a parade, who continue to strut along Main Street after the procession has turned down a side street. (p. 427)

Burns (1978) discusses the importance of shaping the motives and values of the followers.

Leaders can also shape and alter and elevate the motives and values and goals of followers through the vital *teaching* role of leadership. This is *transforming* leadership. The premise of this leadership is that, whatever the separate interests persons might hold, they are presently or potentially united in the pursuit of 'higher' goals, the realization of which is tested by the achievement of significant change that represents the collective or pooled interests of leaders and followers. (pp. 425-426)

O'Toole (1996) suggests that values-based leadership offers a view that transcends immediate wants of the followers, yet at the same time encompasses these in a higher-order view of the common good. "In the end, the leader's vision becomes their vision because it is the vision they desire, and they embrace it as their own" (O'Toole, 1996, p. 10).

Also at the forefront of this new trend was Peters and Waterman (1982), authors of *In Search of Excellence*, who looked at what distinguishes the best-run companies. "We are struck by the explicit attention they pay to values, and by the way in which their leaders have created exciting environments through personal attention, persistence and direct intervention – far down the line" (p. 279). Peters and Waterman also state,

Every excellent company we studied is clear on what it stands for, and takes the process of value shaping seriously. In fact, we wonder whether it is possible to be an excellent company without clarity on values and without having the right sort of values. (p. 280)

Peters and Waterman (1982) share a similar summary of successful leadership with Burns (1978) and Greenleaf (1977).

Success in instilling values appears to have had little to do with charismatic personality. Rather, it derives from obvious sincere, sustained personal commitment to the values the leaders sought to implant, coupled with extraordinary persistence in reinforcing those values. None of the men we studied relied on personal magnetism. All *made* themselves into effective leaders. Persistence is vital. (p. 288)

In contrast, Peters and Waterman (1982) characterize less-well performing institutions as

[m]arked by one of two characteristics. Many had no set of coherent beliefs. The other had distinctive and widely discussed objectives, but the only ones that they got animated about were the ones that could be quantified – the financial objectives, such as earnings per share and growth measures. Ironically, the companies that seemed the most focused – those with the most quantified statements of mission, with the most precise financial targets – had done *less* well financially than those with broader, less precise, more qualitative statements of corporate purpose. (p. 281)

With the work by Peters and Waterman (1982) the movement toward more values-based leadership has strengthened. A new contemporary framework of leadership and organizational change literature was defined by Greenleaf (1977), Burns (1978), and Peters and Waterman. They offered a collective challenge to the old worldview and the momentum of a new direction. The rebirth of a values-based framework has been given significant substance in the thirty years since.

Badaracco and Ellsworth (1989), discussed values-driven leadership,

Exceptional company performance ultimately rests on the dedication and creativity of the entire organization. It does not stem solely from the subtle orchestration of intense personal direction of individual leaders. . . . Leadership means shaping an organization so that its values, norms, and ideals appeal strongly to its individual members while at the same time making the company a stronger competitor. (p. 65)

Maslow et al. (1998) also added to the values-based leadership literature,

This is not about new management tricks or gimmicks or superficial techniques that can be used to manipulate human beings more efficiently. Rather it is a clear confrontation of one basic set of orthodox values by another newer system of values that claims to be both more efficient, and more true. It draws on some of the truly revolutionary consequences of the discovery that human nature has been sold short. (p. xv)

Leadership in this context requires an internal strength to hold to a view of reality that is not always externally supported and can even be threatening to those around us. These capacities are important to resolve for what Heifetz's (1994) refers to as adaptive challenges and the internal strength to do so as holding steady. The literature to follow will show how these

qualities are a quiet form of strength and maturity. They are demonstrated by consistent choices made by each leader, moment by moment. It is through these choices that we frame our attention and intention; we frame how we see the world.

Intention and Integrity

Within the values-based leadership literature the importance of intention and integrity to the success of an organization and their power to shape perceptions and actions is looked at in-depth. Intention is defined as the basis or vision that gives framework to an organization's mission and vision, and provides a reference point for the leaders and their actions. Intention shapes reality by shaping perception (Senge et al., 2004; Wheatley, 2005; Wheatley & Kellner-Rogers, 1999). Max Weber introduced the concept of intention into the social sciences in 1949. He refers to "intention as a concern with the 'interior' (cognitive, emotional) meaning of action rather than merely with the observed behavior of the self" (Bentz and Shapiro, 1998, p. 180; quoting Weber, 1949).

Fifty-five years later, Senge et al. (2004) take a more energetic understanding of the use of intention.

This process of refinement – thinking about your intention many, many times – is in a sense a broadcast of intention. When you broadcast such an intention, there's very little else you have to do. The broadcast of intention goes out and makes it happen. (p.139)

The primary definition of integrity used here, is the degree to which the organization's leadership holds to the defined intention, the expression of real values. As we move further into this work, the new science will offer deeper meanings into this concept. The level of integrity, by defining the level of commitment, defines the organization's ability to change and the type of change that is possible.

Badaracco and Ellsworth (1989) refer to integrity in this way, “Integrity lies at the very heart of understanding what leadership is. The word “integrity” suggests wholeness and coherence” (p. 98).

Henry Cloud (2006) relates integrity to character stating, “A person of integrity is a person of balanced integration of all that character affords” (p. 37). He further states,

When we are talking about integrity, we are talking about being a whole person, an integrated person, with all of our different parts working well and delivering the functions that they were designed to deliver. It is about wholeness and effectiveness as people. It is truly running on all cylinders. (p. 31)

The current leadership literature discusses these concepts, intention and integrity within the context of such ideas as: culture, climate, holding environment and field. These concepts are central to this review. I explore how the living space within an organization becomes conditioned, affected by the leaders, their leadership, the followers, and working conditions.

Field Dynamics of Organizations

Parallel to this development in leadership, the world of science has also been undergoing a profound shift into understanding the energetic nature of the universe. These scientific concepts have crossed over into the social sciences and impacted concepts within leadership and its literature.

There are many theories throughout the physical sciences that discuss the conditions of an environment and how it affects the elements which it contains. Fields which “interrelate and interconnect matter and energy” (Sheldrake, 1995, p. 367) are a common understanding in science today. The various field theories discuss how the conditions within an environment affect the nature of events within their field of influence. My dissertation places attention on the quantum-holographic field theory.

To know the world from a quantum-holographic perspective means to view it as an integrated whole, not a series of fragments or separate parts (Bradley, 2002; Pribram, 1979). This underlying premise of connectedness when realized changes the rules, and affects our perception and our habits of thinking and acting in the world. It changes how we lead and how we do business. Holographic Leadership draws on the power of intention and integrity to bring about alignment with the natural energetic dynamics of the world to create truly sustainable leadership.

A key aspect in the leadership and the application of science discussed here is the individual functioning of the person, the leader, and her impact on the environment she leads. Childre & Cryer (2004) discuss the value of intrapersonal functioning on organizations. In the forward of *From chaos to coherence* this point is illustrated, “The world is an internally created phenomenon” (p. viiii). “This is an assumption on which this material is built. That one’s internal state defines one’s thinking, actions and decisions. This state becomes the lens from which the leader, and by her influence the followers, view their world” (p. 5). The leader’s internal state, then, is crucial to defining an organization – its focus, its goals, and ultimately, its success (Bennis, 2003; Bradley, 2002, 2006; Branden, 1998; Childre & Cryer, 2004; Cloud, 2006; Csikszentmihalyi, 1990, 2003; Goleman, 1997, 2000; Greenleaf, 1977; Harung, 1999; Harung, Heaton, & Alexander, 1995; Hawkins, 1995; Heifetz, 1994; Jaworski, 1998; Jones, 2005; Kegan, 1982, 1994; Maslow et al., 1998; Stein & Book, 2000; Weisinger, 1998; Zukav, 1989).

There have been many scholars over the last few decades that have researched and outlined what it takes to have a great company to achieve excellence (Collins, 2001, 2005; Csikszentmihalyi, 2003; Peters & Waterman, 1982). Also, there is a clear consensus - A great company requires values, integrity, clear intention and consistent leadership. A great company requires great leadership. Yet for hundreds of years leadership has focused on the end result

often at the expense of these same values (Burns, 1978). All too often the end has justified the means. My dissertation refocuses on the whole. It explores how to consciously choose intentions, to act from integrity, and to generate outcomes that reflect the good of the whole, from a practical every day perspective.

The Self as a Leader and an Agent of Change

The field of values-based leadership is active and alive in leadership today. It has begun to gain acceptance, but still struggles with accessibility, the reality of living within its doctrines. How are we supposed to get there? First we need to understand ourselves, as we are the entry point, the agent of change.

Maslow is well known for his optimistic viewpoint of human nature, offered a Hierarchy of Needs of interpersonal functioning that culminates with the self-actualized person (Maslow et al., 1998). According to Maslow (1998), a self-actualized person desires to become everything she is capable of becoming, characterized by morality, creativity, spontaneity, problem solving, lack of prejudice, and acceptance of reality. Maslow et al. took their understanding of human nature into management and leadership.

Learning, creativity, fairness, responsibility, and justice come naturally to people according to Maslow's theories. Why is it we often design organizations as if people naturally shirk responsibility, do only what is required, resist learning, and can't be trusted to do the right thing?

Yet most of us would argue that we believe in the potential of people and that people are our most important organizational assets. If that is the case, why then do we frequently design organizations to satisfy our need for control and not to maximize the contribution of people. (p. 11)

Maslow et al. (1998) focused on the interpersonal aspects of leadership.

We can learn from self-actualized people what the ideal attitude toward work might be under the most favorable circumstances. These highly evolved individuals assimilate their work into the identity, into the self, i.e. work actually becomes part of the self part of the individual's definition of himself. (p. 1)

Maslow (1998) and Maslow et al. (1998) captures the essence of the personal functioning that will be the basis of Holographic Leadership. The self-actualized person is one who understands the importance of their own individual development, for themselves and those they lead. Bennis (2003) suggests that, “Leadership is first being, then doing. Everything the leader does reflects what he or she is” (p. 132). He states that, “Leaders never lie to themselves, especially about themselves, know their faults as well as their assets, and deal with them directly” (p. 32). Bennis considers candor to be the key to self-knowledge.

Candor is based in honesty of thought and action, a steadfast devotion to principle, and a fundamental soundness and wholeness. Maturity is important to a leader because leading is not simply showing the way or issuing orders. Integrity is the basis of trust, which is not as much an ingredient of leadership, as it is a product. (p. 32)

He stresses the importance that “Leaders invent themselves” (p. 32). Bennis continues,

Integrity is the basis of trust. If there is anything that undermines trust, it is the feeling that people at the top lack integrity, are without a solid sense of ethics. The characteristics of empathy and trust are reflected not just in codes of ethics, but in organizational cultures that support ethical conduct. Long before Enron became synonymous with corporate corruption, scholarly studies linked a lack of professional ethics to a business climate that not only condones greed, but rewards it. (pp. 153-154)

He draws this all together by saying, “This corporate ethical decline is a direct result of the bottom line mentality” (Bennis, 2003, p. 154). Bennis’ views mirror the continuing trend away from greed and into values based leadership. He believes in integrity as a basis of leadership and stresses the need for self-authorship, self-creation as a leader.

In the article on *Ethical Leadership, Empowerment and Authenticity*, authenticity is defined much like integrity, “Authenticity – the consistency between leaders’ true ethical intentions and behavior” (Zhu, May, & Avolio, 2004, p. 16). “Authentic ethical behavior represents behavior which is consistent with the leader’s values and moral evaluations. . . . To be authentic, leaders need to ensure their actions are consistent with both their rhetoric and

intentions” (p. 21). “Ethical leaders must create the right conditions and organizational culture to foster the development of ethical behavior in associates” (p. 17).

“In sum, the research suggests that ethical leaders who empower their employees will subsequently see greater reciprocal commitment to the organization” (Zhu et al., 2004, p. 21).

“To be authentic ethical leaders, leaders must transcend their self-interest and focus on what is good for their group or organization” (p. 23).

Zhu et al. (2004) also states,

The authentic ethical leader in any organization listens to stakeholders and is truthful and transparent with them with regard to their moral evaluations. We believe that such a leader will succeed and gain the respect of everyone, while growing such employees into more effective followers and potentially leaders providing a more solid basis for sustainable verifiable organizational performance. (pp. 23-24)

It is this being and doing that needs to be reflected on, requiring the willingness to “see and internalize change” (Heifetz & Linsky, 2002).

Heifetz and Linsky (2002) express this in terms of addressing adaptive challenges.

We call these adaptive challenges because they require experiments, new discoveries, and adjustments from numerous places in the organization or community. Without learning new ways – changing attitudes, values, and behaviors – people cannot make the adaptive leaps necessary to thrive in the new environment. The sustainability of change depends on having the people with the problem internalize the change itself. (p. 13)

The internalized adaptive leaps, discussed here by Heifetz and Linsky (2002), appear to be the same shift in order of consciousness addressed by Kegan (1982, 1994). It is here where we find another key to address our fragmentation.

Robert Kegan’s (1982, 1994) orders of consciousness offer a developmental scale which clarifies how we frame our world, the patterns from which we live, and work. Our order of consciousness plays a significant role in our ability to lead and for intrapersonal capacities such as, self-reflection, and self-awareness.

Order of Consciousness	Subject (structure of knowing)	Object (content of knowing)	Underlying Structure
1 st Order	Perceptions Social Perceptions Impulses	Movement Sensation	Single point, immediate, atomistic
2 nd Order	Concrete: Actuality Point of view: role concept, tit-for-tat Enduring dispositions, needs, preferences	Perceptions Social Perceptions Impulses	Durable category
3 rd Order	Abstractions: ideality Mutuality: Interpersonalism Inner states: Subjectivity, self-consciousness	Concrete Point of view Enduring dispositions, needs, preferences	Cross-categorical Trans-categorical
4 th Order	Abstract systems, ideology Institution: Relationship-regulating forms Self-authorship, self-regulation, self-formation	Abstractions: ideality Mutuality: Interpersonalism Inner states: Subjectivity, self-consciousness	System/complex
5 th Order	Dialectical: trans-ideological Inter-institutional: interpenetration of self and other Self-transformation: interpenetration of selves; inter-individuation	Abstract systems, ideology Institution: Relationship-regulating forms Self-authorship, self-regulation, self-formation	Trans-system Trans-complex

Figure 2:1. Kegan's orders of consciousness.
(Kegan, retrieved July 27, 2008 from <http://www.leaderstoday.org>. Adapted from Kegan, 1994).

The primary shift, as one moves through this evolution of consciousness, is to take the self and begin to make it explicit: to move our focus from our own individual wants and needs to

a broader understanding our place within the whole. From a practical perspective it is about maturity and being able to take a perspective on overall context.

Kegan's (1982) third order of consciousness, the level reached by most adults, is where I will begin the discussion for leadership. A person at this level views the world from a subjective (internal) perspective of interpersonal mutuality, and objectively (external) from a perspective on one's own needs, wishes, and interests. I believe this corresponds to Maslow's (1998) levels of love, affection, and belongingness. The third order of consciousness is about mutually reciprocal one-to-one relationships. The leader at this level acts from a need of being accepted and well liked in his or her decisions. From this level, the leader remains embedded in the environment, their decisions to not take a broad perspective, do not factor in the group as a whole.

Kegan (1982) considers the fourth order to be a minimal level for a leader to meet the demands of our current world. This order is characterized subjectively by self-authorship and identity, and objectively by an interpersonal mutuality. Level four is where an adult emerges from cultural embeddedness into independent self definition.

He suggests that the transition between the third and fourth orders are often achieved by adults as they move into college or the service. Both of these offer a time limited participation in institutional life. It offers the individual the capacity to participate in interpersonal mutuality, while still preserving their sense of self (Kegan, 1982).

A fourth order leader can begin to separate their view of self from the group. However, the independent self definition becomes a strong component in their decisions. At this level a leader considers their preconstructed vision as their gift. "It is the 'goods' she has to deliver, the way she shows she's got the right stuff to be taken seriously as a leader" (Kegan, 1982, p. 322).

This leader does not yet have a full view of the whole. She still wants to use her judgment to control events and outcomes.

The shift from fourth to fifth is about the collective, the wisdom of the group. Fifth order leaders, as suggested by Heifetz and Sinder (1988), “create a vision, mission, or purpose they can collectively uphold” (Kegan, 1994, p. 322).

Kegan’s (1994) fifth order, beyond the vast majority of adults, focuses on the Interpenetration of Selves, the awareness of our connection and functioning from a broader whole. It is self-responsibility and responsibility to the group. This responsibility is not from an overt sense of duty, or what one is seen or caught doing, but from an implicit connection from which one is contributing to the group, to the field. He discusses this level as a “critical reflection on the discipline itself; subjecting its prevailing theories to analysis not just from the perspective of another contending theory but from a perspective ‘outside ideology’” (p. 291). It is here our capacity for true self-discipline emerges.

Kegan’s (1994) fifth level of consciousness that most closely aligns with a worldview of wholeness. It is this level where a fuller perception of wholeness and interconnection can be seen. Kegan discusses the medium of transition from fourth order to fifth order as a simultaneous “surrender of the identification of the form while preserving the form. . . . Ideological forms permit themselves to be relativized on behalf of the play between forms. High risk: ideological supports vanish (e. g., job loss) at the very time one is separating from this embeddedness” (p. 191).

Taking this into work and organizations Kegan (1994) suggests differences that are important to this process of change.

An informational stance leaves the form as it is and focuses on changing what people know; it is essentially a training model for personal change. I would contrast this with a

transformational stance, which places the form itself at risk for change and focuses on changes in how people know; it is essentially an educational model for personal change. . . . While training increases the fund of knowledge, education leads us out of or liberates us from one construction or organization of mind in favor of a larger view.” (p. 164)

Here Kegan (1994) expresses a need for a transformational change, a shift in consciousness. This is particularly important for leadership, as the holder of the environment of their organization. “What may be lacking is an understanding that the demands of work, the hidden curriculum of work, does not require that a new set of skills be ‘put in’ but that a *threshold of consciousness* be reached” (p. 164). Kegan expresses a need for each of us as leaders to move to a higher order of consciousness to meet the demands of our world.

This shift in order of consciousness from fourth to fifth order is similar to the moving from the skills of suspending, hanging our assumptions in front of us, (Arthur, Day, Jaworski, Jung, Nanaka, Scharmer, & Senge, 2002; Bohm, 1994; Senge et al., 2004) to the capacity to focus on the group, into surrender itself. Surrender assumes a greater capacity (order of consciousness) and understanding of wholeness and interconnection. This work will focus on suspending, as it is a prerequisite step. Full surrender is beyond the intended scope of my dissertation.

Kegan (1994) references Heifetz and Sinder’s (1988) work as needing his highest order, a fifth order of consciousness, to “craft and communicate a coherent vision, mission, or purpose; and an ability to recruit people to take out membership in, ownership of, or identification with the vision, mission, or purpose” (p. 322).

It is the order of consciousness that can place invisible limits on our capacity as leaders. “However benign, admirable, or ‘inclusive’ the leader’s vision happens to be, it is still a unilaterally constructed one that comes into existence prior to its contact with prospective followers” (Kegan, 1994, p. 322).

Reams' (2002) also builds on Kegan's (1994) work as it relates to the self. He stresses the development of the self as a key concept of leadership. "The process of development is one of a fusion or identification with one level, a differentiation from or transcendence of that level, and an integration and inclusion of the new level" (p. 121).

Reams (2005) research indicates that a shift from one level of development to another is possible. "A dialogical orientation was shown to give participants access to insight beyond personal levels of consciousness. The assumption of wholeness behind dialogue allows participants to access the wholeness of Self that is transpersonal" (p. 201). This dialogical approach was created by "holding open space (p. 201)." "The holding of open space requires allowing the group to experience many things, without trying to take control of events" (p. 201). This holding open space appears to be similar to Heifetz's holding environment for adaptive work where listening to all voices is a significant component (Heifetz, 1994).

Harung, et al. (1995) offer a view of leadership that also builds on individual development. They offer a new paradigm of leadership development "from the deepest inner aspects of life rather than the surface level of behavior" (p. 44). They suggest that the simplest and most effective way to promote leadership is to develop the leader at their roots, their level of consciousness. This is in line with what Kegan (1994), Maslow (1998), and Maslow et al. (1998) suggest above. It is our level functioning that frames all capacities of behavior, thinking and perception. Harung et al. (1995) refer to their theory as "the unified theory of leadership," as it locates a "unifying fundamental variable underlying the diverse and divergent qualities and behaviors of leaders" (p. 45).

Harung, et al. (1995) discuss Kegan's (1994) stages of progressive development, and stress

. . . a certain degree of maturity is a prerequisite to being able to manage . . . [They state that this stage of maturity is] generally not reached by the majority of adults. Thus there is a mismatch between the expectations of today's organizations – that all of us be self-initiating, self-evaluating, and able to conceive of the organization as a whole - and the levels of psychological development most common in adults. (p. 46)

Harung et al. (1995) also use Kegan's (1994) work to explain the phenomenon of managers who are committed to be participative and empowering but cannot follow through on this commitment. They suggest that a leader needs to reach not only a state of psychological independence, but a higher stage of interdependence. It is the development of interdependence that allows for true empowerment. This state of interdependence involves the ability to see meaning beyond their own identity, a deep sense of interrelatedness without losing their self in the process.

Harung et al. (1995) also discuss Maslow's (1998) stage of Self Actualization and the peak experiences that accompany this stage. They reference Maslow's connection of transcendence experiences with powerful and responsible leaders. Such experiences restructure the individual's knowledge of himself and the world; bring about a higher stage of development and enhanced feelings of wellbeing, permanently changing one's attitude toward life.

Harung et al. (1995) relate transcendent experiences with physiological differences within us. Leadership results from the development of consciousness, our individual mind aligned with the unified field of natural law which underlies physical creation. They suggest nature is not random, but a connected unified field.

Harung et al. (1995), citing Hagelin and Herriott (1991), state that this level of development offers a "fundamentally different platform of development than the self-initiating leadership of a post-conventional, self-actualizing individual" (p. 51). His work provides a platform for correlation between experiences of higher states of consciousness and higher levels

of leadership potential. Their research suggests that “by accelerating the development of consciousness, it should be possible to satisfy the accelerating need for more leaders who can meet the new organizational challenges of the twenty-first century.” (p. 54)

Csikszentmihalyi (1990) offers a different perspective on this high level of personal functioning. He called his highest state flow. He discusses how flow helps to integrate the self and is experienced as harmony.

In our studies, we found that every flow activity, whether it involved competition, chance, or any other dimension of experience, had this in common: It provided a sense of discovery, a creative feeling of transporting the person into a new reality. It pushed the person to higher levels of performance, and led to previously undreamed of states of consciousness. In short, it transformed the self by making it more complex. In this growth of the self lies the key to flow activities. (p. 74)

He goes on to say, “Because optimal experience depends on the ability to control what happens in consciousness moment by moment, each person has to achieve it on the basis of his own individual efforts and creativity” (Csikszentmihalyi, 1990, p. 5).

Once again we see the importance of internal self control as a basis for clear leadership.

Csikszentmihalyi (2003) offers this perspective on the individual functioning of a leader.

We have seen that perhaps the most important distinguishing trait of visionary leaders is that they believe in a goal that benefits not only themselves, but others as well. It is such a vision that attracts the psychic energy of other people, and makes them willing to work beyond the call of duty for the organization. (p. 197)

Csikszentmihalyi (2003) elaborates further,

But the word ‘vision’ is not quite adequate, for it connotes a visual or mental image of what a leader intends to achieve. The interviews suggest, rather, that what drives them is something more visceral than a mental image. It also involves feelings, and a sense of physical rootedness in a field of forces that include the self, but is much larger. It is almost as if, instead of being a transient visitor on this planet they feel they have a permanent place in the cosmos; a unique place that involves specific responsibilities – it is, in other words, a personal destiny, a calling. (p. 197)

Csikszentmihalyi (2003) indicates what happens in consciousness is our own choice. If we choose our conscious state and therefore our perception, then the frame chosen becomes an important tool for leadership and change (Senge, 1994). This understanding is critical to Holographic Leadership. According to Cloud (2006),

The character who seeks reality about himself or herself has the courage to embrace whatever reality he finds. When we talk about ‘character to meet the demands of reality,’ part of that is meeting the demands of the truth about ourselves. The promise of that pain is that when we do that, we can meet the demands of the external world even better. The one who is true about herself is the one who is most able to negotiate things outside of herself as well. (p. 119)

Heifetz (1994) also stresses the importance of maintaining the reality testing necessary for dealing with a changing reality and clear critical thinking. “Reality Testing -- the effort to grasp the problem fully – is often an early victim of disequilibrium . . . With sustained distress, people may lose sight of their purposes – ‘take their eye off the ball’” (p. 38). . . . A leader must have the emotional capacity to tolerate uncertainty, frustration and pain; to be able to raise tough questions, without getting too anxious” (p. 110).

The intrapersonal capacity to tolerate frustration is a necessary component for what Heifetz (1994) refers to as “adaptive work.” “Adaptive work involves not only the assessment of reality but also the clarification of values” (p. 31). He also states that,

Adaptive work consists of the learning required to address conflicts in the values people hold, or to diminish the gap between the values people stand for and the reality they face. Adaptive work requires a change in values, beliefs, or behavior. The exposure and orchestration of conflict – internal contradictions- within individuals and constituencies provide the leverage for mobilizing people to learn new ways. (p. 22)

Heifetz and Linsky (2002) are clear that the internal capacities of a leader provide the base, which then begins to shape the environment for adaptive work. They call for self-reflection, which they state does not come naturally. Our capacity to see within is an important capacity in my work.

Our internal state is dynamic, constantly changing, without clear awareness of one's internal state; one is unaware of his or her leadership. Our internal state includes immediate responses to stress as well as strongly held beliefs. "Few managers stop, reflect on, and make explicit their philosophies of management and leadership. But these assumptions influence almost everything they do" (Badaracco & Ellsworth, 1989, p. 7).

David Bohm also stresses our own individual, intrapersonal aspects of self as critical to our capacities of perception. In his work (1994) *Thought as a system*, he offers a key point necessary to use the awareness suggested here. He states that our thoughts and the biochemical reflexes that shape them offer a limited view of reality. Dr. Bohm, states, "Until thought is understood – better yet, more than understood, perceived – it will actually control us; but it will create the impression that it is our servant, that it is just doing what we want it to do" (Bohm, 1994, p. 5). Lee Nicol's preface to Bohm's book summarizes the premise well,

Dr. Bohm rejects the notion that our thinking processes neutrally report on what is 'out there' in an objective world. He explores the manner in which thought actively participates in forming our perceptions, our sense of meaning and our daily actions. He suggests that collective thought and knowledge have become so automated that we are in large part controlled by them, with a subsequent loss of authenticity, freedom and order. (p. ix)

The above authors emphasize the importance of our "self" as a function of leadership, that our own maturity and intrapersonal capacities significantly shape our leadership. Nathaniel Branden (1998) in his work on self-esteem discusses many of the individual components necessary for our development.

"The first law of self-esteem and the first principle of effective leadership are the same: Thou shalt be aware. Dismissing pertinent realities in the name of short term comfort is not an acceptable option" (Branden, 1998, p. 42).

Branden's (1998) work goes in more detail on the intrapersonal functioning of leaders.

“No leader can be effective who has not learned to manage emotions. . . . Emotions need to be recognized, owned, experienced, and accepted – but not necessarily acted upon” (p. 52).

You cannot successfully manage feelings of which you are ignorant or which you have denied and disowned. On the contrary, such repressed feelings tend to manage you. Self-awareness (an aspect of living consciously) is one of the characteristics of effective leaders. Without it, they cannot manage themselves; unable to manage themselves, they cannot properly manage others. They will tend to lack the emotional intelligence that is the foundation of interpersonal competence. Without a commitment to self-examination, a leader operates at a severe disadvantage. (p. 53)

Branden (1998) summarizes, “If you know what your weaknesses are, you can learn to compensate for them” (p. 53). Once again reality testing, the ability to effectively assess one's self and one's environment, plays a key role in leadership.

Branden (1998) also discusses culture, integrity, and self-esteem, and places them in relationship to each other.

It takes a significant measure of self-esteem to embody and uphold a standard of integrity with such an unswerving consistency (regardless of the latest crisis) that it becomes the trademark of an entire organization – thereby creating an internal culture of trust and mutual regard.

It takes significant measure of self-esteem to give away power, to welcome and embrace the talents of others, never to steal their responsibilities, and to be relentless in communicating one's beliefs in their potential.

It takes a significant measure of self-esteem to see oneself – assets and limitations – realistically, and to think strategically about how to transcend shortcomings.

Rarely are such things done easily. They demand courage, energy perseverance, and commitment. (p. 54)

My dissertation builds on the strengths of character that are discussed here. It is a choice to live consciously, often a tough one. The benefits, as suggested above, to personal and organizational cohesiveness are remarkable.

A mental model is a concept discussed by Senge (1994) which helps to increase our awareness into our limited thought processes. Mental models are an adaptation from Cognitive-

Behavioral Theory into business and organizational development. Mental models are a function of intention, as intention goes to state of mind, and defines the parameters of how we see the world. Mental models are commonly defined as the lens through which one sees the world.

Senge (1994) offers a basic overview of integrity and intention from a more modern perspective, that of connection and collaboration. “The discipline of working with mental models starts with turning the mirror inward; learning to unearth our internal pictures of the world, to bring them to the surface and hold them rigorously to scrutiny” (p. 8). He goes on to state,

The ideas presented in this book are for destroying the illusion that the world is created of separate, unrelated forces. When we give up this illusion – we can then build ‘learning organizations,’ organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspirations are set free and where people are continually learning how together. (p. 3)

The model suggested by Senge (1994) and others is one of interconnection, frequently referred to as systems thinking.

Business and other human endeavors are also systems. They, too, are bound by invisible fabrics of interrelated actions, which often take years to fully play out their effects on each other. Since we are part of that lacework ourselves, it’s doubly hard to see the whole pattern of change. Instead we tend to focus on snapshots of isolated parts of the system, and wonder why our deepest problems never seem to get solved. Systems thinking is a conceptual framework, a body of knowledge, and tools that have been developing over the past fifty years, to make the full patterns clearer, and to help us see how to change them effectively. (p. 7)

A systems perspective offers each of us the ability to understand how our own expectations and attitudes shape what we see. It offers the opportunity to be truly responsible for the potentials that are drawn forth for ourselves and our employees.

Senge et al. (2004) built their work on Bohm’s (1994) progressive view. If the world we see is a projection of our mental models, how do we break out of them? Senge et al. offer these ideas.

Our normal way of thinking cheats us. It leads us to think of wholes as made up of many parts. In this way of thinking, the whole is assembled from the parts and depends upon them to work effectively. This is a very logical way of thinking about machines. But living systems are different.

Unlike machines, living systems, such as your body or a tree, create themselves. They are not mere assemblages of their parts but are continually growing and changing along with their elements. (p. 3)

Senge et al. (2004) ask the question, “Can living institutions learn to tap into a larger field to guide them toward what is healthy for the whole” (p. 11)?

Senge et al. (2004) also offer an updated perspective and technique on breaking our mental models and how to begin looking at our habitual thought processes. They refer to this process as “Moving through the U.”

The three basic aspects of this U are extensions of the learning process. They include sensing - observing and become one with the world; presencing - retreat and reflect, allow inner knowing to emerge; and realizing - act swiftly, with a natural flow. (p. 88)

Senge et al. (2004) continue, stating,

Suspending does not require destroying our existing mental models of reality – which would be impossible even if we tried – or ignoring them. Rather, it entails what Bohm called ‘hanging our assumptions in front of us.’ By doing so, we begin to notice our thoughts and mental models as the workings of our own mind. And as we become aware of our thoughts, they begin to have less influence on what we see. Suspension allows us to ‘see our seeing.’ (p. 29)

When we truly suspend taken-for-granted ways of seeing the work, what we start to see can be disorienting and disturbing, and strong emotions like fear, and anger arise, which are hard to separate from what we see. To the extent we’re trying to avoid these emotions, we’ll avoid suspending. To the extent we can’t talk about this, it limits all of us. We all know that a team that can’t tell the truth about its emotional state limits its strategic thinking as well, because the cognitive and emotional are so connected. (Senge et al., 2004, pp. 39-40)

By beginning to look at the process of how we see and react to the world, we can begin to understand our impact on our organization as well as the holding environment we are creating for our employees. We can ask ourselves, “Are we coming from self-interest and separation, or service and connectedness? Are we acting from integrity? What is our intention?”

The Institute of HeartMath has published a great deal of literature addressing a practical way to integrate the suggestions given above and begin to access a higher state of functioning (Childre & Cryer, 2004; Childre & Martin, 1999). Their system teaches how to consciously move into coherence. It does this in a multiple of ways, aligning physiology, balancing feelings, teaching a way to override the biochemical responses of our complex emotional reflexes, and integrating our abstract mental capacities with our heart. This appears more complex than it actually is. It is all based on a quantum holographic perspective of wholeness where the total is more than the sum of the individual parts. All of these capacities combine to create an intrapersonal flow state.

The concepts of intrapersonal integrity and mood management represent the basis of what is currently being expressed in the literature as emotional intelligence. Emotional intelligence research began in the 1980's by Reuven BarOn, John Mayer, & Peter Salovey. It is described as "a set of skills that enables us to make our way in a complex world – the personal, social, and survival aspects of overall intelligence, the elusive common sense and the sensitivity that are essential to effective daily functioning" (Stein & Book, 2000, p. 14). It is the integration of the heart (feelings) and mind that goes to the core of emotional intelligence. Stein and Book also offer a perspective on the importance of self-awareness and relationship skills. "As creative and skillful as you might be, if you're unaware of how you relate to others, if you behave disdainfully or angrily or impulsively, no one will stick around long enough to admire your skill and creativity" (Stein & Book, 2000, p. 28).

Weisinger (1998) in *Emotional Intelligence at Work* states that,

High self-awareness is the basic building block of emotional intelligence. You can maximize the effectiveness of your emotional intelligence by developing good communication skills, interpersonal expertise, and mentoring abilities. Self-awareness is the core of each of these skills, because emotional intelligence can only begin when affective information enters the perceptual system. (p. 4)

The importance of self-awareness discussed here by Childre and Martin (1999) corresponds with the work of Bohm (1994), Branden (1998), Senge (1994), and Stein and Book (2000) listed above.

Trying to figure things out with your head alone results in a lot of incoherent mental pushing and pulling – an energy expenditure that just isn't necessary when you come from the heart. . . . Creating a joint venture between your heart and your head puts a power pack behind your goals. Getting your head in sync with your heart and harnessing the power of coherence gives you the energy efficiency you need to achieve changes that haven't been possible before. (p. 100)

The concept of emotional intelligence has helped reshape our organizations, how we view people, and their value in organizations. The understanding of our need to collaborate and connect with other employees and clients is becoming more mainstream.

“Emotionally intelligent people recognize the objective reality of time but deeply understand how easily its grip on our perceptions can be loosened and transformed” (Childre & Cryer, 2004, p. 87). They are able to separate themselves from their chaotic environment. They can even transform their experiences to one of joy. This increases the capacity to problem solve and disengages the normal cascade of biochemical responses that actually reduce clear critical thinking.

The literature reviewed above offers a clear outline, stressing the importance of alignment and integration within each of us as leaders. It is from this internal state that we create the field of leadership for our organizations.

The Field of Leadership

This new era in leadership has increased attention on the functioning of the leader and his or her leadership, and the effects on the culture and conditions of an organization. The concept of conditions has also been called a holding environment. The original meaning of this term was a psychosocial environment. It was introduced by Winnicott (1965) as he studied the development of infants. The concept was expanded by Kegan (1982) with his understanding of cultures of embeddedness, and moved into business by Heifetz (1994). Kegan (1982) explains his concept of the holding environment,

In Winnicott's view the 'holding environment' is an idea intrinsic to infancy. In my view it is an idea intrinsic to evolution. There is not one holding environment early in life, but a succession of holding environments, a life history of cultures of embeddedness. They are the psychosocial environments which hold us (with which we are fused) and which let go of us (from which we differentiate). (pp.115-116)

Here, Kegan discusses holding environments in a manner consistent with the field dynamics discussed in the next chapter. We are often unaware of the environments in which we live and work. Below our conscious awareness, they can have unknown influences. This is what he means by embeddedness, unable to see the environment we are in.

Heifetz focuses on a holding environment of an organization as it relates to the anxiety of the employees. He sees this as a primary task of leadership, providing a holding environment for adaptive and productive work (Heifetz, 1994). A holding environment includes the conditions and dynamics of a group. The holding environment discussed here will continue to step higher on Maslow's hierarchy of needs than Winnicott's basic needs or Heifetz's focus on emotional needs. The holding environment I am proposing will focus on creativity and innovation as a necessary criterion for business success.

This concept of a holding environment exists in other disciplines. Kenny (1989) referred to it as the “field of play.” The field of play allows us to hold the non-verbal, non-linear aspects of our organizations, expanding it beyond our current analytical model. She states, “A living system creates an energy flow of expansion, a primary field for growth and change. It is a life-producing model” (Kenny, 1989, p. 19). It is this living model that appears to be needed for adaptive challenges.

My expanded view of a holding environment makes explicit the internal state of the leader(s) as a necessary function for the conditions of innovation. I assume that “the conditions that stimulate self-esteem are the same ones that stimulate innovation” (Branden, 1998, p. 69). I offer that the internal state of the leader(s) is integral to the holding environment of an organization.

Heifetz (1994) discusses the tasks of leadership in a way that takes values into account and makes the “holding environment” a critical factor of leadership. He defines “a holding environment as any relationship in which one party has the power to hold the attention of another party and facilitate adaptive work” (Heifetz, 1994, p. 105).

It is the holding environment that provides the space for mobilizing adaptive work. “The holding environment is a way to contain the stress of the employees to a reasonable level and to create a space for the behavior and tasks of leadership” (Heifetz, 1994, p. 105). Heifetz further states,

An adaptive challenge is a particular kind of problem where the gap is closed when invention and action change circumstances to align reality with values, and where the values themselves may have to change. Leadership for adaptive challenges will not consist of assured visions but of taking action to clarify values. (p. 35)

He goes on to say that “the inclusion of competing value perspective may be essential to adaptive success; [and that] the hardest and most valuable task of leadership may be advancing

goals and designing strategy that promote adaptive work” (Heifetz, 1994, p. 23). He emphasized that it is important that the stress of work does not overwhelm, “that the strategic task is to maintain a level of tension that mobilizes work.” (pp. 104-105)

Heifetz (1994) stresses the importance of respect, trust and admiration as a function of authority and as a key to creating a strong holding environment. In addition, he states,

Holding environments have at least three broad determinants: The severity of the adaptive challenge and the stress it generates; the resilience of the people involved and their support systems; and the strength of the holding environment that the leader’s authority provided for containing and channeling the stress of the challenge. (p. 109)

I would assert that the leader’s own internal state is the synchronizing element or bond that gives strength to the holding environment. This state is more than their authority; this state goes to actual capacity to manage their own personal development, their own physiology - their chemical and electromagnetic state, in addition to all the potential external conditions.

Heifetz’s holding environment provides a link between good leadership, its tasks and purposes, and the new science, an energetic field that coheres behaviors, values, and beliefs. A holding environment encompasses all the conditions of a workplace and of the group. This includes the level of anxiety felt by the leaders and the followers. This level of anxiety like any emotional state guides thoughts and actions within an individual and a group. It is the stress within an organization, the employees and on the leaders themselves that is not adequately addressed. It is these stressors that lead to poor choices, or impaired thinking (Childre & Cryer, 2004; Heifetz, 1994; Lovelace et al., 2007; Wheatley, 2005).

From a physics perspective the conditions of the environment determine the nature of what comes into matter, what emerges. Emergence involves something coming into physical reality, as a result of the ensemble of the whole, the conditions, rather than any individual state. Emergence holds the process of transformation from matter to energy and energy to matter,

which brings about the possibility of novel and coherent structures, patterns, and properties (Bar-Yam, 2004). This makes the holding environment of an organization, the attractor pattern, and the conditions for emergence for future events.

The integration of science and leadership/organizational change literature has begun to offer an expanded definition of leadership and the nature of its tasks. This takes it out of the personal traits of charismatic leadership to a holographic viewpoint of the overall conditions. Leadership from this perspective moves forward from the Transformational paradigm (Burns, 1978) into a process of creating a field, or conditions of leadership for a transformational shift, and sustainable change. This process places increased emphasis on the development of the leader.

Holographic leadership makes the leader a curator of the organization, its employees and stakeholders, and the effect those have in the world. It focuses on the good of the whole, but still allows for a personal sense of accomplishment and value.

Leadership from a holographic perspective is the process of an organization cultivating an intention and goals that are above the level of integrity; and consciously creating the field, the conditions, into which they will appear. From this perspective, leadership becomes the tuning fork that attunes the group; aligning with the field to bring forth conditions necessary to meet objectives. It requires a high level of integrity, for it is the consistency of action aligned with intention that most affect the field.

These concepts of intention and field theory were also discussed by Kurt Lewin (1951) more than fifty years ago. He states that intention is “equivalent to the creation of an inner personal tension” (Lewin, 1951, p. 9). “Conceptually, tension refers to the state of one system relative to the state of surrounding systems. The essence and purpose of this construct is to

include a tendency for change in the direction of equalization of the state with neighboring systems” (Lewin, 1951, p. 11). Lewin suggests that leadership through the attention of the leader creates a tension within the system of an organization. The nature of his or her attention directs the nature of the equalization.

Margaret Wheatley (1994) integrated the concepts of leadership with an expanded worldview. She encourages her readers,

If we continue to draw from the sciences to create and manage organizations, to design research, and to formulate hypotheses about organizational design, planning economics, human nature and change processes, then we need to at least ground our work in the science of our times. We need to stop seeking after the universe of the seventeenth century and begin to explore what has become known to us in the twentieth century. We need to expand our search for the principles of organization to include what is presently known about the universe. (p. 6)

Her basic premise is that an organization is a collection of people, choices, solutions, and problems flowing around creating a field of energy. She discusses how these fields can influence behavior, and can cohere and organize separate events. She introduces the idea of using an organization’s vision not as a destination (linear – Newtonian paradigm) for the organization, but as a field pulling the organization into that desired future state (Quantum paradigm) (Wheatley, 1994).

Wheatley (1994) suggests that,

If organizations are process structures, then seeking to impose control through permanent structure is suicide. If we believe that acting responsibly means exerting control by having our hands into everything, then we cannot hope for anything except what we already have – a treadmill of effort and life-destroying stress. [She goes on to ask,] What if we stopped looking for control and began, in earnest, the search for order? (p. 23)

Wheatley (1994) offers an expanded view of leadership and helps understand the powerful shaping nature of integrity and intention. She offers a simple understanding of the new science, making it more approachable.

Joseph Jaworski also offers an approachable view of the new science through his personal experiences. He integrates the new science with values based leadership in *Synchronicity: The inner path of leadership*. He documents his own transformation and integration of these two remarkable trends. Jaworski (1998) uses Greenleaf's (1977) *Servant Leadership* as the basis of his integration.

Greenleaf takes a fundamental stand and sets forth a new framework through which we can understand the underlying dynamics of leadership. The essence of leadership, says Greenleaf, is the desire to serve one another and to serve something beyond ourselves, a higher purpose. In our traditional way of thinking, 'servant leadership' sounds like an oxymoron. But in a world of relationships, where relatedness is the organizing principle of the universe, it makes perfect sense. In that orientation, servant leadership seems like a very potent and natural way to think about leadership. This, I began to realize, was a critical piece to the puzzle I had been struggling with for so long. (p. 59)

In addition to having great insight into leadership, Jaworski (1998) had the remarkable opportunity to discuss with David Bohm the "implicit order of the universe" as it applies to leadership. "It became clearer and clearer to me that the kind of leadership that could effect lasting change was centered around the *being* aspects of leadership" (p. 64). "Bohm then told me, 'You've got to give a lot of attention to consciousness. This is one of the things of which our society is ignorant. It assumes consciousness requires no attention. But consciousness is what gives attention'" (Jaworski, 1998, p. 82). Jaworski goes on to say:

I felt that at this time of my life I was working in the flow of things, in accord with the natural unfolding of the whole system, and so I would just continue to move in that way. I kept always in the forefront of my mind Bohm's injunction:

Just go with it. You cannot be fixed in how you're going about it any more than you would be fixed if you were setting about to paint a great work of art. Be alert; be self-aware, so that when opportunity presents itself, you can actually rise to it.

I've never received better advice in my life. As I was to discover, acting in the belief that I was part of a greater whole while maintaining flexibility, patience and acute awareness led to "all manner of unforeseen incidents and meetings and material assistance which no man could have dreamed would have come his way." (p. 88)

These ideas, of consciousness and attention, although relatively new to leadership are not new in the literature. Gary Zukav (1979) in his overview of the new physics states that, “The new physics, quantum mechanics, tells us clearly that it is not possible to observe reality without changing it” (p.56). We are a part of the system, and every aspect of ourselves affects that system. “The new physics tells us that an observer cannot observe without altering what he sees. Observer and observed are interrelated in a real and fundamental sense. The exact nature of this interrelation is not clear, but there is a growing body of evidence that the distinction between “in here” and “out there” is illusion.” (p. 115) The new physics has begun to account for attention.

“According to quantum mechanics there is no such thing as objectivity. We cannot eliminate ourselves from the picture” (Zukav, 1979, p. 56). The traditional leadership literature stresses the value of objectivity. We act as if we are affecting the business (system) as though we are outside of it. This is one of the core thinking errors to be addressed in my dissertation. Chapter III will demonstrate the interconnection of the leader’s heart field to the socioaffective field of the organization. No one is outside the group, there is no us versus them. This perspective of wholeness is the nature of energy dynamics.

HeartMind of the Leader

Margaret Wheatley (2005) in *Finding Our Way: Leadership for an Uncertain Time*, also discusses the primary mental model in leadership today and the need for change, “command-and-control leadership as a less obvious but strong form of aggression, where the will of one person is imposed on the others with the demand for obedience and compliance” (p. 183). Wheatley further states,

Increasing aggression is having a profound impact on organizational relationship. Distrust is increasing, so much so that in one survey, managers reported that the primary reason they attend meetings is because they don’t trust what their colleagues will do in

their absence. More employees are retreating into self protective stances, hoarding resources and information for fear of losing further control of their work. (p. 183)

She stresses the dysfunctional nature of our current patterns of aggression, “Thinking shrinks to moment-by-moment reactions and long-term strategic thinking disappears. Everybody seeks to protect themselves, and nobody thinks about the whole enterprise” (Wheatley, 2005, p. 181).

Wheatley and Kellner-Rogers (1999) also illustrate this point of a command and control mental model in their book, *A Simpler Way*.

We build rigid structures incapable of responding. We box ourselves in behind hard boundaries breached only by hostile forays. We create places of fear. We shrink from one another. We mistrust the elemental organizing forces of life. The struggle and competitiveness that we thought characterized life become the preeminent features of our organizations. (p. 37)

Wheatley and Kellner-Rogers (1999) show how a more open and flexible manner offers organizations very different outcomes. “Organizations are living systems. They too are intelligent, creative, adaptive, self-organizing, [and] meaning-seeking” (p. 3).

The more present and aware we are as individuals and as organizations, the more choices we create. As awareness increases, we can engage with more possibilities. We are no longer held prisoner by habits, unexamined thoughts, or information we refuse to look at. (p. 26)

Leaders shape how their organizations view their work and their world (Reams, 2005).

This is supported by Arthur et al. (2002).

In today’s organic and dynamic environment, ‘value constellations’ are largely based on intangible resources. This intangible dimension is the domain of human actions and relationships. The shift from the tangible to the intangible becomes clear when one understand the informal social networks essential to all work, the role of mental models, and the emerging patterns of interdependence among complex and highly disturbed processes of innovation. Accordingly, in the knowledge economy, measures of soft variables such as intentions, interpretations and relationships are increasingly considered part of the more concrete and primary sphere of value creation. (p. 11)

...Here the value of the unseen is recognized as shaping and influencing our world.

Today, leadership practices focus primarily on what is visible and tangible. Tomorrow, the focus will be on mapping the invisible territory of leadership – the tacit territory – to develop a deeper level of knowing, a deeper level of awareness. This will enhance both decision making and creativity (p. 14).

It is the integration of the new science into leadership that allows the understanding of wisdom as a possibility to be accessed, and to be known. This new science supports the supposition that we are all connected, interacting with the whole of the universe, and drawing forth potentials. The application of the new science offers the possibility to weave together the many parts of leadership; and it will offer new opportunities for each of us to shape the world in positive ways.

C. Otto Scharmer (2007) also focuses on how we see, how our mental models affect our leadership. Scharmer works from a systems theory/field theory model, utilizing the concepts of wholeness and interconnection suggested in this dissertation. He offers the social technology of Presencing,

Presencing, the blend of sensing and presence, means to connect with the Source of the highest future possibility and bring it into the now. When moving into the state of presencing, perception begins to happen from a future possibility that depends on us to come into reality. In that state we step into our real being, who we really are, our authentic self. Presencing is a movement where we approach our self *from the emerging future*. (p. 163)

His primary focus is on group dynamics, outlining his “Theory U” and describing, through the use of interviews, people’s experiences of the processes he presents, “downloading, seeing, sensing, presencing, crystallizing, prototyping, performing and embodying” (Scharmer, 2007, p. 39).

Scharmer (2007) works from a transformational perspective. He describes the moment when one shifts out of our normal Newtonian viewpoint and moves through the U.

When it happens, it tends to result in outcomes that include a heightened level of individual energy and awareness, a sustained deepening of one’s authenticity and

personal presence, and a clarified sense of direction, as well as significant professional and personal accomplishments. (p. 4)

This description of a transformational shift in awareness corresponds with Maslow's peak experiences (Csikszentmihalyi, 1990, 2003; Maslow, 1998) description of flow. All represent these experiences as life changing experiences, where one's worldview is changed. This is one entry point into the transformation needed to develop our consciousness.

Scharmer (2007) in his Theory U stresses the value of the Self in leadership. "The most important leadership tool is the Self" (p. 41). However, he does not cover the intrapersonal state necessary for this to occur in a predictable way. Scharmer appears to rely primarily on the group dynamics to bring about alignment.

Jonathan Reams' (2007) critique of Theory U, discusses this,

Scharmer talks about an open heart as the 'capacity for empathetic listening, for appreciative inquiry, and for "exchanging places" with another person or system' (p. 244). While this is indeed a valuable quality, what are not discussed here are the prerequisites for doing this. One may have an open heart in many ways, but there are specific action-logic stages at which the capacity to actually take another person's perspective emerges and goes through degrees of growth. While many adults have rudimentary level of this capacity, it also seems apparent that many people do not have some of the more complex degrees of this capacity. (p. 255)

These intrapersonal capacities are at the heart of my dissertation. Holographic Leadership offers one form of development for these intrapersonal capacities, for ourselves as leaders, and for our organizations.

The idea of consciousness entrained with the natural order of our universe has already been brought into leadership and change. Harung (1999) states,

Mature collective consciousness is linked to improved capacity for performance in a social system and to increased coherence. This coherence or alignment expresses itself in 'cultural integrity.' It may be a challenge to conceive of the simultaneous strengthening of cultural integrity and progress since these two values often are considered to be opposed to each other. However, in higher stages of collective development, cultural integrity and progress are complementary to each other. (p. 155)

Here Harung offers a different but compatible view of coherence, leadership and a collective consciousness. His work is based on unified field theory and the use of Transcendental Meditation (TM) practices (Harung, 1999). The research with TM has demonstrated significant findings in the area of social change. I discuss this research in greater depth in Chapter III.

Intentional Change Theory (ITC) is another theory of change offering an expanded view of change. ITC attempts to integrate non-linear dynamic into leadership. It is a revamping of Boyatzis' theory of self-directed learning mixed with emotional intelligence theory and non-linear dynamics, offering a self-directed change model (Boyatzis, 2006). The *Journal of Management Development* offered an entire issue on ITC in 2006. Boyatzis stated,

Intentional change theory (ICT) is a complex system. At the individual level, ICT describes the essential components and process of desirable, sustainable change in one's behavior, thoughts, feelings, and perceptions. The 'change' may be in a person's actions, habits or competencies. It may be in their dreams or aspirations. (pp. 608-609)

Boyatzis (2006) article begins to take an intrapersonal focus, discussing stages of change, but appears to fall short of specific capacities discussed by Reams (2007).

Sustainable, intentional change is on the whole discontinuous. It occurs through a series of five discoveries or emergence conditions. It is driven by the interplay of the positive and negative emotional attractor. It follows the described process at all fractals of human organization. (p. 607)

ICT is also beginning to be applied in an organization format. Van Oosten (2006) article focused on the story of Roadway Express, offering a description of how intentional change theory and appreciative inquiry work synergistically to create positive organizational change. Van Oosten expressed the findings in this manner,

Roadway Express serves as a solid benchmark for organizations considering how to succeed in cultural transformation. The implementation of the philosophy and methodology of appreciative inquiry (AI) played a key role in that success. Analysis

shows the link between ICT and AI. From this observation, ICT emerges as a stand-alone theory upon which to interpret the success of Roadway's organizational change efforts. (p.707)

The application of ICT and AI covers the important components of field dynamics without the need for a major physics lesson.

AI is another process of change that attempts to work from a perspective of wholeness. "Appreciative Inquiry (AI) offers a positive strength-based approach to organization development and change management" (Cooperrider & Whitney, 2005, p. 1). Cooperrider and Whitney also stated that it defines the role of leaders as positive change catalysts and places attention on appreciation and the value of each person, what they bring into the organization. Again, AI focuses on the value of each individual, but does not account for their individual intrapersonal functioning.

Appreciation is a significant tie into the leadership and change literature as it is the same state (emotional and physiological) that is the focal point of the HeartMath system of physiological coherence (Childre & Cryer, 2004; Childre & Martin, 1999). Appreciation is documented to help facilitate a physiological coherent state.

The Institute of HeartMath has done a great deal of research on what it takes to integrate balanced emotions with cognitive thought, offering tools to gain the capacity for self-authorship. HeartMath offers business people an opportunity to develop entrainment and coherence within themselves and their organizations (Childre & Cryer, 2004; Childre & Martin, 1999).

"Coherence is a progressive state – the more we build it, the more we have in reserve. . . . Increased personal coherence yields greater flexibility, adaptability, creativity, and perhaps most important, the self-security to regain hope" (Childre & Cryer, 2004, p. 12).

Childre and Cryer (2004) are very clear about the value of coherence,

Organizations are the sum total of the intelligence, creativity, self-management, and coherence of their people. As coherence increases within individuals and teams, a much higher level of organizational coherence and alignment is possible - coherence between the organization's mission, its vision, its strategies and its actions. Coherence is *consistency* between customer expectations and customer satisfaction. Coherence is *continuity* in every internal process and communication modality. Coherence is *balance* within the personal life of each stakeholder in the process. . . . The increased chaos in all the world's system requires a highly flexible, adaptive, intelligent response. *Coherence is the energy-efficient modality in a chaotic world.* (p. 12)

Practical skills such as disputing cognitive distortions, emotional intelligence and the HeartMath techniques help individuals within organizations reintegrate the qualities of the heart; helps them to rediscover the peace that has been covered by years of frenetic thoughts and behavior. It is this fragmentation that has caused us to be reactive and crisis oriented (Wheatley, 2005; Wheatley & Kellner-Rogers, 1999). It is our reactive mental state that changes our perception, breaking it into smaller and smaller pieces.

Within each organizational culture there is an unspoken set of rules, acceptable and unacceptable practices, values, and norms of the group that are expected to be maintained. They are conveyed, as will be explained in the next chapter, mostly through an energetic dynamic carried within the affect, a socioaffective field. "This network of affective energy is the medium through which transmission of all interactions - both verbal and nonverbal communication - within the collective occurs. *It provides the ontological means by which members sense and 'read' each other's actions*" (Bradley, 2002, p. 17).

These values and norms of the group are an extension of their integrity and intention. How one lives and breathes has significant impact on what they think, how they perceive reality and respond to every situation. If we choose an intention of (intra-personal) peace, appreciation,

and optimism, it significantly changes their perception of reality, and our ability to respond to the events presented.

The review of literature above suggests that operating from wholeness will transform leadership and its organizations and followers. It offers a basis for personal growth, and a sense of “knowingness,” a sense of connected wisdom, confidence, and clarity of action.

It is this wisdom that is seen as foreign to leadership and business from the command and control model. Fortunately, it is a part of the collaborative model. Jones (2005) discusses this wisdom as it relates to ethical leadership and good intra-personal functioning. She states that “real intelligence requires that the mental facility of wisdom is actively engaged in the thinking process” (p. 364).

She defines wisdom as consisting of seven internal state elements: “a high level of consciousness, power of choice, internal locus of control, awareness of self-fulfilling prophecy, inclusiveness, abundance and a decision process that is guided by honesty, logic, and reasonableness” (Jones, 2005, pp. 365-366).

Wisdom is the bedrock of function in the leadership process, which enables leaders to balance the needs of the organization with the needs of its members. With wisdom, leaders can perform the numerous and dynamic responsibilities of leadership from a reasonable perspective with the willingness to improvise as necessary. (p. 369)

With clear intrapersonal functioning, a state of balance, coherence and integrity, a leader has the option to move into a flow state, where both knowledge and Heart Wisdom is readily accessible. “To apply wisdom in business the leaders of business organizations need to become aware of their innate wisdom and intentionally apply it in their business activities” (Jones, 2005, p. 369).

The new science indicates an expanded view of how we define reality, a living field with non-linear dynamics that suggests that the world is not a chaotic random series of events, but that

there are patterns, attractor patterns or fields that influence our thoughts, our choices and our actions. According to Capra (1996),

Classical physics dissolve at the subatomic level into wavelike patterns of probabilities. These patterns do not represent probabilities of things, but rather probabilities of interconnections. The subatomic particles have no meaning as isolated entities but can be understood only as interconnections, or correlations, among various processes of observations and measurements. In other words, subatomic particles are not ‘things’ but interconnections. (p. 30)

Heifetz’s (1994) holding environment provides a link between good leadership, its tasks and purposes, and the energetic field that coheres behavior, which is shaped by our values and beliefs. A leadership holding environment represents the conditions in which an organization creates and interacts with the world. From a physics perspective the conditions of the environment determine the nature of what comes into matter – what emerges. The holding environment can be seen as becoming the attractor pattern for future events.

This is where the HeartMind of the leader, as the primary designator of the operations of any organization, becomes its tuning fork. It can be done consciously to create a truly sustainable power or can be done unconsciously, with force; where, how we get there (the means) can be rationalized away as necessary, thus failing to grasp the impact it has on the whole.

Summary

The leadership literature discussed above, with its shift toward values, works from a systems theory perspective, living wholes, where the whole is more than the sum of its parts. “Systems thinking is ‘contextual,’ which is the opposite of analytical thinking. Analysis means taking something apart in order to understand it; systems thinking means putting it into the context of a larger whole” (Capra, 1996, p. 30).

It is the integration of the new science into leadership that allows the understanding of wisdom as a possibility to be accessed, and to be known. This new science supports the

supposition that we are all connected, interacting with the whole of the universe, and drawing forth potentials. The application of the new science offers the possibility to weave together the many parts of leadership; and it will offer new opportunities for each of us to shape the world in positive ways.

Holographic Leadership builds on the belief that the universe is energy and information. That mind and matter are the same in different forms. It takes the ideas of intention and integrity and makes them tools for creation.

Throughout this review, excellence in leadership, and profound success in business has been equated with values, ethics, clear intention, integrity, and consistent leadership. What is not seen by most is the energy or field dynamics of leadership. My review breaks the mold, the old paradigm, and addresses the underlying field of leadership and how it is shaped by the intention and integrity, the HeartMind, of the leader.

Chapter III: Coherence: The Flow of Leadership and Change

Introduction

In Chapter III, I discuss the theoretical propositions that make up Holographic Leadership. I build from the literature presented in Chapter II; tying together the values based leadership literature, and the self as a leader into scientific theoretical propositions. I start the discussion with the fragmentation and chaos in which we currently work, and offer broader perspective from which wholeness is real.

I present and discuss the field dynamics of quantum-holographic reality as a basis for values-based leadership and organizational change. From this broad field perspective I move into the self, our own internal functioning. I introduce the HeartMind of a leader as a concept the integrated wholeness of the leader, including their bioenergetic fields. I offer specific theoretical propositions for understanding our own internal state, physiological and psychological, as a basis of our leadership. I offer a review of effective practices that can be used to increase our capacity for a coherent, integrious internal state, and our self-awareness and self-management.

I then return to the core ideas of my work, intention and integrity, this time from a scientific perspective. I add integration, the iteration of daily behavior that allows for the possibility of sustainable change. Finally I offer a theoretical map, and summary of the propositions that delineate both the HeartMind of the leader and the possibility for the emergence of a coherent holding environment for the organization.

My theoretical proposition suggests that from a coherent internal state, the HeartMind of the leader(s) is a point from which the group synchronizes, and offers access to the energetic holding environment of an organization. Such a holding environment represents the optimum conditions for the emergence of a positive and sustainable environment for business. My

operating assumption is that the level of coherence and integrity of the leader(s) has a direct bearing on the conditions of an organization. More importantly, with clear, integrious, conscious intention, and a coherent state, we can bring forth probabilities that are aligned with the intentions of the group, such as adaptive and productive work, profitability and sustainability.

My exploratory theory/model of practice describes how leadership can be an emergent, creative process. I present theoretical constructs that describe how to develop this clear, clean state, allowing for a state of flow, which in turn offers the conditions for a new model of business discussed in Chapter IV.

The model of practice will be based on a conscious application of intention, (Lewin, 1951; Tiller & Dibble, 2007; Tiller et al., 2004a, 2004b, 2005; Weber, 1949), applied with integrity, representing consistent action and a coherent, positive emotional state (Badaracco & Ellsworth, 1989; Bennis, 2003; Hawkins, 1995), and integration (Lewin, 1951; Senge et al., 2004; Wheatley, 1994) which is the daily attention and effort. Clear intention and coherent integrity interact with the field dynamics of an organization to bring about a higher global order.

Wholeness and Fragmentation

My theoretical discussions focus on leadership and the challenges brought on by the fragmentation and constant change which are discussed by many scholars (Bohm, 1980; Childre & Cryer, 2004; Heifetz, 1994; Lovelace et al., 2007; Vaill, 1996). Bohm (1980) addressed the problem of fragmentation in his seminal work, *Wholeness and the implicate order*.

It is especially important to consider this question [fragmentation and wholeness] today, for fragmentation is now very widespread, not only throughout society, but also in each individual; and this is leading to a kind of general confusion of the mind, which creates an endless series of problems and interferes with our clarity of perception so seriously as to prevent us from being able to solve most of them.

Individually there has developed a widespread feeling of helplessness and despair, in the face of what seems to be an overwhelming mass of disparate social forces, going

beyond the control and even the comprehension of the human beings who are caught up in it. (p. 1)

The overall sense of fragmentation has had a significant effect on our organizations as well. An organization in a state of incoherence has been defined by Childre & Cryer (2004) as

A state resulting from accumulated internal noise, turmoil, pressure and conflict among the individuals who make up an organization. This state is characterized by distorted perception, high levels of emotional reactivity, and decreased efficiency, cooperation, and productivity. (p. 248)

It is this state that my work is created to address.

The Information Age is characterized by a flood of data, combined with an “overwhelming mass of disparate social forces” and “general confusion of the mind” (Bohm, 1980, p. 1) has surpassed our brain’s capacity to process the information. Leadership and organizational change requires a process of selection. This capacity to focus and choose well is one of the many areas that have been affected. Peter Vaill (1996) referred to this constant influx as “permanent white water.” “Permanent white water metaphorically defines the difficult conditions under which people exercise their will and judgment within society’s macrosystems” (p. 6).

Permanent white water consists of events that are surprising, novel, messy, costly and unpreventable. . . . It is the subjective feel of these events as much as their objective existence that we are concerned with. Therefore, *the real point is whether experienced executives and others in organizations perceive that what they are trying to do is becoming more complex, problematic and contingent as time goes on.* With this there seems to be widespread agreement: permanent white water conditions are regularly taking us all out of our comfort zone. (p. 14)

Vaill (1996) believes that the model for a smooth-running macrosystem is no longer valid. In particular, the operating macrosystem is profoundly affected by the quality of human will and judgment that is present throughout the system. Although Vaill does not believe one can compensate for this individual will and judgment, my dissertation begins to suggest a way.

I address this by drawing on the research for increasing individual and organizational coherence. Permanent white water has significantly changed the typical business environment over the last three decades, making leadership and decision making more and more complex.

Heifetz (2003) refers to these issues faced by businesses and organizations as adaptive problems.

Beyond technical problems, for which authoritative and managerial expertise will suffice, adaptive challenges demand leadership that can engage people in facing challenging realities and then changing at least some of their priorities, attitudes and behaviors in order to thrive in a changing world. (p. 70)

Each person within a business gives primary attention to their tasks at hand, their immediate goal (Wheatley, 2005). This leaves leaders and workers within the organization each focusing on the pieces for which they are responsible, leaving little attention on the whole. Our attention becomes a fragmented perspective limited by the particulars that define it (Reams & Roy, 2007).

An environment of constant change, fragmented thought, and the process of pushing through, changes our physiology, our perception, the way we think, and the way we breathe (Childre & Cryer, 2004; Heifetz, 1994; Lovelace, 2007). It reduces our reality testing and capacity to problem solve. It does not allow for true sustainability because our focus is on the constant change in the immediate present. In fact, it moves us to a sense of overwhelm, and burn out (Lovelace, 2007; Wheatley, 2005).

Such feelings of exhaustion, overwhelm, and burn out are an impaired physiological states from which many of us work (Bohm, 1994; Childre & Cryer, 2004; Lovelace, 2007). This response hijacks our normal thought processes and interferes with our reality testing and clear critical thinking (Bohm, 1994; Childre & Cryer, 2004; Heifetz, 1994; Lovelace, 2007). The leader who works from chaos is not the same leader who works from coherence. His or her

physiological state has been changed, effecting overall functioning. A state of coherence, a natural state of alignment within our body, can help us to experience a state of flow and clear critical thinking (Childre & Cryer, 2004; Childre & Martin, 1999).

Bohm (1994) looks at this problem in depth.

Our fragmentary way of thinking, looking, and acting evidently has implications in every aspect of human life. That is to say, by a rather interesting sort of irony, fragmentation seems to be the one thing in our way of life which is universal, which works through the whole without boundary or limit. This comes about because the roots of fragmentation are very deep and pervasive. (p. 20)

He specifically discusses how our fragmented system of thought affects our capacity for clear perception. Bohm (1994) described such a state as a “biochemical reflex,” a physiological change that accompanies fragmentation.

This whole system works by a set of reflexes. It is a basic form of conditioning – to repeat something quite often, leaves a mark in the system, in the nerves, and then the reflex has been altered. . . . These conditioned reflexes can affect feelings. These feelings trigger chemical reactions in the body, that effect thoughts, then one thought leads to another and you get a chain reaction. (p. 52)

This chain reaction has changed how our nervous system functions and affects our body chemistry. We often confuse this with clear, critical thought. One key for expanding our capacity to work from a perspective of wholeness is to reset our internal state, our nervous system and the chemical reactions within our body.

“We think we are controlling our thoughts, and producing thoughts, but this is generally not so, that the vast part of our thoughts just comes out of the reflex. . . . *Now these reflexes can serve us if we are not too ridged, but they don't work if they are incoherent*” (Bohm, 1994, p. 53). An important distinction especially for leaders is to determine when our reflexes serve, and when we are being limited by them. Gaining insight into our mental, emotional, physical state and its impact on our leadership can offer greater awareness.

Many processes of leadership and change fail to take our physiology, our reflexes and biochemical state into account. Change has little chance to be successful if it fails to factor in our own innate responses. The best intellectual arguments do not dispute these reflexes, for they are not analytical in nature (Bohm, 1994). My model of practice begins with internal stabilization, teaching individuals the importance of mood management (Childre & Cryer, 2004) and emotional intelligence (Goleman, 1997, 2000; Stein & Book, 2000). The capacity to mediate the biochemical response can be taught (Childre & Cryer, 2004; Childre & Martin, 1999) thereby beginning to mediate its affect.

Being able to mediate our own reactions allows each of us to begin to be physically able to suspend our assumptions to take a clearer look at our thinking. It is the capacity for coherence that allows each of us to stay in a problem longer, to see and manage more of the elements of a problem, and to see the solutions that exist within the whole (Childre & Cryer, 2004; Heifetz, 1994; Wheatley, 2005). When a system is coherent, virtually no energy is wasted because of the internal synchronization among the parts. In organizations, increased coherence enables the emergence of new levels of creativity, cooperation, productivity, and quality at all levels (Childre & Cryer, 2004, p. 241).

From this coherent state we are able to increase our reality testing by recognizing and disputing our cognitive distortions (Ellis & Harper, 1997). Our clear state of intrapersonal functioning allows for the presence of mind to call forth Heart Wisdom, drawing on a broader field of possibilities. This process, by providing conditions aligned with their emergence, can lead to transcended, peak experiences, which are the basis for our development (Harung et al., 1995; Kegan, 1982, 1994; Maslow, 1998; Scharmer, 2007). As we lead from this clear state, we

offer our employees the opportunity to synchronize with us, and provide a holding environment for a higher order.

Field Dynamics

There is a leadership belief, stemming from the traditional Newtonian theories which have significantly influenced academic thinking that by getting the various parts into place the whole will function at peak performance (Capra, 1996; Wheatley, 1994). My holographic model offers an expanded view, one that suggests that by getting the whole into balance the various parts fall into place. Capra also states that, “Whereas in classical mechanics the properties and behavior of the parts determine those of the whole, the situation is reversed in quantum mechanics: it is the whole that determines the behavior of the parts” (p. 31).

David Bohm (1980) offers this on an inclusive and interconnected field of wholeness, which is more than the sum of the parts.

Wholeness is what is real, and that fragmentation is the response of this whole to man’s actions, guided by illusory perception, which is shaped by fragmentary thought. In other words, it is just because reality is whole that man, with his fragmentary approach, will inevitably be answered with correspondingly fragmentary response. So what is needed is for man to give attention to his habit of fragmentary thought, to be aware of it, and thus bring it to an end. Man’s approach to reality may then be whole, and so the response will be whole. For this to happen, however, it is crucial that man be aware of the activity of his thoughts as such; i.e., as a form of insight, a way of looking, rather than as a ‘true copy of reality as it is’. (p. 9)

Building from Bohm’s work are many other field theorists. Rupert Sheldrake (1995) offers a simple definition from which to begin the integration into leadership. He defines a field as “a region of physical influence. Fields interrelate and interconnect matter and energy within their realm of influence. Fields are not a form of matter; rather, matter is energy bound within fields” (p. 367).

Sheldrake's concept of morphic fields offers insight into how fields affect organizations. He states that fields have "influences that extend through time and space, organizing coherent systems and patterns" (Sheldrake, 2004-2005, p. 27). He suggests habits may be inherent in the nature of all living organisms. He extends this to people, "all humans to draw upon a collective memory, to which all in turn contribute" (Sheldrake, 1995, p. xvii).

My dissertation suggests that to change a field pattern would require conscious decisions aligned with a clear vision (intention), and consistent actions from a coherent, positive emotional state (integrity) and a daily focus of attention (integration) to create a new resonance, a new pattern of social dynamics; to draw forth a higher potential order of influence, an organizing pattern of sustainable leadership and ethical organizational behavior.

Morphic Resonance is the means by which information or an activity-pattern is transferred from a previous to a subsequent system of the same kind. This involves "the influence of a like upon a like, the influence of patterns of activity on subsequent similar patterns of activity, an influence that passes through or across space and time, from past to present" (Sheldrake, 2004-2005, p. 28).

This description of the nature of fields and embedded patterns of information fits Bradley's work with quantum-holographic field theory and social dynamics. Quantum holography field theory discusses how information is processed. Bradley (2006) offers this definition of a field and how it shapes the conditions it influences.

The idea is that a field is a distinct area-that is bounded in some way; the idea that a field is a medium or intermediary for communication of interaction among objects or entities; and the idea that information about the global order of forces, action states, and consequences is distributed throughout the system to all parts and locations within the field. (p. 2)

An interconnecting field as an intermediary for communication, with information distributed to all parts is beyond the understanding of Social Fields, introduced by Kurt Lewin (1951), and currently used in C. Otto Scharmer's (2007) *Theory U*. Social Fields have become an accepted concept with the social sciences, but with a very limited scientific base within the leadership and change literature. A scientific base will hopefully offer a clearer understanding of what a Social Field can be, and possible ways to interact and utilize its power more purposefully.

Bradley's work on social dynamics changes our depth of understanding of the dynamics within a group. More specifically Bradley (2002) states,

[Holographic fields are based on a] concept of order in which information about the organization of an object as a whole is encoded as an interference pattern in energy waveforms distributed throughout the field. This makes it possible to retrieve an image of whole objects – a holograph – from any location within the field. (p. 15)

An understanding of field dynamics allows for the inherent natural order within our organizations to emerge. "In natural systems, optimal action-that is, action that is both internally efficient and externally effective-results when the principles of least action and self-organization combine to hold the system in an adaptive relationship of co-evolution with its environment" (Bradley, 2002, p. 12). This appears to offer a link to a flow state (Csikszentmihalyi, 1990, 2003) that can be so elusive. It appears to be the basis of sustainability, as it works with the momentum of the field, in line with the group.

Bradley (1987, 2002) bases his specific understanding of quantum-holographic field theory on the work of Nobel Laureate Gabor's (1948) concept of logons, "a quantum of information" (Bradley, 2002, p. 16), holographic organization, and Pribram's holographic understanding of brain function (to be discussed in *Physiology of Leadership* section).

In his research on communes, he found that social relationships did not support traditional social dynamic theories. Bradley (1987) found that social dynamics appear to fit into

this same mathematical model as Garber's holographic organization and Pribram's brain function. In analyzing data on social dyads, he suggests a Holonomic Social Order as the basis of social dynamics.

We sought to resolve this paradox with four major sociological theories. But they offered little explanation of what we found: A coherent order of power can be created almost immediately, without the time necessary for socialization and institutionalization; it occurs in groups with widely different, cultures, ideological orientations and formal organization. (p. 269)

Bradley (1987) further suggests,

The principle is that of holonomic order: the whole contains all parts and each part contains the whole. It involves a one-to-one correspondence in information between part and the whole. Thus, since information about the order of the whole is enfolded into each part, the whole can be reconstituted from a part. In this way, social order is like a hologram: an image of communal power structure can be obtained from dyads because information for the order of the group is contained in all relations. At a theoretical level, we found a remarkable correspondence between the properties of holonomic order and some basic characteristics of social organization. (p. 283)

Here Bradley (1987) draws a parallel between holographic order and the characteristics of social organizations. He begins to explain the energetic structure of an organizational holding environment.

Karl Pribram in the forward to Bradley's (1987) book offers this explanation of Bradley's research.

Bradley finds that there are two rather different types of order which operates within the groups he had been studying. One of these is heterarchical order and the other hierarchical. The heterarchical order, which is essentially egalitarian and network-like, is responsible for the generating energy, defined as the potential for doing work. The hierarchical order deals with power, the structure which translates this potential into actual work.

Bradley is especially concerned with the discovery of the heterarchical order since this is ordinarily hidden from casual observation. He points out that heterarchy entails an enfoldment of the total order in each of the units – individuals and relationships – that make up the whole. Information is thus distributed over the entire group much as it is in a holographic representation which stores the potential for reconstructing the image of the whole.

This enfolded, implicate ordering is holistic in an entirely different sense from the ordering that characterizes hierarchy. In hierarchical wholes the sum is greater than and different from the sum of its parts. In a heterarchical, holonomic order the whole becomes to some extent enfolded in all of its parts so that each part can act in lieu of the whole.

Both orders are necessary for transformation. The holonomic order energizes while the hierarchical order empowers. This fits with the physics: the energy/momentum domain is potential; the space/time domain is where the actions is. . . . It is the invertibility of the transformational process, the going back and forth between the two orders that makes the entire process go. (p. xii)

The holonomic social order offers new and profound possibilities for leadership and change. It helps explain the power dynamics that have long been seen, in a new way. Its affective component and network like structure significantly deepens our understanding of inclusivity and interconnection.

Bradley (1987) clarifies this order,

The love/affect system is heterarchic order, and when patterned as communion, is the means by which structure is converted into energy – energy, that is as potential for social activity. . . . The power/control system is a hierarchic order. It is the system by which energy is aligned and keyed to a particular function, the means for converting energy into structured activity. The two systems are interlinked by an underlying holonomic process in which the order of each is enfolded into the other. (p. 270)

Bradley offers this diagram to help clarify this process of energetic transformation.

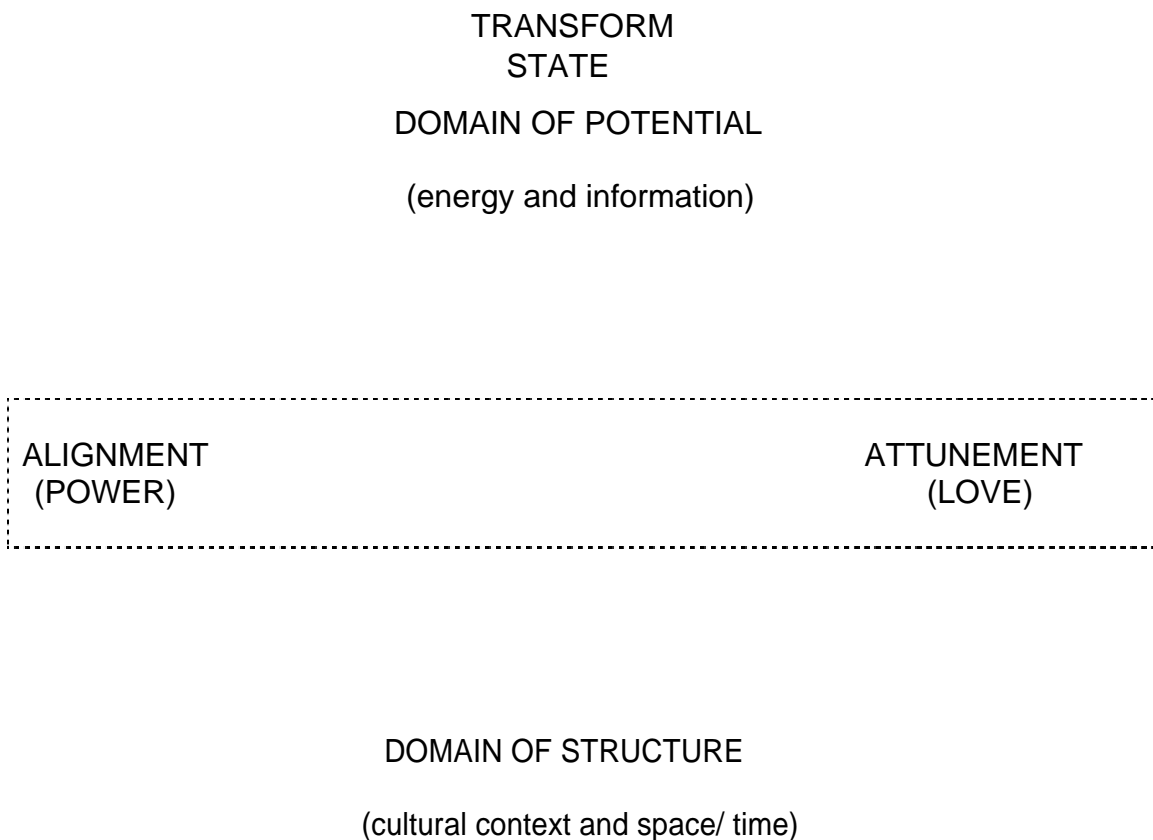


Figure 3:1. Love and power as transformers of energy and structure. A socioaffective field holds the transformational process between energy, information and action within a group. (Bradley, 1987, p. 289).

Bradley's work describes the process of transformation between the domain of potential, energy and information, and the domain of structure, physical reality, culture, in time and space. This model aligns with Bohm's (1980) implicate and explicate order of the universe. In the simplest form, the domain of potential represents the implicate order, and the domain of structure represents the explicate order. The process of transformation works back and forth in flowing wholeness, energy to matter, matter to energy.

My dissertation focuses on the field conditions that interlink the power structure of a group with the network of affective ties, such as emotional structure, and the shift from the

domain of potential to the domain of structure. It is the alignment, the heterarchical order, interlinked with the attunement, the heterarchical order that is the socioaffective field. The transformational space between the domains, based on the alignment and attunement of the group, I believe, is the holding environment of an organization. Bradley (1987, 2002) refers to this as a socioaffective field.

“Social order is therefore an ongoing process of movement back and forth through this transform space, from the domain of potential to the domain of action. It involves a reversible process of transformation and back-transformation” (Bradley, 1987, p. 291). The concept of transformation and back-transformation is important to understanding an energetic holding environment, as it offers a key to transformation for our organizations. The process of shifting between energy (potential) and matter (structure) discussed here (Bohm, 1980; Bradley, 1987; Pribram 1979, 1986), is the basis of the primary shift called for in my dissertation.

Bradley (1987) continues to build from this socioaffective group back into wholeness and the nature world.

The movement of social order is a fundamental process in which social systems are aligning to the totality of forces that move the natural world – to the whole movement of the universe itself. The natural order is something that is constantly evolving and changing. . . . This matrix of movement reaches everywhere and touches everything; nothing in the universe is unaffected for there are no boundaries, just relations and interrelations – the connection of everything with everything. (p. 291)

The natural dynamics of the universe allows “the principles of least action and self-organization combine to hold the system in an adaptive relationship of co-evolution with its environment” (Bradley, 2002, p. 12). Alignment within the socioaffective field allows for least action, self-organization and adaptive evolution for the group. It allows for the possibility of a coherent holding environment to flow with a natural momentum of the field. Moving our

attention to wholeness can allow for emergence of new ideas and can help us to release our old habits of seeing and acting that limits our perception and ability to respond in new ways.

The natural order has apparently always existed, but appears to have been lost in our fragmentation (Bohm, 1980). Bradley (1987) discussed this loss.

Although the movement of wholeness is fundamental and omnipresent, it is often eclipsed by the cultural order – the arbitrary, incomplete social constructions of reality. There are worlds of social illusions: images based on culturally selected, fragmentary sensory perceptions, holographically projected images of reality that are socially defined as ‘real.’ These are the artificial social worlds of internal contradiction and inconsistency, synthetic constructions yielding conflict and stress, never in complete congruence with the natural order. They waste much natural and human potential by locking social energy into ossified structures of domination and repression. (p. 293)

There is a natural energetic order to our universe, which we have come to forget through our fragmentation (Bohm, 1990) and social illusions (Bradley, 1987, 2002). This energetic order is beginning to be explained in a way that can offer transformational change to our organizations.

Through their research, Bradley and Pribram (Bradley, 1998, 2000; Bradley and Pribram, 1997a, 1997b, 1998; Pribram & Bradley, 1998) found that the interactions between the heterarchical, network of affective bonds, and the hierarchy (power) of social controls, “operates as a quantum-holographic-like information processing system that informs the transformation of potential energy into a stable order of effective collective work” (Bradley, 2002, p. 18). This stable order leads to more collaborative and effective work, similar to Heifetz’s (1994) point of a holding environment for adaptive work.

Bradley (2002) describes this interaction more specifically,

The collaborations within the collective that form the communication system are formed by the interpenetrations of relations among the members organized along two dimensions, in which the values allocated in each dimension define points in a *socioaffective field*. The values on the horizontal dimension represent *flux*, the amount of activation of *affective energy* (potential energy) in a social collective. This network of affective energy is the medium through which transmission of all interactions – both

verbal and nonverbal communication -- within the collective occurs. *It provides the ontological means by which members sense and “read” each other’s actions.* (p. 17)

Bradley and Pribram’s (1998) socioaffective field brings in the importance of our affect, our emotions. They refer to this as the medium through which transmissions of all interactions within the collective occurs. Our emotions become the medium of communication, the potential energy of our social group, within a holographic field.

The insight from this research appears to offer a component to understanding of how to create a coherent flow state (Csikszentmihalyi, 1990). Bradley (2002) makes an important conclusion regarding Csikszentmihalyi’s work. “It is worth noting that Csikszentmihalyi’s (1975) model of the ‘flow state’ of action translates directly to the triarchical dimensionality of our theory” (p. 18). Csikszentmihalyi was not able to define how a flow state comes about. Developing a state of flow that moves a person to a higher level of performance appears to lie in both a coherent internal state and a stable heterarchical, network of affective bonds.

Bradley (2002) discusses a base of stable order in our relationships as a fundamental aspect of effective work. “Achievement of stability is an *intentional* act: a durable platform of collective organization is an inescapable prerequisite to the pursuit of other substantive plans and goals. Without collective stability, no further purposeful activity of any kind is possible” (Bradley, 2002, p. 14). Collective stability is the key to a strong holding environment and is the opposite of the fragmentation that I am attempting to address. Stability is often an elusive goal in business today (Heifetz, 1994; Heifetz & Linsky, 2002; Vaill, 1996). This collective stability can be “eclipsed by a fragmented, conflicted social construction fraught with stress from internal disorder and from *disunion* with nature” (Bradley, 1987, p. 293). The internal disorder and disunion with nature discussed by Bradley appears to be the same fragmentation discussed by Bohm (1980, 1994).

The heterarchical (affective) order appears to be a critical, elusive construct to our understanding of social dynamics and holding environments for adaptive work. The hierarchy of power has long been discussed (Cuilla, 2003; Machiavelli, 1950). What appears unaccounted for is the affective network. I believe that a coherent network of affective order is an important new component. Stabilizing affective and power dynamics within our organizations allow for the ability to create coherent environments in our organizations. The question that remains is how.

Bradley discusses how the pattern of power within groups is resistant to change, even as the members of the group change, “with the persistence of global structure, once a pattern for power is established, it tends to persist over time” (Bradley, 1987, p. 254). The key to change appears to be in the affective aspect of the socioaffective field. The leader can offer a point of global coherence, synchronization for the group leading it into a coherent holding environment.

It is from this perspective that I offer an expanded definition of a holding environment (Heifetz, 1994; Heifetz and Linsky, 2002), an energetic, socioaffective field dynamic that binds together the interactions of an organization in both the heterarchical (affective bonds), and the hierarchical (power) order. These field conditions are based in the dynamics - the iterations of thoughts, feelings, and behaviors within the group (Bohm, 1980; Bradley, 1987, 2002; Wheatley, 1994). From this interconnected field, we find the conditions of an organization, which are the conditions for emergence.

The concept of emergence is a natural phenomenon in nature. The process of emergence holds the process of transformation from matter to energy and energy to matter (Bar-Yam, 2004; Corning, 2002; Goldstein, 1999). Bradley (1987) discusses this in his socioaffective fields as the domain of potential moving into the domain of structure (Figure 3:1). This transformation state of energy to matter, brings about new structures, new interactions within an organization.

Emergence is the ongoing process of a system to self-organize (Goldstein, 1999). Emergence is the process where things move to the domain of structure based on the conditions within the field. For example, when the temperature drops below dew point, dew emerges.

From this perspective, the process of emergence already exists in organizations. Heifetz (1994) discusses one of the tasks of leadership as providing a holding environment for adaptive work. Specifically, he refers to managing the level of anxiety of the workers, maintaining this affective state at an appropriate level. The level of anxiety represents a condition in the socioaffective field, which needs to be kept within a manageable range for adaptive work to emerge.

There is not yet clear consensus on how emergence or Heisenberg's Uncertainty Principle works. There remains a great deal of uncertainty regarding the process of transformation between domains, and many unaccounted variables. Holographic Leadership steps out with the ideas that are available, and it begins to explore how to increase the likelihood of drawing forth intended outcomes into the domain of structure.

The Self as a Leader: The HeartMind of a Leader

From a perspective of field dynamics we move now to a focus on the individual leader herself, shifting from the macro to micro. As indicated in the literature review the sense of self a leader brings into leadership shapes all aspects of her *being and doing* (Bennis, 2003; Branden, 1998). It shapes her worldview, and her capacity (Kegan, 1982, 1994). Based on the propositions presented in Chapter II, a leader's state becomes crucial to defining the conditions of an organization, its focus, its goals, and ultimately, its success. My dissertation looks at the whole of a person. It ties internal functioning to the capacity for transformation in our organizations.

Drawing on the field state, the socioaffective aspects of the group, I offer an innovative way to create the conditions for the emergence of collaboration, connection, inclusion, and profitability by providing a more stable holding environment. The HeartMind of the leader(s) represent the field conditions and emergence from an internal perspective, as a condition for the external dynamics of leadership and change.

The leader's state is reverberated throughout the organization, the socioaffective field. Within coherent conditions it naturally synchronizes with the energetic nature of the universe, the field dynamics (Bradley, 1987, 2002; Childre & Martin, 1999; Goldstein, 1999; McCraty, 2003).

The major proposition of my exploratory theory and model of practice; the physiological coherence and psychological balance of the leader(s) offer significant conditions for emergence and a point of synchronization for the group. By holding steady and working with intention and integrity, the leader(s) offers a more stable link to the affective energy and power dynamics of the group.

The HeartMind of the leader, as is the nature of any primary oscillating system, provides a point of synchronization for the subsystems with which it works (Childre & Cryer, 2004; Childre & Martin, 1999; Hagelin, Rainforth, Orme-Johnson, Cavanaugh, Alexander, Statkin, Davies, Hughes, & Ross, 1999). The primary focus of my dissertation is this affective energy (potential energy) in a social collective. "This network of affective energy is the medium through which transmission of all interactions -- both verbal and nonverbal communication -- within the collective occurs" (Bradley, 2002, p. 17).

Entrainment is where similar (living or nonliving) systems are pulled into the same rhythm by the strongest rhythm. "Because the heart is the strongest biological oscillator in the

human system, the rest of the body's systems can be pulled into entrainment with the heart's rhythms" (Childre & Martin, 1999, p. 38).

From a group perspective, our internal coherence offers the capacity for a higher global coherence of our organization. This internal coherence and synchronization of the whole offers the conditions for a more coherent, stable system to emerge. Just as the subsystems of the body entrain to the heart (Childre & Cryer, 2004; McCraty, 2003), the subsystems of an organization synchronize with its leadership. This is the energetic holding environment referred to here. The process of intending a coherent socioaffective field represents the conditions for collaboration, inclusion, and profitability to emerge, as it intends a higher order for more adaptive work.

The subsystems are critical aspects of an organization, and contribute to the whole, just like a liver contributes to the body's health. It is a coherent environment that allows for the highest state of functioning for all who are encompassed within the field. The energetic synchronization of the group allows an organization's processes to become clear and clean, this includes anything from thought processes, problem solving to business processes. Coherence provides a higher degree of interconnection, through a process of alignment. It is leading and managing business at the energetic level.

The HeartMind is an extension of the leader's physiological state and heart field, which will be discussed extensively in the next sections. The HeartMind becomes a point of access to the socioaffective field (potential energy and power) in a social collective, and from which the group synchronizes. It is the integrated wholeness of the leader, which when in a stable coherent mode, offers a possibility of global coherence for the group.

A physiological state of coherence represents a high level of functioning in our bodies, both biochemical and electromagnetic processes. These are the systems that regulate our body,

including the heart, Autonomic Nervous System (ANS), and the Endocrine System which regulates our hormonal responses (Childre & Cryer, 2004; Childre & Martin, 1999). Our bodies produce many chemicals and electromagnetic patterns in response to both internal and external stimuli (Bohm, 1994; McCraty, 2002). These processes within our body can be functioning in a coherent or a chaotic pattern (Bohm, 1994; Childre & Cryer, 2004; Childre & Martin, 1999). Holographic Leadership offers greater awareness of these processes, and how to align them with our overall vision for ourselves and our organizations.

The electromagnetic processes are the energy fields created by our body. Brainwaves represent one aspect of the electromagnetic field to which I am referring. However, the heart is actually the primary producer of the electromagnetic field (McCraty, 2003). It is a coherent electromagnetic state that allows for the bridge to field dynamics within an organization to occur. Through the interactions of our heart fields (Childre & McCraty, 2003; McCraty, 2003), I am proposing that the leader of an organization acts as the primary oscillating system of the group. As is the nature of any primary oscillating system, she pulls the frequencies of the subsystems with which it works (Childre & Cryer, 2004; Childre & Martin, 1999; Hagelin et al., 1999)

Building from this concept of synchronization, frequencies are pulled into a coherent system, processes become clear and clean. Processes include thought processes, problem solving and business processes, and a host of other processes inherent in any business endeavor. My model of practice, emerging from these theoretical propositions, provides support for leading and managing business at the energetic level, through the HeartMind of the leader, where internal conditions are primary. It is this coherent HeartMind that allows for a higher order of coherence within the whole, bringing about a stable holding environment for the organization.

This is the basis of my exploratory theory. Leadership as a way of being (our mental/emotional/physical state) that offers sound leadership, sustainable organizational change and the development of the highest order possible for each organization.

Physiology of Leadership

The internal state of the leader is our point of entry to group field dynamics, to the socioaffective field discussed by Bradley (1987, 2002). Bohm (1994) stressed the importance of our own internal state in his work on thought as a system. Bohm saw thought as actively participating in forming our perceptions, through a series of physiological reflexes. These reflexes (biochemical state) affect our thinking and our thinking affects these reflexes, all are interconnected. “Every reaction of thought is always simultaneously emotional, neurophysiological, chemical and everything else. It is all one system” (p.56).

Bohm (1994) states that our thinking does not neutrally report on what is “out there” in an objective world.

Many of our intentions are reflexive; they just come out automatically. They’re coming from reflexes, whose basis is thought. The intention is implicit in the thought. . . . We have the picture that there is ‘somebody’ inside us who is given all the information and then decides to have the intention to do something based on that. I am suggesting that is not so. (p. 91)

The concept that we do not freely choose all our thoughts and actions is foreign to many strong leaders that place a great deal of emphasis on their own personal power. Field dynamics and the level of our own development are real influences affecting our capacity to lead and manage our organizations. I am suggesting our lack of awareness of the effects field dynamics, on ourselves and our organizations, only increases their power to influence our decisions.

Another significant area to this new integrated view is the cognitive sciences, dealing with the mind and the brain. Karl Pribram (1986) takes the holographic theory and explores its

application to brain function and intrapersonal functioning. He considers the brain to be a “spectral analyzer” and based on holographic theory, that space and time become enfolded in the holographic domain.

The fact that the brain is, among other things, a spectral analyzer, that it encodes information in a distributed fashion akin to that which characterizes a hologram, also means that the structural boundaries that characterize the ordinary limits of ‘brain’ and ‘body’ can, on occasion appear to be transcended. (p. 210)

Pribram (1986) uses the same holographic theory to discuss cognitive science that Bradley uses to discuss group dynamics. The understanding of holographic field dynamics, from both an intrapersonal and interpersonal perspective, allows for a viewpoint of an interconnected whole. It begins to heal our fragmented worldview. It begins to account for what we cannot see as being a real and powerful influence.

Pribram (1986) too discusses that “only the density of occurrences is manifest,” (p.210) meaning that we can only see a small component of the energy that exists, that it is not until it converts into matter do we consider it real. Pribram ties this back to Bohm’s perspective on holograms and mental models.

David Bohm (1971, 1973) pointed out that most of our conceptions of the physical world depend on what we can observe through lenses. Lenses focus, objectify and draw boundaries between parts. Lenses particularize. Holograms by contrast are distributive, unbounded and holistic. Bohm referred to our lens-given ordinary perceptions and conceptions as explicate and those that are holographic as implicate. (p. 210)

Pribram (1986) advocates for this broader holographic view, where the implicate, unseen order is recognized and factored into our perception. “We must recognize the transformational and potential nature of the implicate domain and the fact that our sense organs ‘make sense’ by turning in (and out) selective portions of this domain” (p. 210).

Bradley (2006), building on the work of Pribram, puts it this way,

The act of conscious perception requires both an incoming wave field of sensory information about the object *and* an outgoing wave field of attentional energy. Based on recent research, it is clear that more than the brain is involved in the act of attention. The body's psychophysiological systems generate numerous fields of energy, at various frequencies, that radiate outward from the body as wave fields in all directions. (p. 12)

Pribram's (1986) view of how the brain functions and the nature of our perception allows for the understanding of how fields and the brain might interact. Pribram discusses the brain as an analyzer of spectral forms much like radio or television signals. The radio waves exist and are broadcasting regardless of whether we have a stereo receiving the data. What we receive is based on the tuner or frequency to which we are aligned. This is how intention affects energetic patterns and evokes potentials, by setting the frequency of the receiver.

I believe this is an opportunity within values-based leadership, where we purposely tune our attention to a specific wave field, choosing to receive a specific signal from the many possibilities. It is this attention to a higher order wave field that allows for the transformational shift discussed from an energetic perspective by Pribram (1986) and Bradley (2006) and is also the basis of the leadership discussion in Chapter II. The attention is given within the mind/brain of the leader as well as in the organizational leadership, the focus of attention.

The HeartMath techniques offer a bridge into our highest state of intrapersonal functioning, offering a way to a coherent wave field. Taught as "The HeartMath Solution" (Neutral, Quick Coherence, Freeze Frame and Heart Lock-in) (Childre & Martin, 1999), these techniques offer a simple path to "interrupt the body's normal stress response and facilitates a shift toward increased physiological coherence" (Childre & McCraty, 2003, p. 12).

Physiological coherence allows for the capacity to interrupt biochemical reflexes (Bohm, 1994) which allows us to suspend our reactions and assumptions and to begin to "control what

happens in consciousness moment by moment” (Csikszentmihalyi, 1990, p. 5). The understanding of the existence of these reflexes offers the awareness to begin a process of change. The on-demand practices of Neutral and Quick Coherence, allows for the suspension to occur in real time, to break the biochemical and electromagnetic processes that make up these reflexes while we lead our organizations (Bohm, 1994; Childre & Cryer 2004; Childre & Martin, 1999).

The HeartMath system is basically one of integration. Coherent physiology of the heart, respiration and ANS helps to reduce ‘drag’ on one’s body and increases overall energy and mental clarity. The physiological changes created by the refocusing, and emotional restructuring effectively reset the ANS to a lower less frenetic level and facilitate functioning of higher brain function. This resetting allows each of us to reduce the intensity of the reflex and with practice begin to interrupt the process. This state allows for the increase in creativity, insight and Heart Wisdom (Childre & McCraty, 2003).

From a coherent state each of us is able to reduce emotionality and increase integrity, by having practical, simple tools to choose balance. Without these tools, overriding the body’s biochemical reflexes is very difficult (Bohm, 1994; Childre & Cryer 2004). The emotional balance provided by coherence significantly increases the choices each person perceives at any given moment. The HeartMath Techniques have also been shown to increase emotional self-awareness, facilitating decision making and problem solving, increased mental focus and clarity, enhancing creativity, improving work performance, improving communication effectiveness and increasing team coherence (Childre & McCraty, 2003).

Physiological coherence allows for the tuning of the instrument, our mind and body, to receive the field data. The data already exists in a quantum-holographic, socioaffective reality.

“Coherence is things being in sync, in the flow, our actions and intentions match and the outcomes are productive, efficient and fulfilling” (Childre & Cryer, 2004, p. 10). “When a system is coherent, virtually no energy is wasted because of the internal synchronization among the parts. In organizations, increased coherence enables the emergence of new levels of creativity, cooperation, productivity and quality on all levels” (p. 241).

The HeartMath solution (Childre & Cryer, 2004; Childre & Martin, 1999) offers simple on-demand techniques that allow each of us to move into coherence. It helps provide the conditions for productive and profitable work. Without fragmentation, coherence is our natural state (Childre & Cryer, 2004; Childre & Martin, 1999). We have lost this due to the repeated, frantic nature of our thoughts and behavior. Coherence offers us an opportunity to align with the natural energetic dynamics of our world, creating the conditions for coherent emergence (Childre & Cryer, 2004).

The consistent use of HeartMath tools enables the repatterning of the ANS, allowing for positive emotions and coherent physiological patterns to progressively replace maladaptive emotional patterns and stressful responses as a habitual way of being (Childre & Cryer, 2004; Childre & Martin, 1999).

Our research also suggests that the intentional application of these coherence-building techniques, on a consistent basis, effectively facilitates a repatterning process whereby coherence becomes increasingly familiar to the brain and nervous system, and thus progressively becomes established in the neural architecture as new, stable psychophysiological baseline.

Once the coherence mode is established as the familiar pattern, the system then strives to maintain this mode automatically, thus rendering coherence a more readily accessible state during day-to-day activities, and even in the midst of stressful or challenging situations (Childre & Martin, 1999, pp. 10-11)

Research indicates that the benefits of coherence build and can become self-reinforcing. The process of gaining and sustaining coherence becomes easier with practice, as the body begins to reset to coherence. Coherence from this perspective is a progressive state.

The HeartMath system offers a leader a significant capacity to work from and access a field perspective, as it resets the frequency of our physiology. The demonstration of mood management and good emotional intelligence skills and increased critical thinking increases a person's ability to utilize skills and knowledge that would normally be inaccessible from a state of distress (Bohm, 1994; Childre & Martin, 1999; Childre & McCraty, 2003; Goleman, 1997, 2000; Heifetz, 1994; Stein & Book, 2000). Childre & McCraty state,

Positive emotion-focused techniques can thus enable an individual to effectively replace stressful thought patterns and feelings with more positive perceptions and emotions in the moment when they are needed most. This frequently leads to more effective communication, improved decision-making and greater creativity and resourcefulness in problem solving. (p. 11)

Childre & Cryer (2004) discuss how coherence offers moments of peace, stillness, and appreciation where intuitional insights begin to flow, allowing for new perspectives and understanding to emerge. "HeartMath defines heart intelligence as that part of human intelligence that operates in a bandwidth embracing mental, emotional, and even cellular intelligence" (p. 52).

Individual coherence positively impacts reality testing by reducing fear and reactivity. Coherence increases one capacity for ambiguity which allows one to stay in an adaptive challenge longer. The ability to hold steady allows for the collection of more information, offering greater decrement to what is occurring, and allows for better problem solving.

The Heart Field as a Bridge

Taking the ideas of the self as a leader, the physiology of leadership and field dynamics one step further, is the understanding of our own heart field as an interconnection to the socioaffective field of our organization. The Institute of HeartMath has demonstrated the reality of a field emanating from our heart that extends several feet from the body (McCraty, 2003). A coherent heart field positively affects one's health and the primary connection between the heart and the higher brain, allowing for clear, critical thinking. (McCraty, 2003) A heart field is described as an electromagnetic field produced through the heart that can be detected several feet from the individual (McCraty, 2003, 2004-2005; McCraty, Atkinson, & Bradley, 2004a, 2004b). It is read by an electrocardiogram (ECG) and is measured by reading the "interbeat intervals of the *pressure and electromagnetic waves* produced by the heart" (McCraty, 2002, p. 1). McCraty (2003) continues,

The heart generates the largest electromagnetic field of the body. The electrical field as measured by the electrocardiogram (ECG) is about 60 times greater in amplitude than the brain waves recorded in an electroencephalogram (EEG). The magnetic component of the heart's field, which is around 5000 times stronger than that produced by the brain, is not impeded by tissues and can be measured several feet away from the body. (p. 1)

McCraty (2002) specifies how the heart encodes information.

One of the primary ways that signal and messages are encoded and transmitted in the physiological systems is the language of patterns. Several recent studies have revealed that biologically relevant information is encoded in the same intervals between hormonal pulses. As the heart secretes a number of different hormones with each contraction, there is a hormonal pulse pattern that correlates with heart rhythms. In addition to the encoding of information between nerve impulses and in the interval between hormonal pulses, it is likely that information is also encoded in the interbeat intervals of the *pressure and electromagnetic waves* produced by the heart. (p. 1)

The Institute of HeartMath proposes that the heart's electromagnetic field acts as a carrier wave for information that provides a global synchronizing signal for the entire body (Childre &

McCraty, 2003; McCraty, 2003, 2004-2005; McCraty et al., 2004a, 2004b; McCraty, Atkinson, Tomasino, & Bradley, 2006).

Childre and McCraty (2003) state,

The resulting change in the pattern of afferent signals reaching the brain's cognitive and emotional centers reinforces the feeling shift and also facilitates higher cognitive faculties that are normally compromised during stress and negative emotional states. This sharpens one's discernment abilities, increases resourcefulness, and often facilitates a perceptual shift, which allows issues to be assessed and dealt with from a broader, more emotionally balanced perspective. (p.12)

A heart field significantly changes our awareness of how a leader affects the members of an organization. McCraty (2003) has demonstrated the impact of the heart field on group dynamics. "Evidence now supports the perspective that a subtle, yet influential electromagnetic or 'energetic' communication system operates just below our conscious level of awareness . . . that this is an energetic system contributes to the 'magnetic' attractors or repulsions that occur between individuals" (p. 7). There is also evidence that supports the conclusion "that the nervous system acts as an antenna, which is tuned to and responds to the magnetic fields produced by the hearts of other individuals" (p. 9).

"Research in the new field of neurocardiology, shows that the heart is a sensory organ and a sophisticated center for receiving and processing information" (McCraty, 2004-2005, p.15). Based on this research we respond a subtle level to the electromagnetic fields produced by the hearts of other individuals. The research of a heart field appears consistent with the research of Pribram's and Bradley's socioaffective holographic field of group dynamics (Bradley, 1987, 1998, 2000, 2002; Bradley & Pribram, 1997a, 1997b, 1998; Pribram & Bradley, 1998). It appears that the heart field would be a component of the affective basis of the socioaffective holographic field. Understanding this field allows the possibility of increased awareness and the

capacity to implement change within a group dynamic, because physiological coherence can facilitate our higher state of functioning (Childre & Cryer, 2004; Childre & Martin, 1999).

McCraty (2003) asserts,

When people are able to maintain the physiological coherence mode, they are more internally stable and thus less vulnerable to being negatively affected by the fields emanating from others. It appears that it is the increased internal stability and coherence that allows for the increased sensitivity to emerge. (p. 12)

The HeartMath system potentially has a significant impact on leadership not only through the increased coherence and capacity for leadership, but the actual rhythm of the leader's heart field, providing a global point of synchronization for the followers, an energetic field creating a coherent system (Bar-Yam, 2004; Corning, 2002; Goldstein, 1999; McCraty, 2003). This idea would totally change our understanding of responsibility as leader to create our organization's culture and working conditions.

McCraty (2003) refers to Armour and Ardell (1994) stating,

From an electrophysiological perspective, it appears that sensitivity to this form of energetic communications between individuals is related to the ability to be emotionally and physiologically coherent. The data indicates that when individuals are in the coherent mode, they are more sensitive to receiving information contained in the fields generated by others. In addition, during physiological coherence internal systems are more stable, function more efficiently, and radiate electromagnetic fields containing a more coherent structure. (p. 3)

The nature of our interconnectedness discuss here takes us beyond normal understanding of communication. "The capacity to process information about distant events appears to be a property of all physical and biological organization, and is likely due to nonlocal communication via coherent oscillations in the energy field that interconnects everything in the universe" (Laszlo, 1995; McCraty et al., 2004b, p. 326, citing Bohm & Hiley, 1993; Nadeau & Kafatos, 1999). It makes the concept of an interconnected field dynamic more personal.

It is these coherent oscillations that are actually a key to conscious field connection. Through intention and the entrainment of one's physiology, the person holding an image of success, synchronizes into the group's field and increases the likelihood of success. Bradley (2002) states this somewhat differently,

The spectral enfoldment produces a communicative system in which information about the future (potential) order is probabilistically enfolded into the units of information processed in the 'present.' Such anticipated order is derived from the harmonic progression implicit in the pattern of oscillation of energy at different frequencies. (p. 16)
All of these researchers are essentially saying we are interconnected within fields of

information and that our internal state is significant to our awareness of this interconnection.

Bradley (2006) states,

The calming of extraneous thoughts and adoption of positive emotional interest involved in the act of 'paying attention to' distant locales or nonlocal objects, establishes a relationship of phase-conjugate-adaptive resonance with the quantum level of an object at the distant location. (p. 15)

"Research has found that attention is optimized when a focused positive emotional state is adopted which induces a shift to a coherent wave field in the heart's beat-to-beat pattern of rhythmic activity" (Bradley, 2006, p. 15; cited from McCraty, 2002, McCraty & Atkinson, 2003). Our ability to attend, to focus is significantly related to our own internal physiology. This has a direct impact on our leadership.

Bradley builds his most recent work on McCraty's work further strengthening the tie between the concept of a heart field and a socioaffective field of a group. I am suggesting it is this coherent wave field created by the heart that synchronizes with the socioaffective field to create an energetic holding environment for an organization. McCraty, Bradley, and Pribram all appear to be working from the same energetic understanding of the universe, each offering significant potential contributions to the field of leadership.

The HeartMath system and the psychological skills represented here offer a process whereby clear insight and personal development can be gained. Holographic Leadership integrates the developmental need for a higher level of functioning with the daily tasks of business and creative problem solving. The understanding of a heart field allows access to energy dynamics of a group, and the possibility of creating a holding environment of coherence. It is integral to understand the need for individual development while working in and leading an organization.

The HeartMath research moves the electromagnetic aspect of heart fields into the quantum-holographic domain. So the object of attention, the goals, mission, and vision of an organization are directly connected to the physiological system of the person giving the attention. It introduces the possibility of an energetic connection with those with whom we work.

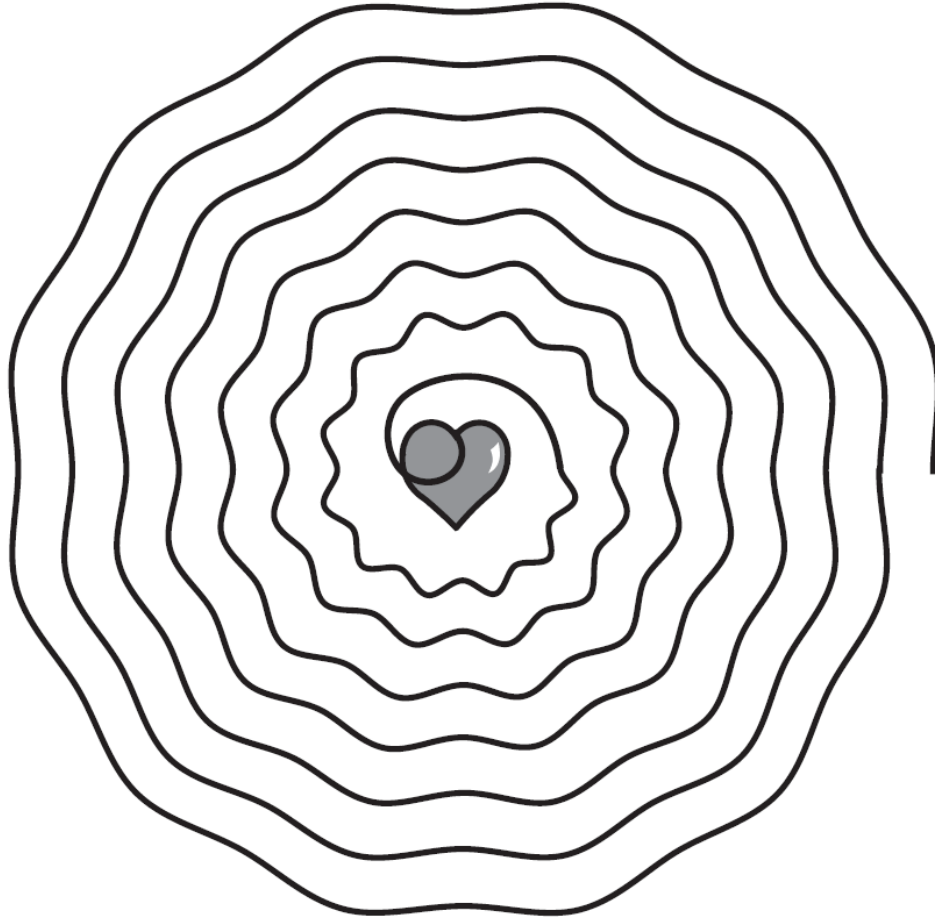


Figure 3:2. HeartMind.
A simple view of a coherent field emanating out into the organization.

The HeartMind of the leader represents the internal conditions of leadership, and a primary point of oscillating for the group. The diagram represents a heart field in a coherent rhythm from which the group synchronizes. A coherent HeartMind correlates directly to a higher state of intrapersonal functioning, reducing our fragmented thoughts and reactions. It allows for our highest state of leadership.

Out of Chaos: Clear Critical Thinking

Psychological integration builds on the capacity to interrupt the physiological aspects of fragmentation and provide a means to moving out of this system of thought (Bohm, 1994), and bring about clearer critical thinking. My theoretical proposition submits that a clear expression of

field dynamics into organization is through the good psychological and physiological functioning of the people involved, especially the leader(s). That the degree to which you manage yourself is the degree to which you can bring forth a coherent, intrapersonal flow state (Csikszentmihalyi, 1990), a direct reflection of the affective energy of a socioaffective field (Bradley, 1987, 2002). This section discusses the clear thinking that is the basis of psychological balance.

The process of intrapersonal leadership is based in coherence, physiological and psychological. It has at its core, self-discipline and self-awareness. We have discussed above the nature of the brain and how it analyzes and perceives based on “density of occurrences” (Pribram, 1986, p. 210). Based on this understanding of the mind and brain, physiological coherence is necessary to tune the receiver to a higher order, to help reduce the overlay of cultural conditioning (Bohm, 1980, 1994; Childre & Cryer, 2004).

In keeping with the analogy, you can have the stereo set for your favorite station (your intention) and still never turn it on. This act of turning it on is our attention. As leaders, our attention is pulled in so many directions, that we have to be clear where it is placed (Heifetz, 1994). Bohm (1980) called for us to “give attention to this habit of fragmentary thought, to be aware of it, and thus bring it to an end,” (p. 9).

David Bohm (1980) offers a greater depth of understanding, “Clarity of perception and thought evidently requires that we be generally aware of how our experience is shaped by the insight (clear or confused) provided by the theories that are implicit or explicit in our general ways of thinking” (p. 7). This is another core aspect of my work, clear perception as a basis for clear critical thinking. Insight into our clear or confused theories is provided by the process of disputing cognitive distortions (Ellis & Harper, 1997).

Heifetz (1994) discusses the importance of reality testing; Senge (1994) and Senge et al. (2004) discuss our need to suspend mental models. All attempt to address the need for clear perception as a basis for strong leadership. My model allows suspending, by offering a way to begin to examine and release unconscious beliefs (Ellis & Harper, 1997).

As we learn to release our limiting beliefs, expand our awareness to higher level of consciousness, and precisely place our attention, we are able to work from clearer insight. One of the things needed is a process of making our beliefs explicit. Working from an awareness of wholeness requires clearer insight, a different level of functioning and skills. Awareness of the possibility of higher functioning, and the use of coherent intention offers a way to draw forth probabilities for transformational growth, for ourselves and those we serve (Bradley, 1987; Hagelin et al., 1999; Harung, 1999).

Bradley (2002) states “thoughts are implicit acts” (p. 12). He sees thoughts as virtual actions that an individual visualizes mentally as objects. These mental objects become a prerequisite to rational and purposeful action. Thoughts become the precursor to our actions, to our leadership.

Ellis and Harper (1997), offer Rational Emotive Behavioral Therapy (REBT) as a means to regulate our thought processes and our emotions responses, (biochemical reflexes) from a cognitive-behavioral perspective. They state that our thoughts are the basis of our feelings, and see our emotional responses as an obstacle to clear functioning. Ellis and Harper see a large amount of our destructive thoughts as coming from unrealistic, illogical and self-sabotaging thinking. They offer a way to increase our rationality.

Their work is based on the premise that emotions are a three part process. First, emotions are based on an internal feeling state which is based on our interpretation of what is happening to

us. Second, there is a series of physiological changes. And third, our active behavior, which is an interaction with our environment, expressing our physiological state and our agitated psychological reactions.

Ellis and Harper (1997) advocate a change that allows us to challenge our “core dysfunctional beliefs” and to “effect permanent and deep-seated improvement” (p. 25). The change is generated by “disputing irrational beliefs” (p.26) that underlie our unconscious thoughts and enhance our power to change the belief and reduce the emotional disturbance. The process of disputing irrational beliefs replaces the irrational belief with a rational one, a healthy feeling and behavior. By discovering our irrational beliefs and replacing them with rational beliefs, we are more likely to demonstrate socially interested behavior, “and help preserve, perpetuate and enhance the happiness of the group in which you choose to live and of the human race as a whole” (p. 28).

Clear critical thinking is a critical component in the HeartMind of the leader. It allows for the clear insight needed in an environment of permanent white water (Vaill, 1996). Ellis and Harper, advocate for the same need as many others discussed here, to manage our internal state. Their focus is on cognitive self-management. This process allows us to begin to see how our own expectations and limited beliefs affect our judgment and our capacity to lead.

Intrapersonal Aspects of Leadership

It is from this base that the ability to maintain clear thoughts is to be integrated with physiological coherence. The leadership literature stressing the importance of good psychological integration and intrapersonal skills has been discussed in the previous chapter (Bennis, 2003; Branden, 1998; Childre & Cryer, 2004; Cloud, 2006; Csikszentmihalyi, 1990, 2003; Goleman, 1997, 2000; Greenleaf, 1977; Harung, 1999; Harung et al., 1995;

Hawkins, 1995; Heifetz, 1994; Jaworski, 1998; Kegan, 1982, 1994; Maslow et al., 1998; Stein & Book, 2000; Weisinger, 1998; Zukav, 1989). This section begins to integrate all of these elements into a usable framework. The intrapersonal self-management process, is based in two practices, disputing cognitive distortions, a process of increasing reality testing and an overall state of happiness (Ellis & Harper, 1997); and Quick Coherence, a process used here to help with emotional restructuring and mediating our biochemical reflexes (Childre & Cryer, 2004; Childre & Martin, 1999). Both practices offer a way of mediating the effects of a situation in the moment. So the process of change is integrated, and on-demand in the daily world of business.

My model helps leaders live in line with Bennis' statement, "Leaders never lie to themselves, especially about themselves, know their faults as well as their assets, and deal with them directly" (Bennis, 2003, p. 32). The level of self awareness and honesty discussed here is a fourth order of consciousness, based on Kegan's work (1994). My model is about transformational change, it begins where the leaders are and helps them, and those they serve move to the next developmental level.

We go back to Branden's edict, "The first law of self-esteem and the first principle of effective leadership are the same: Thou shalt be aware" (Branden, 1998, p. 42). The sustainable change comes in through self-awareness and an iterative cyclical process, meaning that small changes are made frequently throughout the day to correct cognitive distortions or an activated biochemical reflex.

Leading this process requires a strong sense of self. Our skills of self-reflection and self-awareness help us look within ourselves for constant, small corrections. True self-esteem is not based on externals; meeting a specific goal, such as our businesses being profitable; it is based on what Ellis and Harper (1997) refer to as Unconditional Self-Acceptance.

Managing our emotions is not a process of denying their existence (Ellis & Harper, 1997; Goleman, 1997, 2000; Stein & Book, 2000). It is a process of increased awareness and using the affective energy to move us into a state of coherence. Failing to understand these currents of energy within us leads to a blind spot in our perception, the inability to see how we have created the difficulties for ourselves and our organizations.

I have seen this lack of awareness cause a myriad of passive-aggressive and destructive behavior in organizations. Strong emotions, (biochemical reflexes) can be transformed, but they do not just disappear (Bohm, 1994; Childre & Martin, 1999; Ellis & Harper, 1997). Zukav (1989) helps clarify this,

When we close the door on our feelings, we close the door to the vital currents that energize and activate our thoughts and actions. We cannot begin the process of understanding the effects of our emotions upon us, our environment, and other people, or the effects of the emotions of other people upon themselves, their environment, and us. Without awareness of our emotions, we cannot associate the effects of anger, sadness, grief, and joy - within ourselves or others - with their causes. (p. 61)

The processes discussed here offer a way to bring attention to our emotions and intentions in a productive way. This is where the HeartMath system becomes so important to Holographic Leadership. One can learn to be aware of one's feelings, to use the information that the feeling is providing, and limit the emotional response and the reflex that it triggers.

Zukav (1989) discusses how emotions can affect the whole. Emotions are currents of energy with different frequencies (p. 94).

Creative or loving or caring thoughts invoke high-frequency emotions, such as appreciation, forgiveness and joy, and raise the frequency of your system. If your thoughts are thoughts that draw low-frequency energy currents to you, your physical and emotional attitudes will deteriorate, and emotional or physical disease will follow, whereas thoughts that draw high-frequency energy currents to you create physical and emotional health. (p. 95)

He goes on to say, “Your intentions create the reality that you experience. Until you become aware of this, it happens unconsciously. Therefore, be mindful of what you project. That is the first step toward authentic power” (Zukav, 1989, p.120). This coherent, self-aware state allows each of us to consciously choose our behaviors, and our thoughts that align with our intentions. “What you choose, with each action and each thought, is an intention, a quality of consciousness that you bring to your action or your thought” (p. 136). Zukav (1989) illustrates what happens as we live in a frantic state, unconscious of our thoughts and feelings.

Zukav continues,

Emotions reflect intentions. Therefore, awareness of emotions leads to awareness of intentions. Every discrepancy between a conscious intention and the emotions that accompany it points directly to a splintered aspect of the self that requires healing. (p. 61)

Disputing cognitive distortions and mediating biochemical reflexes provide the capacity to be aware of our unconscious intentions, through emotional self-management. Very simply, the HeartMath techniques for attaining physiological coherence can be used to manage our state when our “button has been pushed” with a biochemical reflex. We dispute our cognitive distortions to disengage the irrational belief behind our reflex, to change our patterns of thinking. Thoughts and feelings are tied together. So feelings significantly affect thoughts, and thoughts affect feelings (Bohm, 1980, 1994; Childre & Cryer, 2004; Childre & Martin, 1999; Ellis & Harper, 1997).

Both practices allow each of us to return to a state of equilibrium, but enter the cycle of chaos at different stages. If a biochemical reflex is active, mediation needs to occur first. Once we are clear, and can look at our thought processes, we can begin to correct for a distortion before it triggers another reflex. Even if we find ourselves in a state where we are completely overwhelmed, the awareness that we are having a biochemical wash that creates distortions will

at least allow us to minimize our potential negative response and its effect on our organization. With the return to a more balanced state, the cognitive practices are available for clean up, (correcting misperception and poor decisions) often with significantly less damage due to greater capacity and the awareness of our impact.

Another important difference with the use of these practices is that they are not about addressing surface behavior. We have experienced anger and not acted out in the moment, and then failed to see how our underlying resentment affects our future choices and the socioaffective field that encompasses us. Holographic Leadership offers the possibility to clear the incident internally, physiologically, and psychologically. We will not have to manage the situation overtly, as we have managed ourselves internally.

The purpose of the physiological coherence and the psychological integration process is to achieve an open, fluid, and flexible intrapersonal state. It is from this state that true leadership, for the good of the whole is possible. “The journey to wholeness requires that you look honestly, openly and with courage into yourself, into the dynamics that lie behind what you feel, what you perceive, what you value, and how you act (Zukav, 1989, p. 147).

From this clear, calm leadership, group coherence is enabled. A coherent socioaffective field offers an attractor pattern that coalesces the group’s thoughts, behaviors, and actions.

Intention as an Agent of Change

With this increased awareness what do we do to create the conditions, the holding environment, for our desired outcome? There are a number of studies demonstrating the use of intention and coherence to change physical reality. It is through the use of intention and integrity we have the capacity to shape and activate potentials.

William Tiller, a physicist, has conducted a number of experiments using the power of intention to change the structure of matter, most frequently that of water. The primary point of his work is that clear, calm focused attention used with a clear intention affects reality (Tiller, 1997).

Tiller (1997) introduces an interesting phenomenon called “conditioned space.” In a five part series, he offers evidence on the nature of intention, field dynamics and non-locality (Tiller & Dibble, 2007; Tiller et al., 2004a, 2004b, 2005). From these experiments, Tiller et al. (2004a, 2004b, 2005) offer experimental evidence indicating the possibility of creating conditioned space to bring about an accelerated and specified change.

Tiller’s (1997) specific design was to imprint a specific intention on what he refers to as an intention imprinted electrical device (IIED). These devices were then placed in specific laboratories and the intended change monitored. His purpose in this series of studies was to “fulfill the general scientific method requirement” (Tiller et al., 2004a, p. 145), and to reproduce his theoretical protocol to meet the empirical standard of replication. He has previously published on his theoretical stance of field dynamics and “gauge symmetry” (Tiller, 1997; Tiller et al., 2001).

He suggests that conditioned space will accelerate an intended change. He defines conditioned space as “a higher electromagnetic gauge symmetry state than our normal background state and such a space can be specifically tuned” (Tiller et al., 2004a, p. 145).

Fundamentally, it appears that the IIED procedures allow one to condition any type or volume of space to a higher EM gauge symmetry level and our measurement techniques allow one to track some identifier of that state. It appears then, that one can ‘tune’ the conditioned space to serve a specific intention use at a high level of enhanced performance. (p. 154)

Like Bohm (1990, 1994), Tiller (1997) challenges the dynamic equation of Nature and makes a clear relationship between energy fields and mind. Tiller offers this new understanding, “Function ⇔ Structure ⇔ Chemistry, to a new equation: Function ⇔ Structure ⇔ Chemistry ⇔ Electromagnetic Energy Fields.” He then extends this further to “Function ⇔ Structure ⇔ Chemistry ⇔ Electromagnetic Energy Fields ⇔ Mind” (pp. 3-4).

Tiller also supports an expanded holographic view and stresses the importance of training one’s mental and emotional states. “Running through the work in this field [Consciousness Studies] is the assumption that we all share the same underlying consciousness and that there is no separation or boundary in space and time at a deep level” (Tiller et al., 2001, p. 3). Tiller through a series of studies has offered insight into conditioned space (Tiller, 1997), and how to change the nature of physical domain through the application of a coherent physiological state and focused attention on an intention (Tiller & Dibble, 2007; Tiller et al., 2004a, 2004b, 2005).

Another phenomenal example of the interaction between intention and physiological coherence (in this case brain coherence) to create significant physical effects in the target populations was conducted by Hagelin et al. (1999). This study was the application of Transcendental Meditation (TM), a clear conscious state with intention, on the population of Washington, D. C. The effects were a significant change in social indicators.

Hagelin’s group, building on over 40 previous studies researched the effects of TM for affecting social change. His group was able to demonstrate a 23.3 % reduction in crime rate in Washington D.C. over a two month period, from June to the end of July 1993 (Hagelin et al., 1999). His study suggests clear evidence for the field effect of collective consciousness, coherence, and the impact of a small aspect of a system (the square root of one percent of the population) to entrain the whole and generate change.

Hagelin et al. (1999) suggests a relationship between subjective well-being and objective social indicators. Subjective experience is generally assumed to be only an effect rather than a cause of objective conditions (Assimakis & Dillbeck, 1995). This subjective state, our intrapersonal state, is the subject of my dissertation.

Like the HeartMath research, Hagelin used the concepts of entrainment to inform the protocol used. He specifically used “the square root of one percent of the population to produce a society-wide transformation” (Hagelin et al., 1999). He discusses how “a few coherent elements in a physical system” can move the system into coherence as a whole. This entrainment of a few clear, coherent aspects of a system is a key component here. Hagelin et al. (1999) (quoting Hagelin, 1987, p. 65) states,

This proportion is based on physical models of how a few coherent elements in a physical system can stimulate phase transitions to coherent functioning in the entire system; since the combined intensity of coherent elements is proportional to the square of their number, a measurable influence on the whole system can be expected when a coherent subpopulation exceeds a number proportional to the square root of the total population. (pp. 159-160)

The research suggests that as coherence is increased, a higher order to the group is affected. The reduction in social indicators is a field effect, or influence at a distance. These studies bring to light the effects at a distance of physical fields. “A characteristic of all physical fields is that they propagate influences at a distance” (Assimakis & Dillbeck, 1995, p. 1174, citing Sudarshan & Mukuna, 1974). This is a limitation of his research as very little is known regarding the nature of field dynamics, specifically in relationship to non-locality and action at a distance.

These studies offer significant validity to the action of intention as an agent of change in a coherent field. A clear calm physiological state implies a potential for a coherent field, which increases our ability to choose and act from integrity.

Integrity: The Power of Choice

David Hawkins (1995, 2002), a psychiatrist, also offers a developmental scale from which to view our capacities and choices. He stresses the importance of integrity, the consistency of thoughts and behavior toward our intention. He has taken his understanding, “From psychology, philosophy, psychoanalytical theory, and the classic “chain of being” (Hawkins, 2008, p. 45; Lovejoy, 1936) and created a Scale of Consciousness. This scale offers insight into how we experience reality, and to clarify the reflexive nature of our thoughts and emotions.

Hawkins Scale of Consciousness is a evolutionary list of patterns, using emotions as indicators for the levels. With simple descriptors, such as fear or joy, it is much easier to gain insight into one’s level of functioning, as compared to Kegan’s orders of consciousness. It can be used as a reminder to see if one is in chaos or coherence, above or below the Level of Integrity. (Hawkins, 1995, 2002).

God-view	Self-view	Level	Log	Emotion	Process
Self	Is	Enlightenment	700-1,000	Ineffable	Pure
All-being	Perfect	Peace	600	Bliss	Consciousness
One	Complete	Joy	540	Serenity	Transfiguration
Loving	Benign	Love	500	Reverence	Revelation
Wise	Meaningful	Reason	400	Understanding	Abstraction
Merciful	Harmonious	Acceptance	350	Forgiveness	Transcendence
Inspiring	Hopeful	Willingness	310	Optimism	Intension
Enabling	Satisfactory	Neutrality	250	Trust	Release
Permitting	Feasible	Courage	200	Affirmation	Empowerment



LEVELS OF TRUTH

LEVELS OF FALSEHOOD



Indifferent	Demanding	Pride	175	Scorn	Inflation
Vengeful	Antagonistic	Anger	150	Hate	Aggression
Denying	Disappointing	Desire	125	Craving	Enslavement
Punitive	Frightening	Fear	100	Anxiety	Withdrawal
Uncaring	Tragic	Grief	75	Regret	Despondency
Condemning	Hopeless	Apathy, hatred	50	Despair	Abdication
Vindictive	Evil	Guilt	30	Blame	Destruction
Despising	Hateful	Shame	20	Humiliation	Elimination

Figure 3:3. Map of Scale of Consciousness.
(Hawkins, 2006, p. 370)

Hawkins' (1995) scale is logarithmic ranging from zero to one thousand. His levels, the attractor patterns, are a continuum of frequency that delineates power to force. The divider

between these two overall patterns is 200, the threshold level of integrity. The area of Force uses the descriptors of Shame, Guilt, Apathy, Grief, Fear, Desire, Anger, and Pride as the primary attractor patterns. Power, above the threshold level of integrity is described with: Courage, Neutrality, Willingness, Acceptance, Reason, Love, Joy, and Peace (Hawkins, 1995).

Each level on the scale represents a differentiating attractor pattern, wave field, in which we can engage reality. From a quantum-holographic perspective it represents the density of occurrences (Pribram, 1986), or a socioaffective field (Bradley, 1998, 2000; Bradley & Pribram, 1997a, 1997b, 1998; Pribram & Bradley, 1998). For the leader with self-awareness, the insight offered by the scale, allows a simple way to view our own level of thoughts, feelings and behavior.

Hawkins advocates for the use of power as means for positive change and cautions against the use of force in creating equal and opposite reactions (Hawkins, 1995, 2002). His description of force aligns with Bohm's (1994) view.

Nothing you do can change their thinking, except communicate to them that they are incoherent – communication which they will accept and understand. Otherwise you are trying to meet thought with force, which is really a kind of violence. If you say 'out there are some people behaving incoherently and I will try to make them behave coherently,' then you're using force. But they keep on thinking the same old way. If you're more powerful than they are, they will do what you want for a while – until you get to be a little weak, and then they'll get back at you. (p. 17)

To communicate with the intention of acceptance and understanding is an example of power. Hawkins' use of the term power shares qualities with values-based leadership, courage, willingness, acceptance, reason, and love. He relates our level of integrity to our intention, as an undercurrent of field dynamics discussed by Senge & Zukav, as the primary frequency from which we draw forth probabilities. His use of emotions as descriptors fits with the importance of tying positive emotional states to our intentions (Tiller & Dibble, 2007; Tiller et al., 2004a,

2004b, 2005; Hagelin et al., 1999). Hawkins (1995, 2002) ideas fit well with the quantum-holographic whole and Heisenberg's uncertainty principle, the interrelationship between observer and observed

The attractor patterns below the threshold level of integrity are considered force and by definition will create equal and opposite reactions within the field. The attractor patterns above the level of integrity constitute power and radiate cohering positive energy (Hawkins, 1995, 2002), bringing out what many discussed above would describe as a flow state. Hawkins (1995) also ties his concepts to Peters and Waterman's (1982) work,

Our research on attractor patterns correlates closely with the conclusions arrived at by Thomas Peters and Robert Waterman in their book *In Search of Excellence*. They concluded that successful companies were those that had 'heart' as opposed to strictly left-brain, scientifically managed companies. (Hawkins, 1995, p. 164)

Peters and Waterman (1982), in their values-based approach offer examples of integrity in leadership. Hawkins offers a way to see the values-based leadership and holographic fields integrated into a more common language. Hawkins' Scale of Consciousness offers the ability to understand how we are functioning by identifying the primary emotion and behaviors (Hawkins, 2006). It can be used with straight-forward diagnostic approach that offers a more traditional format to this new application and understanding of energy systems and leadership.

Hawkins (2002) describes what he means by an attractor field.

One indication of a low-energy attractor field is a struggle of opposites. Whereas power always results in a win-win solution, force produces win-lose situations; the consequent struggle indicates that the correct solution hasn't been found, as when the assertion of one's group's interests violates those of another. The way to finesse a high-energy attractor field solution is to seek the answer that will make all sides happy and still be practical. . . . Support the solution instead of attacking the supposed causes. (p. 167)

A simple list of corresponding thoughts, feelings and behaviors to identify each attractor pattern (Hawkins, 2006) allows the application to leadership and organizational life. It does not require complicated testing or confusing orders of functioning.

Qualities and behaviors above the Level of Integrity:

Joy is love in a more unconditional state; it is dedicated, compassionate, patient, and persistent in a positive attitude.

Love is an internally driven state, not dependent on external factors, forgiving, nurturing, supportive, able to see totality of problem. It does not take a position, is inclusive, optimistic, and progressively expands its sense of self.

Reason is where rationality rises to the forefront; becomes expert at manipulating abstract concepts and symbols, intellectualizes. Is not always able to distinguish between symbols and what they represent.

Acceptance is emotionally calm, with a broader perception and equanimity, displays balance, proportion and appropriateness, accepts the limitations of being human.

Willingness implies one has a commitment to participate in life; it is friendly, social, helpful to others, volunteer, contribute to the group, sympathetic and responsive to others.

Neutrality allows for flexibility, nonjudgementalness, realistic appraisal of problems, unattached to outcomes, reduction in frustration and self-defeating behaviors.

Courage is the onset of empowerment, exploration, accomplishment, fortitude and determination. It includes the energy to learn new job skills and beginning go confidence.

Qualities and behaviors below the level of integrity:

Pride is characterized by vanity, pride, sense of self-importance, superior attitude, strong opinions, the desire to be noticed, and admired.

Anger is characterized by intimidation, a punishing, and vengeful attitude, emotional, dramatic, and threatening interactions.

Fear is characterized by frequent panic, overreactions, dramatic responses, focus on survival, needing a sense of protection and control, exaggeration and justification of actions.

Grief is characterized by living in past, resentment, despondency, avoidance, seeking sympathy, control, and bitterness.

Apathy is characterized by blame, sense of being a victim, indifference, rationalizing and excuse making, hopelessness, cynicism, self-pity and a refusal of solutions.

Guilt and Hate are characterized by judgment of others, negativity, narrow view of situations and people, self-indulgence, meanness, cruelty, stinginess and vengefulness.

Figure 3:4. Levels of Integrity descriptors (Hawkins, 2006).

Hawkins offers a clear injunction regarding the use of coercion and force. He offers scientific reasons for the values-based leadership of Greenleaf, Burns and Heifetz. He offers a pattern from which to overlay the work of Wheatley and the others discussed here. The Scale of Consciousness offers an indicator of how to assess where one is engaging the field and the likely outcome based on that engagement.

Hawkins focuses on the state of consciousness from which we live and work, much like Kegan's (1982, 1994) orders of consciousness. He suggests that a person working from the state of anger, for example cannot be working above the level of integrity. This fits with the emotional aspect of the HeartMath research. Significant to the HeartMath program is that positive emotions and mood management are a requisite for a coherent heart field. This places integrity and coherence in very similar positions to each other, suggesting that the field needed to bring forth our stated intentions needs to be both coherent and integrative.

I am suggesting that the heart broadcasts the electromagnetic field, a heart field (Childre & McCraty, 2003; McCraty, 2003) but it is the intention, the underlying choice that creates an attractor pattern, which selects the resonance, and acts as an attractor for probable events. Positive intentions have to be empowered by coherent positive emotions to be effective. These emotional attractors appear to be aligned with the affective nature of socioaffective field discussed by Bradley (Bradley, 1987, 1998, 2000, 2002; Bradley & Pribram, 1997a, 1998b, 1998; Pribram & Bradley, 1998).

My exploratory theory ties the concepts of physiological coherence and integrity together as parallel concepts. HeartMath's physiological coherence system is based on emotional refocusing and restructuring techniques. The emotion of appreciation is the primary focal point. Hawkins' uses emotions as a simple way of identifying the frequency from which we are

working. Hawkins' brings back in the psychological integration, the higher on his scale the higher the functioning, the higher the level of psychological integration (Hawkins, 1995, 2002).

These two systems even use similar terminology in their work. Neutral is the first tool in the HeartMath system, and Neutrality is just above the Level of Integrity. The state of anger is below the level of integrity, and out of coherence. The state of appreciation is the focal point of the HeartMath System and above the Level of Integrity.

Iteration and Integration

Our thoughts and biochemical reflexes, which are the basis of our perception of reality, create our lives, our work and our organizations. Not understanding this is a major impairment to our capacity to lead and change our organizations. This has been discussed at length in this chapter, and is the focal point of the model of practice to come. Thoughts and emotions create by the nature of their electromagnetic frequencies; they create by the nature of the biochemical wash; they create through the frame from which we have chosen to see. We are responsible for who we have chosen to be personally, but as leaders who we are has an even more profound effect (Bennis, 2003; Branden, 1998; Childre & Cryer, 2004; Cloud, 2006; Harung, 1999; Harung et al., 1995; Heifetz, 1994; Kegan, 1982, 1994; Maslow et al., 1998; Stein & Book, 2000; Weisinger, 1998). Who we are is reflected in our thoughts, feelings and behavior. All of these are largely repetitive. For example, one small thought, such as "This won't work," has no real power. But when this thought is repeated ten thousand times a day, for weeks, months, and even years, it has huge power. (Dyer, 2001, 2004; Ellis & Harper, 1997) This is the resonance, the energetic nature of our heart field and our thoughts, that is the attractor pattern in the implicate world. This is what I mean by frequency of thought, an attractor pattern from which we create. I am referring to this biochemical, electromagnetic, emotional base through which our

perception and thought moves, the heart field of our own reality, and ultimately moving into the holding environment of our organizations.

The change created by repeated thoughts and emotions is small and almost imperceptible. We assume that there is no affect. Actually, we give it no attention whatsoever. This is our distortion. Thought is the transitory domain between matter and energy, implicate to explicate, for it sets the model, the frequency of what we are choosing to see. This has been specified above by Bohm, Pribram, Bradley and Tiller. Bohm (1990) relates this here once again more explicitly.

There is a kind of active information that is simultaneously physical and mental in nature. Active information can thus serve as a kind of like a 'bridge' between these two sides of reality as a whole. These two sides are inseparable, in the sense that information contained in thought, which we feel to be on the 'mental' side, is at the same time a related neurophysiological, chemical, and physical activity (which is clearly what is meant by the 'material' side of this thought). (p. 281)

. . . This means that that which we experience as mind, in its movement through various levels of subtlety, will, in a natural way ultimately move the body by reaching the level of quantum potential and the 'dance' of the particles. There is no unbridgeable gap of barrier between any of these levels. Rather, at each stage some kind of information is the bridge. This implies that the quantum potential action on atomic particles, for example, represents only one stage in this process. . . . The content of our own consciousness is then some part of this over-all process. (p. 282)

The content of our own consciousness represents which probabilities move into reality. It represents the corresponding physiological state of our consciousness, and therefore how we interact with the world. This can be the real power of our mental, emotional and physical state used with self-awareness and self-discipline. It is our repeated thoughts, and actions that frame our lives and our leadership. If we are able to bring them into consciousness, emphasizing our strengths and reducing our limitations we can affect a higher order for ourselves and our organizations. The daily integration within the HeartMind of the leader leads to a coherent holding environment and sustainable change for the organization through the frequency by which the leader(s) HeartMind pulls the group into a synchronistic whole.

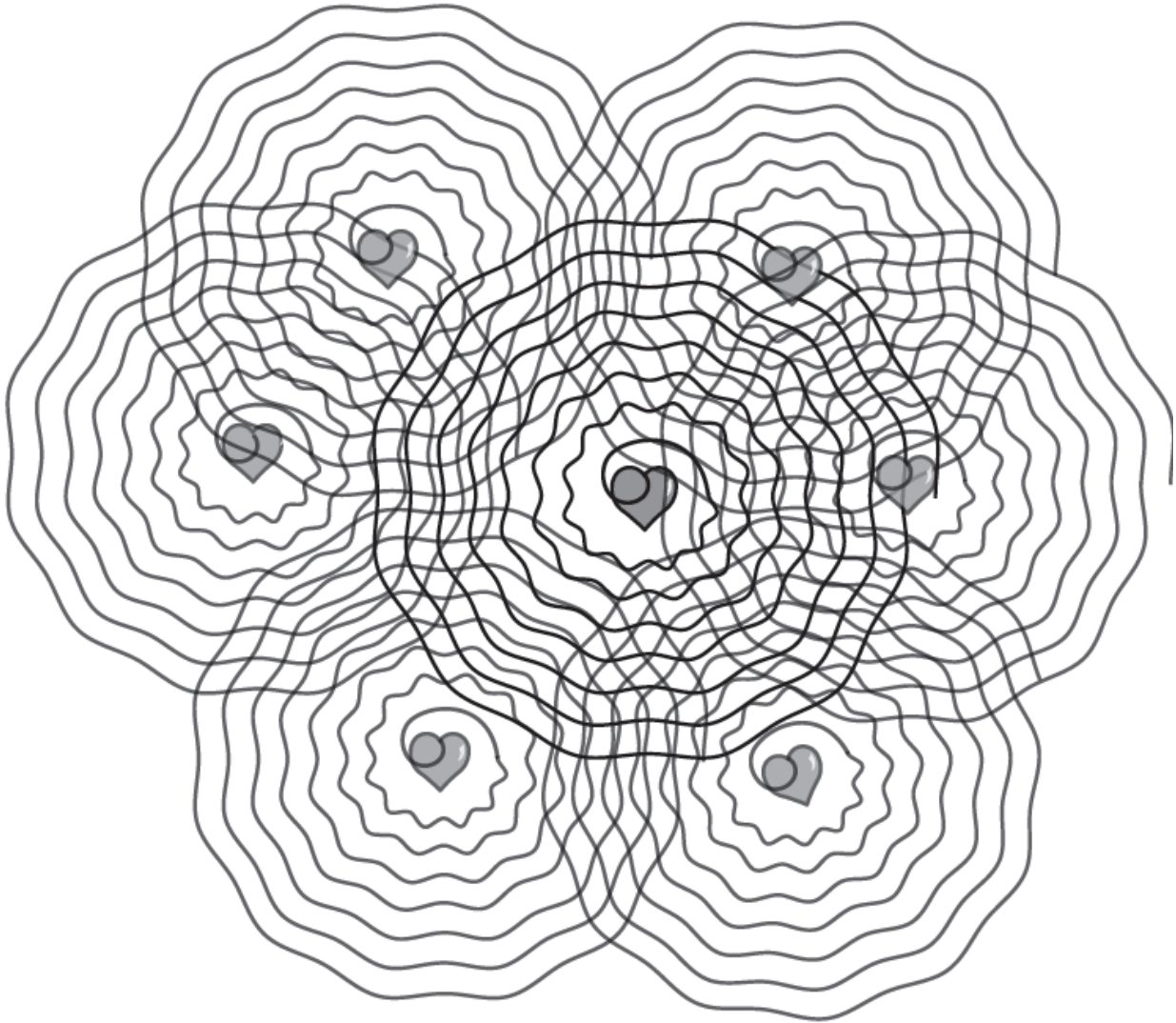


Figure 3:5. A coherent holding environment.
Group functioning, pulled into a synchronistic whole drawing forth for a more a stable global order.

The HeartMind of the leader(s) offers a point of synchronization to a coherent holding environment. The HeartMind offers a point of access to the socioaffective field (potential energy and power) in a social collective (Bradley, 1987). The field dynamics of an organization's holding environment offer the conditions for the emergence within the organization. A resonant holding environment offers the conditions for greater collaboration, connection, inclusion, and profitability, by allowing for a higher global order.

functioning of the organization. A coherent HeartMind allows for a phase transition into coherent functioning, a coherent holding environment. These conditions allow for the emergence, into the domain of structure, for clear critical thinking, and the alignment of the organization's values with daily behavior. These conditions allow for adaptive and profitable work.

The transformational space (shaded area), represents the space between the domains of potential and structure, an area unaccounted for in the leadership literature. The global coherence of this space, within the HeartMind of the leader(s) allows disjointed parts to be synchronized, increasing efficiency and effectiveness in their interrelationship, which generates an emergent whole, greater than the sum of the parts. A coherent, adaptive holding environment, allows for the affective bonds within the group to be strengthened, creating more potential energy, and emphasis on the network like structure of the group. Holographic Leadership shifts the process of increasing global order in an organization to an internal focus of physiological coherence and psychological balance.

By creating an internal state of coherence and balance the socioaffective network of the group, the interrelationships, can be strengthened and shaped to impact the whole to a higher order of functioning. The coherent HeartMind of the leader(s) begins to impact the energetic holding environment of the organization. From a physics perspective, coherence in this sense maximizes local freedom and global cohesion (Thurber et al., 2008).

The concepts presented here offer a broad scientific framework to view leadership, to begin to lead from the implicate whole, and to intend higher orders of global coherence for our organization. Holographic Leadership offers a model for transformational leadership. It offers a more precise understanding of group dynamics and how to bring about change within those

dynamics. A transformational shift is the process discussed here. Managing our internal state offers a beginning point.

My thesis places the subjective world on equal footing with the objective nature of our world. It places specific attention on organizational living systems and suggests new and different ways in which to lead them. Like Action Research, its primary point of focus is not the outcome. It places equal attention on the process. My theoretical propositions:

- Field dynamics are real and influencing factor in our lives and in our organizations (Bohm, 1980; Bradley, 1987; Laszlo, 1995; Nadeau & Kafatos, 1999; Sheldrake, 1995).
- Organizations are self organizing systems, encompassed in a field of information that influences thoughts, feelings and behaviors (Bohm, 1980; Bradley, 1987; Laszlo, 1995; Nadeau & Kafatos, 1999; Sheldrake, 1995).
- The field of information encompassing an organization is an energetic holding environment, a socioaffective field dynamic (Bradley, 1987, 2002).
- The holding environment is nested into larger fields, such as a community, an industry, and ultimately the Undivided Wholeness in Flowing Movement (Bohm, 1980, Bradley, 1987; Sheldrake, 1995).
- Field dynamics are enduring, slowing the nature of the potential changes; this quality can be used to help ensure sustainability (Bradley, 1987).
- Human beings have significant bioenergetics fields that interact with the socioaffective field of a group. We cannot be outside a system looking in (Childre & McCraty, 2003; McCraty, 2003; Zukav, 1979).

- The conditions of the field, the holding environment, are the properties of the ensemble which emerge into matter, physical reality (Bar-Yam, 2004). It is an internal point of interconnection between subjective and objective reality, the implicate and explicate worlds (Bradley 1987; Pribram, 1979, 1986).
- The coherent heart field of the leader(s) is the point of synchronization for an organization, offering access to a socioaffective field, the holding environment of the organization.
- The physiological coherence and psychological balance of the leader(s) offer significant conditions for emergence. By holding steady and working with intention and integrity, the leader(s) offers a more stable link to the affective energy and power dynamics of the group.
- The emotional attractor pattern, the HeartMind of the leader(s), is a significant factor in the conditions of the field and nature of what emerges (Bar-Yam, 2004; Goldstein, 1999). It sets the tone for a coherent stable order or a fragmented organization.
- Bringing our personal functioning, our HeartMind, into greater balance and coherence can provide a point of synchronization for the group as a whole, offering a higher form of global coherence, and shaping a coherent sustainable culture.

Conclusion

I have discussed the science that makes our intention and integrity vital to our organizations. These concepts already exist within the values-based leadership literature. My

dissertation is about expanding many existing concepts from leadership and change and offering a new perception, a new lens through which to see and lead our organizations.

Extending Heifetz's use of a holding environment, I have suggested that the psychophysiological state of the leader actually affects the psychophysiological state of each person in the holding environment, and the quality of the work done. Because of the nature of leadership to model the expected standards, modeling chaos only increases this state within the employees and leads to many difficulties in business functioning.

The synchronization and coherence can already be seen from a more traditional level with standards of behavior, dress, etc. The synchronization discussed here goes beyond what we can see, beneath the level of our current awareness, taking into account Pribram's (1986) recommendation "to recognize that transformational and potential nature of the implicate domain." (p. 210)

From a scientific perspective, we can create a phase transition into coherent functioning. If the leader is consciously aware of their state and its effect, a great deal more can be done to correct and manage the permanent white water. Also, by working with awareness, the leader can empower each person to hold the environment through their own coherent state, affecting a greater more powerful whole.

It is with group coherence, through positive emotional patterns and clear intention that synchronistic events through conditioned space can begin to appear as a more coherent socioaffective field. More importantly, since all employees are in a clearer state of perception and intuitive connection, the opportunities have a greater potential to be seen, responded to, and brought into physical reality for the good of all.

From this perspective, our attention becomes a form of currency within our organizations, as it significantly affects our physiology and frame of mind, which is the basis of our heart field and the socioaffective field of the group.

The frequency of the practice throughout the day, allows coherence to become a conditioned response, resetting the ANS. The state of coherence is self-maintaining, offering the increased possibility of sustainability within our organizations. The capacities that are increased during coherence, such as reality testing , stress tolerance, and self-awareness are strengthened and made more readily available, creating a positive feedback loop.

There is great depth possible in both physiological coherence and psychological integration, so improvement in this state can be ongoing. The coherent functioning of each person becomes a critical link in the knowledge base. This is how the open, fluid, and flexible functioning of the individual becomes integrated into the group, and becomes the basis of a powerful, creative holding environment.

Leadership from this perspective is the process of an organization cultivating an intention and goals from a state of coherence, which are above the level of integrity. Leadership becomes the tuning fork that attunes the group. It requires a high level of consciousness and integrity. I am suggesting that it is positive intentions empowered by coherent positive emotions, and aligned with consistent action that most affects the holding environment.

The nature of leadership is to hold an environment for common purpose. The HeartMind is the point of synchronization and offers the possibility for transformational leadership, encompassing individual and group shifts. Holographic Leadership is based on the dynamics

within the whole, and offers an understanding of our interconnection. Learning to consciously condition the field within the organization offers us the increased capacity to develop our organizations.

Chapter IV: A Bridge to the Implicate Order of Leadership

Introduction

Margaret Wheatley (1994) asked the question, “What if we stopped looking for control and begin, in earnest, the search for order” (p. 23)? My dissertation suggests that we can seek and find a new order by training leaders to use their own HeartMind to influence the holding environment of their organizations.

Chapter III outlined the importance of field dynamics within our self and our organizations. It offered an understanding of physiological coherence and psychological integration of the leader(s) as conditions of synchronization and emergence, ways in which we connect to the energetic universe to bring forth the intentions of the organization. I have offered a theoretical base to view the leader(s) of an organization as the primary oscillating system of the group. I have suggested that the HeartMind of the leader significantly impacts the socioaffective field dynamics, the holding environment of an organization. Chapter IV will further develop the theoretical ideas of Holographic Leadership into a suggested model of practice for implementing into the everyday world of our organizations.

Drawing on the HeartMind of the Leader

The HeartMind of the leader provides a significant organizing principle for the potential energy and power for her organization (Bradley, 1987, 2002; Childre & Martin, 1999; Goldstein, 1999; McCraty, 2003). Clear, calm leadership offers a different socioaffective group dynamic (Bradley 1987, 1998, 2000, 2002; Bradley & Pribram, 1997a, 1997b, 1998; Pribram & Bradley, 1998) to that of chaotic leadership (Childre & Cryer, 2004). A coherent heart field facilitates higher cognitive faculties, “sharpens one’s discernment abilities, increases resourcefulness, and often facilitates a perceptual shift, which allows issues to be assessed and dealt with from a

broader, more emotionally balanced perspective” (Childre & McCraty, 2003, p.12). Our capacity for clear critical thinking is directly tied to the state of our physiology (Bohm, 1994; Childre & Cryer, 2004; Childre & McCraty, 2003; Goleman, 1997, 2000; Heifetz, 1994; McCraty, 2003; Stein & Book, 2000).

Our HeartMind becomes crucial to defining the conditions of an organization, and ultimately, its success. A leader working from coherence and integrity is in a position to provide clear, calm leadership. Providing a point of synchronization for the group, the coherent leader offers a wider base of operation, as the group is more than the sum of each individual’s functioning (Bar-Yam, 2004; Bradley, 1987; Capra, 1996; Goldstein, 1999). This wider base includes a holographic, socioaffective field, with an attractor pattern, a core intention, that creates a pattern that coalesces the group’s thoughts, behaviors, and actions with the intentions from which the group works (Bradley, 1987, 2002; Hawkins, 1995, 2002). This is the nature of flow, the feeling of “being carried away by an outside force, of moving effortlessly with a current of energy, at the moments of highest enjoyment” (Csikszentmihalyi, 2003, p. 39).

The heart broadcasts an electromagnetic field, a heart field, but it is the intention, the underlying affect that determines the resonance, and acts as an attractor for probable events (Hawkins, 1995; McCraty, 2003; Tiller, 1997; Tiller & Dibble, 2007; Tiller et al., 2001, 2004a, 2004b, 2005). It is the combination of positive intentions empowered by coherent, integrious emotions that makes the shift to a coherent holding environment possible.

The more conscious we become of our reflexes and the socioaffective dynamics the more we can learn to manage the energetic dynamics within our organizations. Holographic Leadership is the process of emergence in organizations. The HeartMind of the leader is the interface between subjective and objective worlds, our connection to the Undivided Wholeness

in Flowing Movement (Bohm, 1980). Our point of entry to the group field is located in our heart. Our individual level of functioning and coherence helps determine our organization's level of global coherence, and our capacity to draw forth the highest potential. Our emotional/physiological state is the frequency. The point of power is internal, here and now. Through a clear, calm state we access wholeness, we move between domains: Subjective => Objective => Subjective.

Bohm, Bradley, and Pribram have all offered complimentary interconnecting viewpoints to understand this Undivided Wholeness in Flowing Movement (Bohm, 1980). This interconnecting field remains unseen, unknown, and elusive as a powerful transformational awareness for our leadership and our lives. To improve, we will need to be able to trust the knowledge that wholeness is primary. The fragmentation is so pervasive we do not know its effect on our self or our world (Bohm, 1980, 1994; Wheatley, 1994). My model of practice offers one way to answer Bohm's call "for man to give attention to his habit of fragmentary thought, to be aware of it, and thus bring it to an end" (Bohm, 1980, p. 9).

The primary shift required for this model is our state of mind, a shift to the awareness of wholeness. It is a prerequisite choice to see and work from wholeness; the "willingness" (Hawkins, 1995) to accept our interconnection. This shift requires a kind of faith, like the faith we have in gravity and oxygen. Neither of these can be seen, yet they sustain us in many ways. This underlying premise of connectedness when realized changes the rules, and affects our perception and our habits of thinking and acting in the world. The integration of wholeness is a process, a lifelong journey.

Holographic Leadership Model: Intention, Integrity and Integration

On the surface, the component of intention is very similar to the vision and mission already used by so many companies. With the understanding of our deep interconnection, emergence, and synchronization, intention becomes more meaningful. We can draw from wholeness itself, the understanding needed to consciously work within it (Bohm, 1980; Tiller, 1997; Tiller & Dibble, 2007; Tiller et al., 2001, 2004a, 2004b, 2005). The intention becomes the frame from which we view the world and, therefore, what we see (Senge et al., 2004; Wheatley, 1994; Zukav, 1989). Our observation, the intent to see wholeness, changes the system we are observing (Zukav, 1979, 1989). To begin we may have to *imagine* that *behind* this world of fragmentation is the world we want.

With clear intention and vision for ourselves and our organization, the next component is integrity. The integrity of action is the consistent movement toward our intention. Integrity also includes the “willingness,” a state of Power, above the level of integrity (Hawkins, 1995). Integrity holds within it the positive, affective component, a critical component of coherence. So this component encompasses the integrity of using the practices throughout the day, maintaining a clear mental and emotional state. It is in integrity that positive emotions are paired with clear positive intention.

Intention and integrity becomes the mental model of our attention. Attention is where our focus is placed. It is through the use of our attention that the practices become integrated. It is through our focus that we manage the use of intention and integrity. Integration is a key component as it places focus on the need for the daily use of intention, integrity, and the daily behaviors listed below. By understanding the power of our own state, and where and how we place our attention we can begin to do reduce the fragmentation (Bohm, 1980, 1994). Our own

daily use of coherence makes this awareness possible even as we are pulled in a million different directions.

From our own individual application of Holographic Leadership, we impact our organization. This occurs from the modeling of more clear, consistent decision making, more even emotional tone, and consistent movement toward the organization's intention. It also comes from a frequency change in the leader's HeartMind. This coherent field begins to pull the organization into synchronization and offer a more powerful social dynamic by bringing about greater global cohesion.

The Holographic Leadership theoretical model (Figure 3:6) began in the domain of potential Undivided Wholeness and moved into physical reality outlining how the world of energy and information becomes embedded in time/space and culture. The model of practice (Figure 4:1) looks at the same process from the reverse position. It begins in physical reality, creating the conditions for a new holding environment, to be drawn forth from the domain of potential. The space becomes conditioned for a higher global order.

The model below takes the core ideas, intention, integrity, and integration and relates them to the practices that emanate out from each. It illustrates the point of synchronization for the group. The model of practice is an iterative process, moving deeper and deeper into the organization as it progresses. It is intended to help bring about individual and cultural shifts, through a wave like structure.

Awareness of Undivided Wholeness

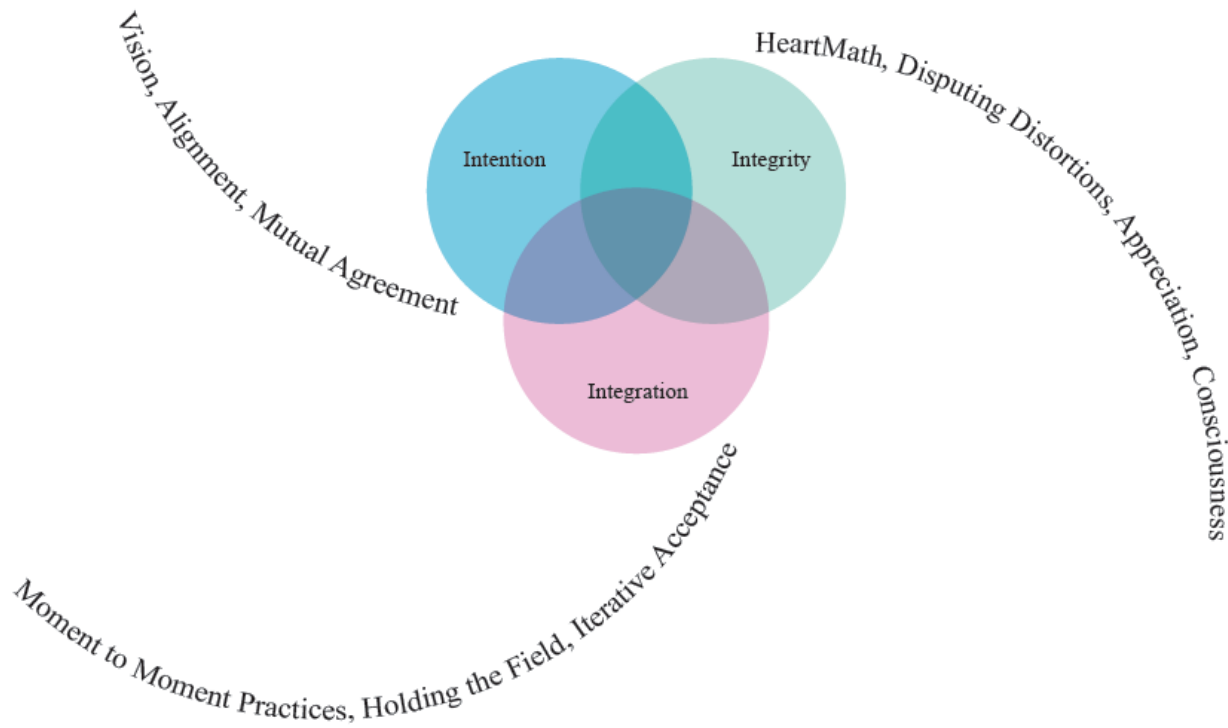


Figure 4:1. Holographic Leadership model for practice.

Intention, integrity and daily integration within the HeartMind of the leader and the organization leads to a coherent holding environment and sustainable change for the organization.

The Holographic Leadership is an intrapersonal self-directed change program. It is through our own internal state (Bohm, 1994; Childre & Cryer, 2004; Childre & Martin, 1999; Childre & McCraty, 2003) that we find a significant point of contact with the “Undivided Wholeness in Flowing Movement” (Bohm, 1980). The change is from the inside out, first, within the leader herself, and then within the organization as a whole. I focus on leader development as

a coherent process of organizational change. My model is the whole of a person applied to leading the whole of an organization.

Holographic Leadership works from both an educational and training perspective (Kegan, 1994). It offers skills (training) and increased awareness (education) to help facilitate the reaching of a transformational stance, (Burns, 1978; Maslow, 1998) a threshold of consciousness (Kegan, 1994). It assumes the need for transformation, while offering the conditions to create a holding environment for the shift to occur. It does this by offering practices that can be used to help us reorganize the constructions of our mind, and patterns of our physiology. It is this shift that offers a platform for transformational change (Childre & Cryer, 2004; Childre & Martin, 1999; Kegan, 1982, 1994; Maslow, 1998; McCraty, 2003).

Intention, integrity and integration offer a way of being that is Holographic Leadership. They represent the core components of creating a calm, clear HeartMind, and creating the conditions for a powerful, coherent holding environment to emerge within our organizations.

Holographic Leadership: Implementation Model

These processes integrate the theoretical propositions into daily behaviors of leadership and organizational development, to create a point of entry, a practical step-by-step process to engage in and work from wholeness.

Wholeness

- 4th order leader
- Awareness of wholeness
- Intention to work from this understanding

Alignment

- Presentation to leadership
- Discussion
- Mutual agreement

Clarification of Intention and Vision

An ongoing process, beginning with an initial leadership intention and moving into the organization. A final vision is created from a self-selecting group of the whole organization toward the end of the implementation of the program.

Self-directed change program – beginning with leaders

Pre-assessment and feedback to individual:

- BarOn Emotional Quotient inventory (EQi)
- Physiologic coherence with the HeartMath's emWave[®] PC Stress Relief System

Education and Training in group and individual formats:

- Education in concepts of
 - Field dynamics
 - Intention, Integrity and Integration
 - Hawkins' map of consciousness
 - Kegan's order of consciousness
 - Emotional intelligence
 - Physiological coherence
- Training in
 - HeartMath techniques, including Activation Grid
 - Disputing cognitive distortions

Holding the Field: (concurrent with organizational change process)

- Preliminary intention is paired with the specific practices of field dynamics
- Heart Lock-in and Quick Coherence – HeartMath techniques – used daily
- Log participation, ideas and insights
- Weekly discussion continue to address questions, increase education, and solve real time problems from perspective of wholeness

Iterative acceptance: Process repeats as it moves into rest of organization

Pre-assessment and feedback to individual:

- BarOn Emotional Quotient inventory (EQi)
- Physiologic coherence with the HeartMath's emWave[®] PC Stress Relief System

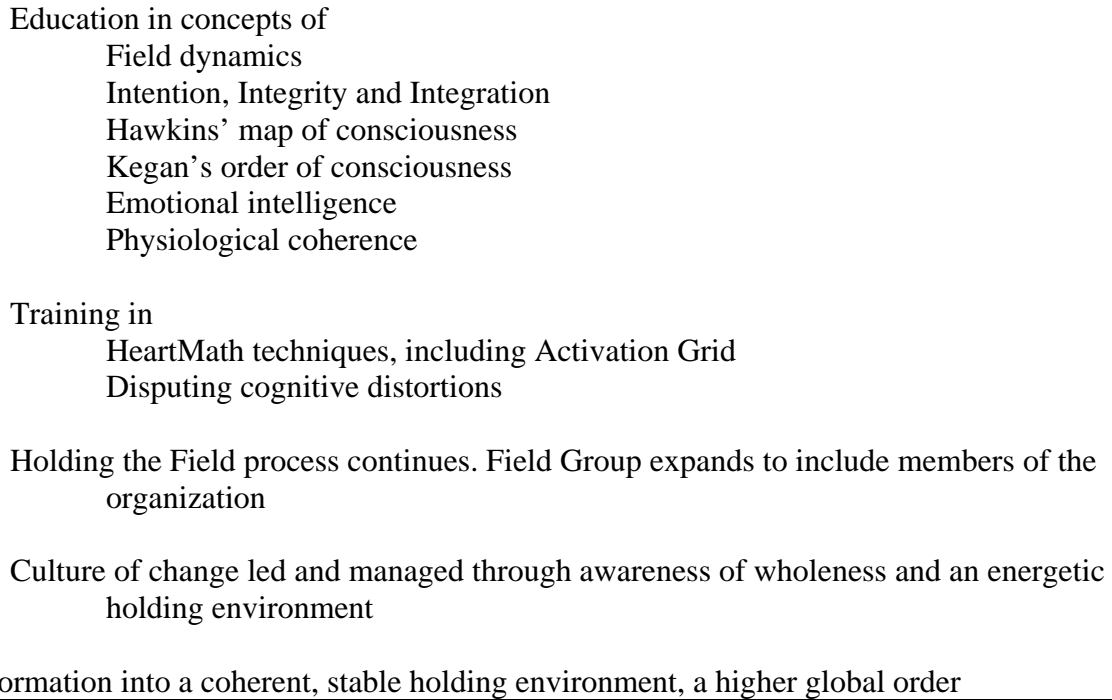


Figure 4:2. Holographic Leadership Implementation Model.

The process shown above is delineated in separate pieces as is the nature of the domain of structure. It is really a synergistic whole, the pieces used in concert that offers a sum greater than its parts.

Wholeness and Awareness

Holographic leadership begins with the leader(s). Before the process can begin, an intention to understand and work from an expanded whole needs to be present. It is a preliminary intention, which draws forth a process like Holographic Leadership. It becomes the basis of a specific, organizational intention created later, as this process moves into the organization. My model of practice will require at least one fourth or fifth order leader to hold the intention for her organization. The leader will also need to hold the intention for her own continued growth, to suspend her own limitations as the process of emergence offers unexpected and challenging opportunities. For this process to be successfully implemented within an

organization, the leader must be a stakeholder, a protector of the change model within the company. The holographic leader(s) direct attention to what is possible and chooses an inclusive, coherent problem solving and change method (Heifetz, 1994).

Alignment

The Alignment stage is common purpose. Sustainable change needs to move with a natural momentum, to flow from Power (Hawkins, 1995). Force only creates an equal and opposite reaction (Zukav, 1979).

The implementation process for Holographic Leadership kicks off with a presentation to the organization's leadership, and a discussion of the process. The leaders gain greater understanding and determine if it fits their needs, and the intention of the organization. As the facilitator, I evaluate the capacity of the organization for holding a sustained process. I use my own clinical judgment to determine if the necessary fourth order leader, level of integrity, and organizational values are present and if the conditions for alignment appear present.

It is possible to begin in a training format with one of the concepts, such as the HeartMath techniques, emotional intelligence, or clear critical thinking to allow more time to determine proper alignment, or to allow for the necessary buy-in for the change process.

Clarification of intention and vision

The initial intention is wholeness, in alignment with the vision and mission of the organization. The vision/mission process begins where the organization is. It is then revisited, expanded and developed as more and more of the people in the organization are the taught techniques for coherence and balance. The culmination is the creation an intention - a vision from a state of global coherence, with a broad group from the organization where alignment is at the base of the process.

Self-directed Change Program Beginning with Leaders

My implementation model provides the processes by which a fourth or fifth order leader might guide her organization into Holographic Leadership. Working from a perspective of interconnected wholeness, each person's developmental stage is considered correct as it is part of the implicate whole.

This model of leadership and change begins with the leader(s) and then moves into the group. This allows for the primary oscillating system to be set into coherence and integrity. The application of the change program works in both individual and group formats.

Pre-assessment

With mutual agreement to begin, a pre-assessment process is undertaken. The purpose of the pre-assessment process is to help create an objective sense of progress. Seeing coherence improve in the midst of the daily chaos has helped my clients maintain a sense of motivation and focus.

There is as of yet no way to measure a group's socioaffective field to determine global coherence. The assessments used here focus on our affective nature, an important component in using intention, integrity and to bring about coherence. The specific assessments are the BarOn Emotional Intelligence inventory (EQi) and HeartMath's emWave[®] PC Stress Relief System.

The feedback from the assessments is given in an individual session, which also helps to build a relationship between myself and the individual leader. The specifics of emotional intelligence, the EQi, and the emWave[®], are discussed in the next section in context to the whole program.

Education and Training

The educational process covers the topics of emotional intelligence and HeartMath techniques, the physiology of leadership, field dynamics, intention, integrity, and integration, Hawkins' map of consciousness, and Kegan's order of consciousness. Many of these concepts have been discussed a length in previous chapters, so only a limited review will be included here.

The educational process begins at the level of leadership, for any organization; since this is the group that begins to hold the environment and provides the necessary resources. This level is defined by the client, and therefore facilitates many different types of leadership structure. This change process does not require full participation of all leaders or all employees.

The educational process lasts approximately six weeks. Any leader within the organization is welcome to attend. This is an introduction to the overall program, and the daily practices. This group becomes the platform to discuss the application of the practices within the organization, and a forum to address any possible concerns.

The educational process also offers the opportunity to begin developing as a group. With an acceptance of wholeness and an intention to work from power, we begin to address and change daily behaviors. The suggested practices are based on my own experience in attempting to help many different leaders from many different industries, all of whom have been subjected to the chaos and fragmentation of business.

The educational process begins where each person is. It accepts their order of consciousness (Kegan, 1982, 1994); their level of fragmentation; and the nature of the specific tasks to be accomplished. Such awareness allows for increased reality testing and an acceptance of the journey ahead. It allows the possibility to accept our humanness as we strive to be better leaders.

Individual sessions, once per week for six weeks, are set up to teach the HeartMath system and how to dispute cognitive distortions. This gives each person time to practice and integrate each new tool. It also allows for the opportunity for some privacy as personal struggles can be part of this change process.

The HeartMath solution (Childre & Cryer, 2004; Childre & Martin, 1999), applied on-demand, offers the possibility of physiological coherence, which enables us to stabilize our biochemical reflexes, manage our moods, and increase the capacity for clear thought. Disputing our cognitive distortions allows for us to move deeper into wholeness, by beginning to remove our confused and limited insights (Bohm, 1994) and beliefs (Ellis and Harper, 1997) from which we view our reality.

The HeartMath Solution is taught to help address the biochemical reflexes that compromise our perception and clear thinking. It is summed up with: “Activating heart intelligence + managing the mind + managing the emotions = energy efficient, increased coherence, enhanced awareness, and greater productivity” (Childre & Martin, 1999, p. 22). It consists of a number of techniques; Holographic Leadership focuses on the emotional refocusing and restructuring tools of Neutral Tool, Quick Coherence® Tool, Freeze Frame® Tool, and Heart Lock-in® Tool (Childre & Cryer, 2004).

Neutral Tool: Heart focus, heart breathing. The first step is to focus in the area of your heart, and imagine yourself breathing in through your heart, and then out through your solar plexus. Neutral is the baseline technique, which begins to reset the ANS, and help align it with the functioning of the heart, and lungs. It corresponds to the vertical access of the Activation Grid (see Figure 4:3), high effort to low effort. It is the simplest of the tools and can be used in all situations.

Quick Coherence® Tool: Heart focus, heart breathing, heart feeling. Building on Neutral, a heart feeling is added to the focused breathing. With a focus on the heart, breathing in with a sense of appreciation or positive feeling, then out through the solar plexus. The emotional component corresponds to the horizon axis of the Activation Grid, positive to negative feeling. Feeling states are tied to endocrine function and biochemical reactions, which effects perception and thinking (Bohm, 1994; Childre & Cryer, 2004; Childre & Martin, 1999). The Activation Grid is completed during a private session, and helps identify personal positive feelings that are then drawn from when using this tool.

Freeze Frame® Tool: Shift, activate, ask (sense). Shift your attention to the area around your heart. Activate a positive feeling from the past or a sense of appreciation. Ask for Heart Wisdom or a new, more effective attitude or action to take.

Heart Lock-in® Tool: Focus, appreciate; radiate. Heart Lock-in offers a way to consciously radiate coherence throughout the organization. Focus on the heart, move into a feeling of appreciation and radiate this state in our acts of leadership (Childre & Cryer, 2004).

As part of this process, each leader is guided through creating a personal Activation Grid (Figure 4:3). An Activation Grid is a quadrant-based account of our physiological functioning.

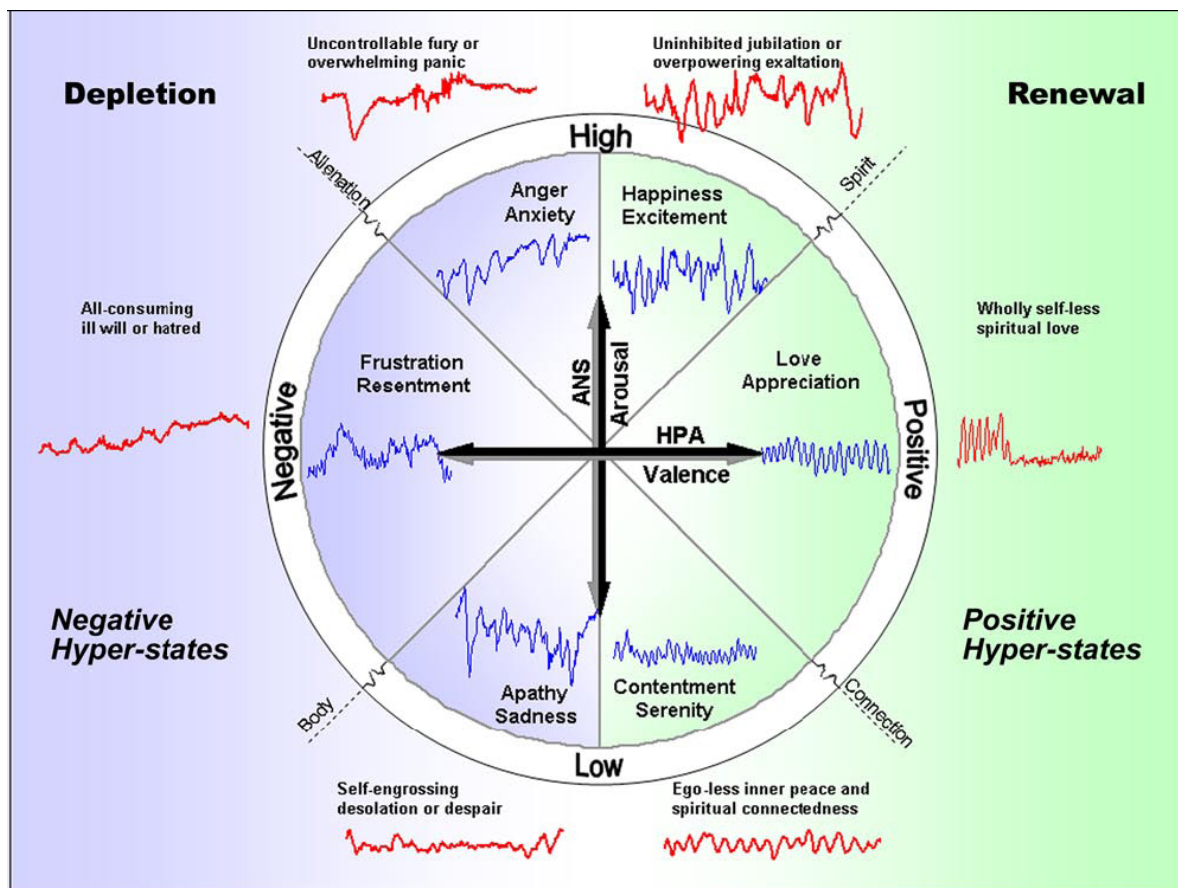


Figure 4:3. Activation Grid.
 (The Institute of HeartMath, www.heartmath.org, retrieved August, 2006)

Creating a personal Activation Grid ties our emotional states and memories to our physiological functioning. It increases our self-awareness, and provides a deeper understanding of our own fragmentation. This process helps provide insight into our Biochemical Reflexes, and their affect on a moment to moment basis. With an increased understanding of our own physiological functioning, we can make more frequent choices to lead from coherence and alignment.

The emWave[®] PC Stress Relief System, created by The Institute of HeartMath reports our level of physiological coherence. The emWave[®] will give us a physical heart field reading as it relates to coherence, discussed in Chapter III. It allows us to determine if we are functioning in a clear state of coherence. It helps demonstrate how breathing in appreciation or other positive

emotional states increases our coherence, so it is used in conjunction with the personal Activation Grid created with each participant.

The emWave[®] provides four levels of challenge, allowing the process of resetting our physiology to be monitored into higher levels of coherence. The emWave[®] has an advantage of being a pre and post assessment, and can be used on a daily basis as a training aid.

Each participant is introduced to the concepts of cognitive distortions and how they are disputed. An outline of the basic steps is given in a group discussion. The personal application is done in individual sessions. Rational Emotive Behavioral Therapy was created by Ellis as a way of disputing irrational beliefs. It is a step-by-step process of identifying an event that has triggered a biochemical reflex and then dispute it into a healthier form. The steps are based on the ABC's (Albert Ellis Institute, 2000; Ellis & Harper, 1997; Stein & Book, 2000).

Activating event: briefly summarize the situation that disturbs you.

irrational Belief: identify the belief beneath the event.

Consequences: identify the consequence of this thinking and acting.

Dispute irrational belief: begin to ask yourself - Does this belief/behavior serve you? Is the belief helpful or self-defeating? Questioning the behaviors helps identify a more rational belief, creating newer and healthier thoughts and behaviors.

new Effect: the result of a new belief and a new behavior (Albert Ellis Institute, 2000).

The effects of this process, like the HeartMath system, offers a way of disabling our biochemical reflexes, and to begin seeing are fragmented thoughts. It also allows for a more expanded view of the situation, increasing reality testing (Ellis & Harper, 1997; Stein & Book, 2000). The focus here is on the underlying thoughts. The belief under the event becomes the trigger of the biochemical event in our body and hijacks our ability to think clearly. By making

these beliefs more conscious we can dispute its reality and reduce its effect on our capacity to lead.

It is the process of making unconscious beliefs (the subjective), objective, that is the basis of the transformational shift discussed by Kegan. His orders of consciousness, specifically third and fourth level, are introduced here and used in conjunction with disputing cognitive distortions.

A point of emphasize is that strong unconscious beliefs become unconscious intentions (Zukav, 1989). Holographic Leadership is the process of becoming more aware of our unconscious patterns, and making them more explicit. It is a process of self-awareness and self-reflection, increasing the likelihood of a transformational shift within the leader(s), and within the group.

The individual format is used here to facilitate learning, and work on specific personal distortions. Working in fragmentation often brings with it a great deal of frustration. The private coaching sessions offer a place to release this and redirect our attention back to wholeness. Each person has the opportunity to withdraw their belief in external reality while still maintaining reality testing.

Both practices offer the opportunity to increase our awareness of our own emotional patterns that are at the heart of emotional intelligence. The Bar-On theory of emotional intelligence is used here. The Bar-On Emotional Quotient Inventory (EQi) clarifies our capacities in specific skills suggested in the literature as vitally important, such as Self-Regard, Self-Awareness, Reality Testing (Branden, 1998; Childre & Cryer, 2004; Goleman, 1997, 2000; Heifetz, 1994; Stein & Book, 2000; Weisinger, 1998). Below are the individual components of assessed by the EQi.

Intra-personal Components:

Self-Regard
 Emotional Self-Awareness
 Assertiveness
 Independence
 Self-Actualization

Inter-personal Components:

Empathy
 Social Responsibility
 Interpersonal Relationships

Adaptability Components:

Reality Testing
 Flexibility
 Problem Solving

Stress Management Components:

Stress Tolerance
 Impulse Control

General Mood Components:

Happiness
 Optimism

Figure 4:4. BarOn emotional intelligence components.
 (Stein & Book, 2000).

The EQi is a valid and reliable self-report skills-based assessment designed to assess workplace competencies. It includes sections for Interpersonal skills, Intra-personal skill, Adaptability skills, Stress Tolerance and General Mood. As a result, it is a good indicator of the skills we are attempting to develop, and offers an objective viewpoint of a normally subjective topic (Stein & Book, 2000). Emotional intelligence offers insight into our capacity to manage our mood and increase the awareness of how our emotional state is affecting our leadership and daily tasks of work.

The emWave and the EQi are used with a diagnostic evaluation of the leader's Order of Consciousness and Level of Integrity. Each of these are introduced and integrated into the educational process.

Participants in the educational group are introduced to Hawkins' Scale of Consciousness, (Figure 3:3) and are shown the correlation between emotional states, coherence and integrity. With the use of the Activation Grid (Figure 4:3), it is relatively easy to see a state of anger, as a state of incoherence, and a state below the level of integrity. The focus is on understanding how emotional states affect leadership. For example, how working from guilt impairs integrity.

Hawkins (2006) offers an explanation of the emotional attractors on his Scale of Consciousness relating to integrity. The listing offers an account of behaviors and thoughts typical of each level (Figure 3:4). This process is not a full application of Hawkins' theory. Holographic Leadership emphasizes the tie between integrity and emotional states. Applying the understanding of specific emotional states, to specific examples brought up in the group allows the members to see how we act out of different levels of integrity and coherence. The application to leader development is made in the same manner a clinician applies diagnostic criteria to determine level of functioning, with clear understanding of each parameter, corresponding markers can be observed.

Throughout the implementation phase, the need for integrating knowledge and practice is emphasized. Individual and group discussions use specific organizational examples to make the changes practical.

Holding the Field

With the completion of the educational process, we move to the next phase of the model and begin the conscious application of field dynamics. The initial field group is made up of

self-selecting members from the education group. This group holds the intention of the organization in a manner similar to the research of Hagelin et al. (1999) and Tiller et al. (2004a, 2004b, 2005) discussed in Chapter III.

The initial field group begins by creating a more specific intention, inclusive of wholeness and the values of the organization. The leadership group begins to actively use and integrate the skills learned to create conscious holding environment.

All leaders who have participated in the educational group have the necessary skills to be part of the field group. Those who do not self-select are encouraged to use the daily practices to create the basis of the new culture.

The initial intention is paired with the state of appreciation in the HeartMath techniques. Specifically, Freeze Frame is used fifteen minutes each day, holding a state of appreciation and the designated intention. The Quick Coherence technique is used in conjunction with the intention, throughout the day to maintain coherence. It is this moment-to-moment correction that is most important. All of these skills have been used and practiced throughout the educational process. It is pairing the positive, coherent state with the intention that is new at this point.

At the designated date participants begin to hold the field, a fifteen minute application of Freeze Frame, breathing in the intention of the organization. Participants are asked to process their daily business activities through the lens of their stated intention, and to use the Quick Coherence technique any time they feel stressed by the demands of the day. This is how the process gets integrated, and addresses fragmentation even in the midst of chaos.

Additionally, the participants will be asked to radiate the intention, Heart Lock-in, and ask for Heart Wisdom, as they feel it is helpful. Each participant is initially encouraged to keep a log of their participation and a journal of emergent knowledge.

On a weekly basis, meetings will be held to discuss leadership issues, organization development, answer questions regarding the field exercise, and shape personal functioning in line with coherence and integrity. To allow space for more expanded problem solving, organizational issues will be discussed from a viewpoint of the inclusive whole.

The group meetings also offer the reinforcement necessary for the change process to be integrated. The field group holds the framework for consciously intending sustainable change, by changing the field dynamic, thereby creating a positive holding environment to achieve a win-win progression toward stated goals.

The suggested practices above are simple and based in the literature. They can make a contribution to an organization in and of themselves. The conscious shaping of the field dynamic allows for the possibility of a more sustainable holding environment, and stronger, more coherent leadership. Used together, it may offer an opportunity to address the fragmentation and white water of our time.

Iterative Acceptance

The same educational process used for the leaders is taken into the organization. Group members self-select, from all levels of the organization. Groups are held to a reasonably small size so active participation can be facilitated. (More than one group process could be going at a time, determined by the number of participants who self-select.) The process is taken in a wave-like format throughout the organization, meaning as people self-select a new group is taken through the process.

The field group is then expanded to all levels of the organization, but will always include at least one fourth order leader. Research indicates that substantial change can occur with a very small number of participants, holding the environment - square root of one percent to one percent

(Hagelin et al., 1999). The exact level of involvement still needs to be determined through future research.

Leaders not actively involved in holding the field would direct attention to the general cultural change of incorporating the HeartMath techniques and the facilitation of clearer critical thinking through the use of the cognitive distortion disputing techniques. Both techniques affect the nature of communication, the capacity to listen and problem solve as a group. The introduction of these techniques, in and of themselves, places the organization in a dynamic state of change and the leaders need to be aware of and monitor these effects. Additionally, the insights gained from the use of Holographic Leadership need to be integrated into strategic and general business plans of the organization.

The process continues until it moves into a maintenance phase for new hires. This is determined by the lack of self-selecting participants. A final vision is created from a self-selecting group from the whole organization. General training and refresher courses can be offered for the HeartMath techniques and clearer critical thinking.

Transformation

Holographic Leadership offers a potential for a transformational shift, into a more coherent, stable holding environment. Taking the practices deeper into the organization, increases the likelihood of synchronization as each person is given the opportunity to cohere their own heart field and clear their own thought processes.

Each person is in a different place in their lives, and in their work (Kegan, 1982, 1994; Hawkins, 1995). The Holographic Leadership implementation model accepts and begins where each person is. Many of the practices presented here were specifically created to help a person move from lower to higher functioning (Ellis & Harper, 1997; Stein & Book, 2000). The specific

practices taught are accessible and applicable to broad orders of consciousness. For example, HeartMath techniques are taught to children to improve learning (Childre, 1992). My model does not require each person to hold the same point of view of the practices, simply to work with them from where they are.

It is the momentum of intention, in coherence with the socioaffective field of the group (Bradley, 1987, 2002) that allows the possibility of convergence of all levels to bring about change in a sustainable way. People are not separated into groups, such as low and high. An average adult, can be taught the HeartMath techniques which begin to mediate biochemical reflexes. All members of an organization are offered the opportunity to begin to understand how their thoughts shape their perceptions at their current level of functioning. This is how the specific practices begin to offer a structure for a shift, through simple, daily, understandable behaviors used with intention.

The practices in my model will not offer the possibility of mediating every belief or biochemical response. There are deep personal beliefs and cultural beliefs that will escape our awareness and continue to affect our leadership. Holographic Leadership is the beginning of a process to increase our ability to work with an energetic field dynamic, drawing forth a more coherent holding environment for our organizations, by reducing our overall sense of fragmentation.

The process suggested in my model offer the conditions for the transformational shifts discussed in Chapter II. It is a consistent iterative process that can build the momentum for a shift and hold the conditions for its emergence.

Holographic Leadership and Organizational Transformation

Holographic Leadership is similar to participatory leadership of Action Research and Appreciative Inquiry. Both represent change that attempts to be inclusive and based in our interconnection. Holographic Leadership optimizes strengths, and builds power to create an environment of transformation.

In Holographic Leadership, AI, and Action Research the leader does not control the goals, she allows for a process of emergence to shape the outcome (Cooperrider & Whitney, 2005; Lewin, 1951; Whitney & Trosten-Bloom, 2003). She holds the environment. The leader is an active participant. This participation, not control, is the basis of Collin's level five leadership (Collins, 2001, 2005) and his basis of understanding for a "high performance organization" (Collins, 2005).

The common link in all three processes is appreciation. To allow a group to lead themselves in a research process is the basis of Action Research (Lewin, 1951). Action research requires an appreciation, understanding, and acceptance of a group's wisdom and knowledge to release control of outcomes. AI uses appreciation as a mindset, a way of viewing the process and the people we interact with. It begins to lead from an emergent future as it works to create positive scenarios of what is possible (Cooperrider & Whitney, 2005; Whitney & Trosten-Bloom, 2003).

Holographic Leadership builds on the concepts inherit within Action Research and Appreciative Inquiry. It moves deeper as it also *breathes in appreciation*, aligning our physiology into a coherent state. Holographic Leadership accepts our interconnection as the basis of reality. The state of interconnection takes participants more deeply into the practices of a

group, which allows for the resetting our physiology and allowing for a higher order of self-organization within the group.

The motivation in Holographic Leadership comes from a sense of being valued, of being part of a collective whole from which we can take personal meaning. It is a process of attraction, not a process of convincement or promotion. We attract the desired outcomes based on synchronization and emergence. As a leader, through our own internal coherence, we set the tone for the wisdom of the group to emerge.

The shift from deficit-based change to positive change is characterized by a system wide participation, with a focus on our strengths. As with Action Research and AI, Holographic Leadership builds on the discovery of a positive core with creative and widespread sharing of information. It focuses on creative potential, and the organization's capacity to contribute to a better world (Whitney & Trosten-Bloom, 2003). It allows for a more perfect state as the organization grows and develops. It extends beyond Action Research and AI by offering a process and conscious point of engagement with Undivided Wholeness (Bohm, 1980).

Holographic Leadership is a process of tightening the practice of leadership. The initial focus is on the development of the individual and then moves into the group. It works with many known concepts for best practices, such as emotional intelligence, clear critical thinking, and holding the environment. It synthesizes these into a perspective of wholeness. On the surface, it offers mainstream training and development. However, it is the combination paired with intention and an understanding of quantum-holographic field dynamics that potentially creates a transformational shift in our organizations.

The problems of fragmentation, permanent white water, and creativity have received a great deal of attention in the literature. My model is an attempt to put together underutilized

concepts and practices in service of well established problems. I suggest relatively minor changes in daily thoughts and behavior which can result in potentially significant solutions. The scope of impact in the organization is through a shift of performance in the individual.

Holographic Leadership is a new mental model for leadership applied broadly in an organization.

My dissertation is an exploration of what might be possible, as of yet its limitations are unclear. Changing the mental model of an organization alone offers a great challenge. It requires an above average level of functioning in order to understand and lead. It requires a commitment to a change process, shaping an organization. It does not offer instantaneous results nor change the essence of leadership. It attempts to change the holding environment for leadership, which hopefully leads to conditions that result in more effective and adaptive work.

A leader must “hold steady” in the face of constant change (Heifetz, 1994). Holographic Leadership is the beingness of leadership discussed in the literature (Bennis, 2003; Cloud, 2006). The capacity to manage ourselves, to work from coherence, allows for a state of emergent flow creating the conditions for creativity. Csikszentmihalyi (1990) and Maslow et al. (1998) all state that internal conditions are primary for creativity and innovation. Coherent internal conditions are vital to bring forth clear insight.

We initiate and sustain emergence from within our own HeartMind. Creativity is an internal process, a subjective experience by which the artist attempts to bring her vision into the objective world. The environment of permanent white water (Vaill, 1996) has fragmented our mind (Bohm, 1980, 1994), and has reduced our capacities.

According to Maslow et al. (1998), our ability to be creative is a natural state that has been crippled or lost. The purpose of my work is to reduce the frantic nature and overall sense of burnout which I see exhibited daily. Holographic Leadership is a way to create the conditions to

harvest our own phenomenological experiences into useable creative ideas; to bring these ideas into reality, and create sustainable and positive business environments.

Holographic Leadership and the Heifetz Model

The role of a leader in Holographic Leadership encompasses the traditional leadership role, guiding our organization toward a common purpose. Here I use Heifetz's model to take my work back into values-based leadership, to further explicate, Holographic Leadership.

Heifetz (1994) defines the tasks of leadership as follows: First, providing a holding environment for containing the stresses for adaptive and productive effort: Clearly all organizations need productive work; the understanding of coherence brings this into a new light. The holding environment in Holographic Leadership is directly affected by the frequency of the HeartMind of the leader. The greater the internal coherence the greater the likelihood the organization will be pulled into a more stable order.

Second, direct attention: Attention is directed inward to the state from which we lead, and then offers this more coherent leadership to our employees. It is the level of integrity and coherence that becomes primary. From a coherent state, problem solving becomes more productive, and insights more clear. As the leader focuses on their own coherence, more coherent thoughts and actions occur, alignment and emergence become more prominent.

Third, offer access to information: From a holographic field perspective, information is embedded in the whole. The process of using Heart Wisdom draws forth the insights necessary for the highest action. Heart Wisdom is at the heart of Csikszentmihalyi flow, the feeling of being connected to something bigger than ourselves. In my model, information is more available as people are encouraged to move to a higher order of functioning. Openness occurs as the organization shifts in its development.

Fourth, control the flow of information: This is directly tied to access. The focus is on internal control. Holographic Leadership assumes an open system, above the level of integrity. It does not negate reality testing, but offers those who demonstrate capacity deeper levels of information.

Fifth, the power to frame the issues: This is core to Holographic Leadership as the perceptions we choose is the world we see. The leader will need to constantly reframe the issue to be more inclusive of the whole. The broader the context the greater the capacity to problem solve.

Sixth, orchestrate conflict and contain order: Change involves moving people out of current patterns into new patterns. This can cause a sense of loss and confusion, which can lead to conflict. This is where the holding steady, in coherence and with consistency of action, becomes really necessary. It is also necessary for each individual to hold steady in order to manage their own responses to change. This model offers clear direction on the capacity to hold steady.

Seventh, the power to choose the decision-making process itself: Holographic Leadership is a system-wide decision-making process; one that is inclusive and maintains a focus on integrity and coherence, listening to all voices.

Summary and Conclusion

Holographic leadership is a process of leading an organization into a coherent whole. The initial focal point is the leader's internal state. In Holographic Leadership managing our internal state becomes an act of leadership and an agent of change. It becomes the way we hold the environment for our organization. With an understanding of field dynamics, the leader's state, their HeartMind, has a more profound effect than previously understood. A coherent internal

state offers a point of synchronization for the group's socioaffective field. Leadership from this coherent state allows for a shift to a higher order.

Holographic Leadership is about alignment. Aligning our internal functioning into a state of resonance, allows for increased levels of critical thinking and creativity, and increases the potential for a flow state to emerge. Synchronization within a system allows communication to occur between individuals without obstruction (Thurber et al., 2008). It is from these conditions that increased collaboration can emerge, where the inclusion, and listening to all voices is more likely.

The core components intention, integrity, and integration offer the cohering principles needed to bring about sustainable change. Intention becomes the frame from which we view the world, including wholeness and interconnection. Integrity is the consistency of action and a frequency state of power. Both recognize the importance of a positive affective state. Integration is the attention, the selection of focus on the daily thoughts, feelings, behaviors and choices aligned with our intention.

The implementation model, building from the literature, offers a step-by-step format. The practices delineate the specific daily behaviors necessary for increasing coherence and balance. The implementation model extends the practices into a series of strategically placed techniques used in concert to reduce individual and organizational fragmentation. With higher internal coherence, the focus then moves into the group. The group focus increases our awareness of an interconnected holding environment. Focusing our attention on positive emotions, coherent thinking, and consistent behavior offers a way in which to reduce fragmentation and draw forth an orderly, energetic field dynamic for our organizations.

The synchronization of the group allows for the emergence of a whole that is greater than the sum of its parts. These conditions allow for the wisdom of the group to emerge, for communication to be more clear, for a process of change that is respectful, and for each of us to make a shift to a higher potential.

Chapter V: Holographic Leadership and Future Possibilities

Introduction

Holographic Leadership is a process of harnessing our own power, mastering our mental and emotional states, and aligning with the whole. It is the discipline of taking our intention and integrity and focusing it on where we want to go, not on where we have been. I have discussed the very real science of intention that allows for more sustainable change to be possible.

Working with the field dynamics of a group is much like tuning a piano that has been long out of tune. It may require many tunings before the adjustments will hold. This constant tuning may be frustrating, but I believe it is possible with consistent intention, integrity, and integration.

From the perspective of quantum-holographic field theory, the probabilities presented here are available to each of us as leaders. What it takes to lead in alignment is to simply place our attention and act in accord with this choice every day. The concept is very simple, but the consistency of action is more challenging, as it takes the integrity of our intent and makes it explicit.

This model encourages us to move into our hearts to access Heart Wisdom. It suggests we move into integrity and coherence to lead our organizations. It challenges our thought processes, beliefs, attitudes, and our courage to look within. I can think of nothing our world needs more for our organizations and institutions. Holographic Leadership is a model of peace, peace as a way of being, a frequency within our world (Hawkins, 1995). It is a choice.

My model is the work of a “maverick,” controversial, unconditional, visionary, risk-taking, tenacious, intuitive, and energetic (Essex & Kusy, 1999). It puts leadership on “fast forward,” moving us out of our comfort zone. It takes change head-on. It is not a surface change;

many of the basic skills of leadership remain unchanged. We will still offer direction, vision, and create strategic plans, identifying our strengths, weakness, opportunities and threats. What is different are the internal frames of thought, our physiology, our way of being.

The HeartMind of the leader is an energy-based model for understanding ourselves and the dynamics within our organization. It helps cohere a holding environment for each person's growth, a transformational shift. It is this shift that holds the key to flow activities (Csikszentmihalyi, 1990). The awareness of our HeartMind redirects attention inward, where our emotional state becomes a significant interface with future probabilities. It offers an expanded view of our emotions, one that utilizes their power, without accepting the drawback of emotionalizing. The HeartMind makes explicit the physiological difference between these two states.

The HeartMind places attention on our emergent, subjective reality as an additional means for leadership and change. With wholeness as primary, we have a new understanding of how to work from creativity and insight. With coherence, we have the capacity. My model helps us to understand and manage the overt and covert aspects of change, to look within the whole of an organization, not to the surface.

The theoretical propositions and model of practice are just the beginning. There is much more to be explored in the research to come. The energy dynamics of Holographic Leadership offers a way to step out of the traditional power struggles by expanding the definition of power. It increases our understanding of and ability to work from collaboration, by changing our perception of interconnection. It changes our capacity for clear communication. Together, we increase our capacity for common purpose and profitability.

All of the key components of this protocol, intention, integrity, integration, are strongly represented in the leadership and change literature. My work now begins to operationalize this values-based leadership model, the daily behaviors positioned for critical impact. It brings into our everyday world a unique process of innovation through self-management and vision.

A leader does not have to be perfect to work from this leadership model. She does not have to be free of her cultural imprints or cognitive distortions. She simply needs to begin to “put them on the table,” making the tendencies explicate, so they can be transformed.

We have been trained to look for pieces. What makes our transformation more difficult is not the elusiveness of wholeness, but our own conditioning for “particularizing” our worldview.

Fast Forward Leadership

The bridge between this new model to the leadership and change literature is the focus on values, integrity, and clear vision. Common purpose is an established concept (Burns, 1978). Holding this clear vision for our common purpose is the known constant as we walk into a new understanding of organizational dynamics, a point of stabilization to help offset the feeling of operating blind in an unknown subjective world.

Change will require each of us to step back and challenge our own views, to question our assumptions, and to be open, fluid and flexible. Our track to “future success won’t be found on past trails” (Essex & Kusy, 1999, p. 3). It will be found on new horizons, in the probabilities drawn forth by new conditions.

As leaders, we can serve as the model for this way of being. Our coherence and consistency of action now has greater meaning. “When leaders hang on to old behaviors, while espousing new ideas, those around them get confused and trust is eroded” (Essex & Kusy, 1999,

p. 5). It will be our responsibility to hold the environment, and to accept and name it when we fail to do so. Without this courage, our inconsistency becomes confusing.

Holographic Leadership also recognizes the power of each individual within the organization. For each individual has their own connection to the whole, their own vision of the common good. My proposed model has its source in true empowerment. It acknowledges the power that is in each of us. It is not a power that is given by leadership, but an innate power acknowledged for its contribution. Holographic Leadership attempts to provide each person a holding environment for his or her development, aligned with the whole.

Holographic Leadership is a model of innovation, an open, fluid state that invites us to suspend our current chaotic way of being. It suggests a way to be Change Masters, people and organizations who are adept at anticipating and leading productive change (Kanter, 1983). It is the anticipating, through the use of emergent knowledge that offers a unique dimension to this change process. My model takes a forward look at leadership and a possibility of leading from an energetic understanding of the world.

Contributions to Leadership and Change

Holographic Leadership offers a number of unique aspects to leadership and change. It offers an extended understanding of a holding environment. It allows for greater understanding of how we might consciously create a holding environment, a state of flow in our organizations. And through these coherent conditions, draw forth a transformational shift for ourselves and our employees. It offers the HeartMind, as a core to our leadership, and an organizing principle for the group. It offers a deeper understanding of intention and integrity.

This model has a strong emphasis on personal growth, as it teaches how to step out of our habitual ways of thinking on a regular basis. Done over a course of time, it can expand our view

of reality. The beauty of this model is that it is internally driven, and we decide when we apply the recommended practices. Coming from a perspective of wholeness, the growth and development of each person will be aligned with his or her level of development. It is a model of acceptance, appreciation, and reality testing, one that allows for each person's growth to unfold.

A holding environment thus becomes the basis of creativity and innovation, a high performing organization that is based in humility, consistency of action, and clear vision (Collins, 2005). Holographic Leadership holds the stress and provides a way to transmute the power and affective energy of the group into adaptive, profitable work (Heifetz, 1994; Bradley, 1987).

Intention in Holographic Leadership goes beyond what is discussed in the literature in Chapter II. It becomes a cohering principle, a way drawing forth our vision. Paired with positive emotional states it brings about changes in physical reality (Hagelin et al., 1999; Tiller, 1997; Tiller & Dibble, 2007; Tiller et al., 2001, 2004a, 2004b, 2005).

My model brings awareness to our own emotional and physical states in a practical application to business. Emotions in my model are moved to the forefront, as a powerful medium of change. In recent years, there has been a great deal written about emotional intelligence. This model offers a way to take this work further, using our emotional intelligence to work in alignment with each other.

Emotions tied to coherence and integrity are also significant aspects of this model. Many of us hope to live in coherence and integrity everyday without being aware of how. Our emotional state changes our physiology and our capacity for clear thinking. Strong negative emotional reactions create negative long term outcomes for ourselves, and for those we lead. My model of leadership encourages balance and alignment.

The meaning of integrity in Holographic Leadership is deepened by tying it to our psychological and physiological state. The state of mind generated by Holographic Leadership offers the moment-to-moment awareness of our internal state. It encourages courage, willingness, reason, love, and joy. It increases our awareness of the debilitating effects of incoherent states such as anger, fear, greed, and pride. We can recognize that the means, how we do things, very much matters. Giving up incoherent, unintegerious emotional states become a business strategy. Acting from integrity with clear intention, powered by positive emotions becomes one of the most powerful things we can do.

From a practical business perspective this means that a leader cannot run her business out of anger and greed and create a long term holding environment in line with the goals of the business. Force offers a short-term possibility for gain, similar to what is discussed in *Good to Great* (Collins, 2001), which is not sustainable. An attractor pattern of force creates equal and opposite reactions (Bohm, 1980; Hawkins, 1995).

Holographic Leadership is one way to integrate Heart Wisdom to increase productivity and efficacy. Heart Wisdom begins to align the heart and mind of each person within the group. The emergent knowledge becomes the basis of creativity and innovation in an organization. The important elements necessary for creativity and innovation are quickly lost in times of stress. Holographic Leadership attempts to hold the environment for higher order needs to be met.

Emergent knowledge allows for a greater diversity of opinion, as wholeness is by definition inclusive. With the focus on the common good, developed together from a state of appreciation and global coherence, emergent knowledge offers insight and creativity from an intention of inclusivity.

My theoretical propositions and model of practice offer a depth of understanding for the process of change. It takes the individual change process and brings it into the whole. It recognizes the covert aspects, the processes of change that seem invisible, and positions these with the overt aspects of change. It places the point of power within ourselves.

These unique aspects offer an expanded platform to lead and change our organizations. It is a model that assumes a constant state of movement in the Undivided Whole. The process itself reduces the fragmentation we have been struggling with. It reduces the tendency to separate ourselves from our organizations. Holographic Leadership offers a field of acceptance and appreciation for each person as we are enfolded in the whole.

Future Possibilities and Research

My dissertation offers a beginning, a foundation of a new human science into leadership and organizational change. There are many areas of future research and development. There are many ways its application has yet to be made operational.

My dissertation is built on the foundation of theorizing and model making laid out by Kuhn, Kaplan, Schön, and Jarvis. This literature attempts to explain these processes, but it is not the journey itself. There are many inherent gaps between theory and reality, which will need to be explored, areas in shadow that will need to be brought into full relief.

There is a great deal of historical literature that was beyond the scope of my dissertation. Taking these areas, such as consciousness studies and positioning this work within these fields, would further deepen the understanding and interconnection of the concepts discussed here. It would also help deepen the model explicating the interrelationships of the concepts between the social and physical sciences.

The exact nature of a HeartMind and an energetic holding environment as a dynamic that shapes the success of an organization is unknown. The research base on which it is built continues to emerge, change and develop. This places the whole process of growth and development in a constant dynamic consistent with the overall premise, the Undivided Wholeness in Flowing Movement (Bohm, 1980). As the research in my theoretical base grows the nature of my work will change.

The application of this theoretical base will take future research into a much more specific understanding how the process of coherence within the individual offers an increased probability of global coherence for the group; and how from this place of synchronization, creativity, insight, and emergent knowledge becomes more available.

Another important area for future research will be to delineate the nature of creating a shift toward the group's intention. The specifics of the intention research (Hagelin et al., 1999; Tiller, 1997; Tiller & Dibble, 2007; Tiller et al., 2001, 2004a, 2004b, 2005) offer a number of examples from which to draw from for this research. The TM research uses both square root of one percent and one percent (Assimakis & Dillbeck, 1995; Davies & Alexander, 2005; Dillbeck, 1990; Dillbeck, Cavanaugh, Glen, Orme-Johnson, & Mittelfehldt, 1987; Hagelin et al., 1999; Orme-Johnson, Alexander., Davies, Chandler, & Larimore, 1988). These percentages will need to be fully explored. What is the optimal number within a group that needs to participate in holding the field to shape the organization? Can these be paired with an intention imprinted device?

Questions which will need more formal testing include: How does the energetic nature of emotions affect the individual functioning of the leader and the organization? How does the individual's emotional frequency affect our external reality? How does the daily use of the

practices used by the majority of a group affect the field group and the outcomes? What is the effect of informal leaders as a point of synchronization?

In addition to clarifying the research base, the model itself needs to be made fully operational. My dissertation is an exploratory study. The specific practices themselves have a great deal of research behind them, but using them in concert may affect their impact.

There are many areas of this model that are tailored specifically to my skills and training. One of these areas is in the use of the various scales by Kegan (1982, 1994) and Hawkins (1995). The use of these scales for me is heuristic. I have been using the guidelines discussed in each of these scales for many years. I have been trained to use diagnostic criteria and clinical judgment in a way that is not readily available for a business leader. This is a limitation to operationalizing Holographic Leadership for more wide-spread use. Since my model is heuristically informed, hard data will need to be gathered on the use of these scales in daily business.

From a more practical perspective, a primary need for my model is to properly identify those organizations that meet the conditions for engagement and have the necessary capacity to commit to such a process. Initially the nature of this change will require an organization to work with me as a facilitator. This will limit those who can participate in the leadership process.

The future of Holographic Leadership needs to be explored in a number of ways. A full application of the whole model, in a consciously participating group, would allow for all the practices and their relationship to each other to be vetted within this system. The knowledge gained may affect the timing of their introduction or the nature of their use within the process. Like the leadership itself, the process of applying Holographic Leadership will be an emergent, Action Research process.

With the number of variables involved, and the focus on the integrated whole, a positivistic and experimental research approach of isolating specific practices and then introducing them one at a time is not ideal. This model assumes the Undivided Wholeness is more than the sum of its parts. So there would be intervening variables that would be difficult to control.

An important area to be explored is Bradley's (1987) finding that once a pattern of power is established it is difficult to change. My model attempts to address this inherent pattern and offers a process to create sustainable change. Looking at the sustainability from a socioaffective field perspective, is one the differences that a focus on the integrated whole offers.

There are a number of potential ethical issues that need to be explored. Who participates? Who does not participate? Who decides? Who has the control in the application of the process and who does not? These are problems in any values-based system – whose values are being represented. Holographic Leadership is an attempt to work for the good of the whole, but can actually only be worked from a high order of consciousness. The Kegan (1982, 1994) and Hawkins' (1995) scales offer some understanding of this functioning.

Another potential ethical issue is with the nature of facilitation. Initially the introduction of Holographic Leadership will need to have an "outside" facilitator to walk the organization through the process. An important question will include the effect I have as a facilitator. What will my influence on the group be? How do I affect to whom the group synchronizes? This could be offset if I am synchronized together with the leader; but when I leave, how does this affect the group?

One way to offset the difficulty of an outside facilitator is to train someone within the group to be primarily responsible for the application of Holographic Leadership into their

business and to oversee the field group. I would work primarily with this person to hold a clear vision of wholeness, and to offer assistance to all in the organization to maintain integrity with intention. This person would be the primary person to manage the field group and keep clear awareness on the holding environment of an organization. She would ideally need to be in the fifth order of consciousness, based on Kegan's scale (1992) and actively maintain this level. She would be able to hold emotion of the organization, especially anxiety, without confusing it with reality.

Future development of this work will be a search for order. A search for order is a fundamentally different type of research. It does not begin with the assumption of a random universe or isolated processes. It does not assume anyone can be outside of and observe a group. The nature of this research will have to include a qualitative, self-observation component. The researcher(s) will be recognized as part of the system with which they are working.

Holographic Leadership offers hope, and an expanded view of our organizations that allow us to step out of chaos and fragmentation. The changes suggested here are a significant shift within the world of business, operating from a different view of reality. Imagine if we could harness the intentional change suggested here (Hagelin et al., 1999; Tiller and Dibble, 2007; Tiller et al., 2004a, 2004b, 2005) offering streamlined ways to align and lead our organizations to their highest and best.

Conclusion

Holographic Leadership suggests the possibility that the leader holds the environment for her organization through a coherent physiological state, with clear, conscious intention, and integrity of action. She becomes the catalyst of change by holding the conditions, allowing the group to self-organize into a higher global order. This model is the process of a fourth order

leader in an active state of change, intending a transformational shift for herself and her organization.

I have suggested a series of practices to use with intention for leading a transformational shift. It is only a beginning, an exploration of science and leadership. I offer a practical process of integrating these diverse ideas into daily business. In addition, I have attempted to offer the daily behaviors necessary for sustainable change. “Awareness alone is not sufficient for change. One must be mindful of the necessity to practice, practice, practice in order for the new perspectives and behaviors to become enduring personal qualities” (Hanson, 2000, p.100).

Transformational shifts can cause us to feel challenged and often resist. I hope that my dissertation offers some education and the increased awareness needed to move us closer to being Change Masters (Kanter, 1983).

I have positioned my dissertation within the scholarship of integration, and the scholarship of application. My theoretical propositions and model of practice encourage “knowing and reflection-in-action” in its participants, and is itself an emergent process of “knowing, and reflection-in-action” (Schön, 1995). For future application I accept the scholarship of teaching (Schön, 1995). It is the daily work that will make a difference, for coherence and alignment are processes not a destination.

Holographic Leadership is part of an evolutionary learning that we have yet to understand. We have capacities we have not yet imagined. I have attempted to offer leadership by directing attention, offering access to information, framing the issue, and providing a decision-making model (Heifetz, 1994) based in wholeness. My exploratory theory/model of practice allows each of us to be a curator, a servant of our organizations. It focuses on the

organization as a whole, while still allowing for a sense of personal of value and accomplishment. It even allows for prosperity and profits as they are a function of this living system.

References

- Adeyemi-Bello, T. (2003). The impact of leader characteristics on the performance of organizational members: An exploratory study. *Work Study: A Journal of Productivity Science*, 52, 6-7, 286-289.
- Albert Ellis Institute. (2000). In M. E. Bernard and J. L. Wolfe (Eds) *The REBT resource book for practitioners (2nd ed.)*. New York: Albert Ellis Institute. 2-1 - 2-3.
- Armour, J., & Ardell, J. (1994). *Neurocardiology*. New York: Oxford University Press.
- Arthur, B.W., Day, J., Jaworski, J., Jung, M., Nanaka, I., Scharmer, C. O., Senge, P.M., (2002, Spring). Illuminating the Blind Spot. *Leader to Leader*, 11-14.
- Assimakis, P. D., & Dillbeck, M. C. (1995). Time series analysis of improved quality of life in Canada: Social change, collective consciousness, and the TM-Sidhi program. *Psychological Reports*, 76, 1171-1193.
- Badaracco Jr., J. L., & Ellsworth, R. R. (1989). *Leadership and the quest for integrity*. Boston: Harvard Business School Press.
- Bar-Yam, Y. (2004). A Mathematical Theory of Strong Emergence: Using multiscale variety. *Complexity*, 9, 15–24.
- Bennis, W. (2003). *On Becoming a Leader*. Cambridge, MA: Perseus.
- Bentz, V. M., & Shapiro, J. J. (1998). *Mindful Inquiry in Social Research*. Thousand Oaks CA: SAGE.
- Bohm, D. (1971). Quantum theory as an indication of a new order of physics. Part A. The development of new orders as shown through the history of physics. *Foundations of Physics*, 1, 359-381.
- Bohm, D. (1973). Quantum theory as an indication of a new order of physics. Part B. Implicate and explicate order in physical law. *Foundations of Physics*, 3, 139-168.
- Bohm, D. (1980). *Wholeness and the implicate order*. New York: Routledge & Kegan Paul.
- Bohm, D. (1990). The new theory of the relationship of mind and matter. *Philosophical Psychology*, 3, 2/3, 271-287.
- Bohm, D. (1994). *Thought as a system*. London and New York: Routledge.
- Bohm, D., & Hiley, B. J. (1993). *The undivided universe*. London: Routledge.

- Bohm, D. & Peat, F. D. (1987). *Science, order and creativity*. London: Routledge.
- Boyatzis, R.E. (2006). An overview of intentional change from a complexity perspective. *Journal of Management Development*, 25, 7, 607-623.
- Bradley, R. T. (1987). *Charisma and Social Structure: A Study of Love and Power, Wholeness and Transformation*. New York: Paragon House.
- Bradley, R. T. (1998). Quantum vacuum interaction and psycho-social organization. In D.Loye (Ed.), *The Evolutionary Outrider: The Impact of the Human Agent on Evolution* (pp. 117-149). Westport, CT: Praeger.
- Bradley, R. T. (2000). Agency and the theory of quantum vacuum interaction. *World Futures*, 55, 227-275.
- Bradley, R. T. (2002). *Love, Power, Brain, Mind and Agency*. Carmel, CA: Institute for Whole Science.
- Bradley, R. T. (2006, February 7 - 10). *The psychophysiology of entrepreneurial intuition: A quantum-holographic theory of non-local communication*. Paper presented to the Third International Entrepreneurship Research Exchange conference, Auckland, New Zealand.
- Bradley, R. T., & Pribram, K. H. (1997a). Self-Organization and the social collective. In K. H. Pribram & J. King (Eds.), *Learning as Self-Organization*, pp. 478-506. Mahwah, NJ: Lawrence Erlbaum.
- Bradley, R. T., & Pribram, K. H. (1997b). Optimality in biosocial collectives. In D.S. Levine & W. Elsberry (Eds.), *Optimality in Biological and Artificial Networks*, pp. 449-488. Mahwah, NJ: Lawrence Erlbaum.
- Bradley, R. T., & Pribram, K. H. (1998). Communication and stability in social collectives. *Journal of Social and Evolutionary Systems*, 21, 1, 29-81.
- Branden, N. (1998). *Self-esteem at work: How confident people make powerful choices*. San Francisco: Jossey-Bass.
- Burns, J. M. (1978). *Leadership* (1st ed.). New York: Harper & Row.
- Capra, F. (1996). *The web of life: A scientific understanding of living systems*. New York: Doubleday.
- Childre, D. (1992). *The How to Book of Teen Self Discovery: Helping Teens Find Balance, Security and Esteem*. Boulder Creek, CA: Planetary.

- Childre, D., & Cryer, B. (2004). *From chaos to coherence*. Boulder Creek, CA Planetary.
- Childre, D., & Martin, H. (1999). *TheHeartMath solution*. San Francisco: HarperCollins.
- Childre, D., & McCraty, R. (2003). *The appreciative heart: The psychophysiology of positive emotions and optimal functioning*. Boulder Creek, CA: Institute of HeartMath.
- Cloud, H. (2006). *Integrity: The courage to meet the demands of reality*. New York: HarperCollins.
- Collins, J.C. (2001). *Good to great*. New York: HarperCollins Books.
- Collins, J., (2005, July-August). Level 5 leadership: The triumph of humility and fierce resolve. *Harvard Business Review*. 136-147.
- Cooperrider, D. L. & Whitney, D. (2005). *Appreciative inquiry: A positive revolution in change*. San Francisco: Berrett-Koehler.
- Corning, P. A. (2002). The re-emergence of “emergence”: A venerable concept in search of a theory. *Complexity*, 7, 6, 18-30.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.
- Csikszentmihalyi, M. (2003). *Good Business: Leadership Flow and the Making of Meaning*. New York: Penguin Books.
- Cuilla, J.B. (2003). *The Ethics of Leadership*. Australia: Thompson-Wadsworth.
- Davies, J. L., & Alexander, C. N. (2005). Alleviating political violence through reducing collective tension: Impact assessment analyses of the Lebanon war. *Journal of Social Behavior and Personality*, 17, 285–338.
- Dillbeck, M. C., (1990). Test of a field theory of consciousness and social change: Time-series analysis of participation in the TM-Sidhi program and reduction in violent death in the US. *Social Indicators Research*, 22, 399-418.
- Dillbeck, M. C., Cavanaugh, K. L. Glenn, T., Orme-Johnson, D. W., & Mittlefehldt, V. (1987) Consciousness as a field: The transcendental meditation and TM-Sidhi program and changes in social indicators. *The Journal of Mind and Behavior*, 6, 1, 67-104.
- Dubin, R. (1976). Theory building in applied areas. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 17-39). Chicago: Rand McNally.

- Dyer, W. W. (2001). *You'll see it when you believe it: The way to your personal transformation*. New York: HaperCollins Books
- Dyer, W. W. (2004). *The Power of Intention*. Carlsbad, CA: Hay.
- Ellis, A., & Harper, R. A. (1997). *A guide to rational living* (3rd ed.). Chatsworth, CA: Melvin Powers Wilshire.
- Essex, L., & Kusy, M. (1999). *Fast forward leadership*. New York: Princeton Hall
- Garbor, D. (1948). A new microscopic principle. *Nature*, 161, 777-778.
- Goldstein, J. (1999). Emergence as a Construct: History and Issues. *Emergence* 1, 49-72.
- Goleman, D. (1997). *Emotional Intelligence: Why it can matter more than IQ*. New York: Bantam Books.
- Goleman, D. (2000). *Work with emotional intelligence*. New York: Bantam Books.
- Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness*. New York: Paulist Press.
- Hagelin, J. S. (1987). Is consciousness the unified field? A field theorist's perspective. *Modern Science and Vedic Science*, 1, 28-87.
- Hagelin, J., & Herriott, S. (1991). Unified field based on economics. *Modern Science and Vedic Science*, 4, 72-95.
- Hagelin, J.S., Rainforth, M.V., Orme-Johnson, D.W., Cavanaugh, K.L., Alexander, C.N., Shatkin, S.F., Davies, J.L., Hughes, A.O., Ross, E. (1999). Effects of group practice of the transcendental meditation program on preventing violent crime in Washington D. C.: Results of the national demonstration project, June-July 1993. *Social Indicators Research*, 47, 153-201.
- Hanson, P. G. (2000, Spring). The self as an instrument of change. *Organization Development Journal*, 18, 1, 95-105.
- Harung, H. S. (1999). *Invincible leadership: building peak performance organizations by harnessing power of consciousness*. Fairfield, IA: Maharishi University of Management Press.
- Harung, H. S., Heaton, D. P., & Alexander, C. N. (1995). A unified theory of leadership: experiences of higher states of consciousness in world-class leaders. *Leadership & Organization Development Journal*, 16, 7, 44-59.

- Hawkins, D. (1995). *Qualitative and quantitative analysis and calibration of the levels of human consciousness*. Unpublished doctoral dissertation, Columbia University.
- Hawkins, D. (2002). *Power vs. force: The hidden determinates of human behavior*. Carlsbad, CA: Hay.
- Hawkins, D. (2006). *Transcending the levels of consciousness: The stairway to enlightenment*. West Sedona, AZ: Veritas.
- Hawkins, D. (2008). *Reality, spirituality and modern man*. West Sedona, AZ: Veritas.
- Heifetz, R. A. (1994). *Leadership without easy answers*. Cambridge, MA: Belknap Press of Harvard University Press.
- Heifetz, R. A. (2003). Adaptive work. In T. Bentley, & J. Wilsdon. (Eds.), *The adaptive state: Strategies for personalising the public realm* (pp. 68 – 78). London: Demos.
- Heifetz, R. A., & Linsky, M. (2002). *Leadership on the line: Staying alive through the dangers of leading*. Boston: Harvard Business School Press.
- Heifetz, R. A. & Sinder, R.M. (1988). *Political leadership: Managing the public's problem solving*: in R. Reich ed., *The power of public ideas*. Cambridge: Balinger.
- Howell, J. M., & Avolio, B. J., (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated business unit performance. *Journal of Applied Psychology*. 78, 6, 891-902.
- Jarvis, P. (1999). *The practitioner-researcher: Developing theory from practice* (1st ed.). San Francisco: Jossey-Bass.
- Jaworski, J. (1998). *Synchronicity: The Inner Path of Leadership*. San Francisco: Berrett-Koehler.
- Jones, C. A. (2005). Wisdom paradigms for the enhancement of ethical and profitable business practices. *Journal of Business Ethics*, 57, 363-375.
- Kanter, R. M. (1983). *Change masters: Innovation and entrepreneurship in the American corporation*. New York: Simon and Schuster.
- Kaplan, A. (1998). *The conduct of inquiry: Methodology for behavioral science*. New Brunswick, N.J.: Transaction.
- Kegan, R. (1982). *The evolving self: Problem and process in human development*. Cambridge, MA: Harvard University Press.

- Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard University Press.
- Kenny, C. B. (1989). *The field of play: A guide for the theory and practice of music therapy*. Atascadero, CA: Ridgeview.
- Kuhn, T. S. (1986). *The structure of scientific revolutions* (2nd, English ed.). New York: New American Library.
- Laszlo, E. (1995). *The interconnected universe: Conceptual foundations of transdisciplinary unified theory*. Singapore: World Scientific.
- Lewin, K. (1951). *Field theory in social science*. Chicago, IL: The University of Chicago Press.
- Lovejoy, A. O. (2005). *Great chain of being: A study of the history of an idea*. Cambridge, MA: Harvard University Press.
- Lovelace, K. J., Manz, C. C., & Alves, J. C. (2007). Work stress and leadership development: The role of self-leadership, shared leadership, physical fitness and flow in managing demands and increasing job control. *Human Resource Management Review*, 17, 374–387.
- Machiavelli, N., (1950). *The prince and the discourses*. New York: Random House.
- Marcic, D. (1997). *Managing with the wisdom of love*. San Francisco: Jossey-Bass.
- Maslow, A. H. (1964). *Religion, values, and peak-experiences*. Columbus: Ohio State University Press. A Theory of Human Motivation. *Psychological Review*. 50, 4, 370-96.
- Maslow, A. H. (1998). *Toward a psychology of being* (3rd ed.). New York: Wiley and Sons.
- Maslow, A. H., Stephens, D. C., & Heil G. (1998). *Maslow on management*. New York: John Wiley and Sons.
- McCraty, R. (2002). Influence of cardiac afferent input on heart-brain synchronization and cognitive performance. *International Journal of Psychophysiology*, 45, 1-2, 72-73.
- McCraty, R. (2003). *The energetic heart: Bioelectromagnetic interactions within and between people*. Boulder Creek, CA: Institute of HeartMath.
- McCraty, R. (2004/2005). The Resonate Heart. *Shift*, 15-17.
- McCraty R., & Atkinson, M. (2003). *Psychophysiological coherence*. Boulder Creek, CA: HeartMath Research Center.

- McCraty, R., Atkinson, M., & Bradley, R. T. (2004a). Electrophysiological evidence of intuition: Part 1. The surprising role of the heart. *The Journal of Alternative and Complementary Medicine*, 10, 1, 133-143.
- McCraty, R., Atkinson, M., & Bradley, R. T. (2004b). Electrophysiological evidence of intuition: Part 2. A System-Wide Process? *The Journal of Alternative and Complementary Medicine*, 10, 2, 325-336.
- McCraty, R., Atkinson, M., Tomasino, D., & Bradley, R. T. (2006). *The coherent heart: Heart-brain interactions, psychophysiological coherence, and the emergence of system-wide order*. Boulder Creek, CA: Institute of HeartMath.
- Moore, G. (2005). Humanizing Business: A modern virtue ethics approach. *Business Ethics Quarterly*, 15, 2, 237-255.
- Mott, V. J. (1996). Knowledge comes from practice: Reflective theory building in practice. In R. Rowden (Ed.), *Workplace learning: Debating five critical questions of theory and practice* (pp. 57-63). San Francisco: Jossey-Bass.
- Nadeau, R., & Kafatos, M. (1999). *The non-local universe: The new physics and matters of the mind*. New York: Oxford University Press.
- Orme-Johnson, D. W., Alexander, C. N., Davies, J. L., Chandler, H. M., and Larimore, W. E., (1988). International peace project in the Middle East. *Journal of Conflict Resolution*, 32, 4, 776-812.
- O'Toole, J. O. (1996). *Leading change: The argument for values-based leadership*. New York: Ballantine Books.
- Peters, T. J. and Waterman, R. H. (1982). *In search of excellence*. New York: Harper and Row.
- Pribram, K. H., (1979, June). Transcending the mind/brain problem. *Zygon*, 14, 2, 103-124.
- Pribram, K. H. (1986). The cognitive revolution and mind/brain issues. *American Psychologist*, 41, 507-520.
- Pribram, K. H., & Bradley, R. T. (1998). The brain, the Me and the I. In M. Ferrari & R. Sternberg (Eds.), *Self-Awareness: Its Nature and Development* (pp. 273-307). New York: The Guilford Press.
- Reams, J. (2002). *The consciousness of transpersonal leadership*. Spokane, WA: Gonzaga University.
- Reams, J. (2005) What's integral about leadership? *Integral Review*, 1, 118-132. Retrieved April 10, 2008 from <http://integral-review.org>.

- Reams, J. (2007). Illuminating the blind spot: An overview and response to theory U. *Integral Review*, 5, 240-258. Retrieved December, 15, 2007 from <http://integral-review.org>.
- Reams, J. & Roy (2007). *Wholeness lost/wholeness regained: A process model view*. Paper presented June 4, 2007 at Trans disciplinary and the Unity of Knowledge: Beyond the Science and Religion Dialogue. Retrieved April 2, 2008 from <http://www.metanexus.net/conference2007/papers/>
- Scharmer, C. O. (2007). *Theory U: Leading from the future as it emerges*. Cambridge, MA: The Society for Organizational Learning.
- Schön, D. A. (1995). The new scholarship requires a new epistemology. *Change*, 27, 6, 1-7.
- Senge, P. M. (1994). *The fifth discipline: The art and practice of the learning organization*. New York: Currency Doubleday.
- Senge, P., Scharmer, C. O., Jaworski, J., & Flowers, B. S. (2004). *Presence: Human purpose and the field of the future*. Cambridge, MA: Society of Organizational Learning.
- Sheldrake, R. (1995). *The presence of the past: Morphic resonance and the habits of nature*. Rochester, Vermont: Park Street Press.
- Sheldrake, R. (2004/2005). The resonate heart. *Shift*, 27-30.
- Stapp, Henry P. (2007). *Mindful Universe: Quantum Mechanics and the Participating Observer*. Germany: Springer.
- Stein, S. J. & Book, H. E. (2000). *The EQ edge: Emotional intelligence and your success*. Toronto: Stoddart.
- Sudarshan, E. C. G., & Mukuna, N. (1974). *Classic dynamics*. New York: Wiley.
- Thurber, M. R., McCraty, R. Shaffer, T., Allen, K., Wilson, & B. Sawyer, S., (2008) *HeartMath interventions for counselors, therapists, social workers and health care professionals: Establishing a new baseline for sustained behavioral change*. Boulder Creek, CA: HeartMath LLC.
- Tiller, W. A. (1997). *Science and human transformation: Subtle energies, intentionality and consciousness*. Walnut Creek, CA: Pavior.
- Tiller, W. A., & Dibble Jr., W. E. (2007). Toward general experimentation and discovery in conditioned laboratory and alternative medicine spaces: Part V. Data on 10 different sites using a robust new type of subtle energy detector. *The Journal of Alternative and Complementary Medicine*, 13, 1, 133-149.

- Tiller, W.A., Dibble, W. E., & Kohane, M. J. (2001). *Conscious Acts of Creation: The Emergence of a New Physics*. Walnut Creek, CA: Pavior.
- Tiller, W. A., Dibble Jr., W. E., Nunley, R., & Shealy, C. N. (2004a). Toward general experimentation and discovery in conditioned laboratory spaces: Part I. Experimental pH change findings at some remote sites. *The Journal of Alternative and Complementary Medicine*, 10, 1, 145-157.
- Tiller, W. A., Dibble Jr., W. E., Nunley, & R., Shealy, C. N. (2004b). Toward general experimentation and discovery in conditioned laboratory spaces: Part II. pH-change experience at four remote sites, 1 year later. *The Journal of Alternative and Complementary Medicine*, 10, 2, 301–306.
- Tiller, W. A., Dibble Jr., W. E., Orlando, G., Migli, A., Raiteri, G., & Oca, J. (2005). Toward general experimentation and discovery in conditioned laboratory spaces: Part IV. Macroscopic information entanglement between sites 6000 Miles Apart. *The Journal of Alternative and Complementary Medicine*, 11, 6, 973–976.
- Torraco, R.J. (2002). Research methods for theory building in applied disciplines: A comparative analysis. *Advances in Developing Human Resources*, 4, 3, 355-376.
- Torraco, R.J., & Holton III, E. F. (2002). A theorist's toolbox. *Human Resources Development Review*. 1, 1, 129-140.
- Vaill, P. B. (1996). *Learning as a way of being: Strategies for survival in a world of permanent white water*. San Francisco, CA: Jossey-Bass.
- Van Oosten, E. B. (2006). Intentional change theory at the organizational level: a case study. *Journal of Management Development*, 25, 7, 707-717.
- Weber, M (1949). *The methodology of the social sciences*. New York: Free Press.
- Weisinger, H. (1998). *Emotional intelligence at work*. San Francisco: Jossey-Bass.
- Wheatley, M.J. (1994). *Leadership and the new science*. San Francisco: Berrett-Koehler.
- Wheatley, M. J. (2005). *Finding our way: Leadership for an uncertain time*. San Francisco: Berrett-Koehler.
- Wheatley, M. J., & Kellner-Rogers, M. (1999). *A Simpler Way*. San Francisco: Berrett-Koehler.
- Whetten, D. A. (1989). What Constitutes a Theoretical Contribution? *Academy of Management Review*, 14(4), 490-495.
- Whitney, D., & Trosten-Bloom, A. (2003). *The power of appreciative inquiry: A practical guide to positive change*. San Francisco: Berrett-Koehler.

Winnicott, D. W. (1965). *The maturation processes and the facilitating environment*. New York: International Universities Press.

Zukav, G. (1979). *The Dancing wu li masters: An overview of the new physics*. New York: Morrow.

Zukav, G. (1989). *Seat of the soul*. New York: Simon and Schuster.

Zhu, W., May, D. R., & Avolio, B. J. (2004). The impact of ethical leadership behavior on employee outcomes: The role of psychological empowerment and authenticity. *Journal of Leadership and Organizational Studies*, 11, 1, 16-26.