A Self-Organizing Leadership View of Paradigms

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A weary manager of a large corporation that had just announced a new company-wide training program, was expressing his frustration over the waves of such programs he had seen come and go over the last few years. Someone else in the group disagreed, noting that this one seemed to have some real potential. The first manager responded, "Just wait--in a few months we'll beat it to fit and paint it to match and it will look like everything else that's rolled through here." Unfortunately for the company, his prediction was accurate. And even more unfortunately for all of us, the same process is being played out almost daily in offices and plants around the country.

For business leaders struggling to introduce fundamental change into their organizations, it can seem at times as if there is some invisible, inordinately powerful gravitational force that works against movement or, if movement does occur, slowly but inevitably draws things back toward their original conditions. Every once in a while, fundamental lasting change seems to occur in some corner of the organization or in someone else's business. But then, most frustrating of all, when the apparent operational causes and circumstances of that change are duplicated in another part of the business, the results are often the same cycle of resistance and regression.

In fact, such a force does exist, and it is both invisible, and inordinately powerful. That it is invisible does not however mean it cannot be seen, only that we must learn new

ways of seeing. And as to its inordinate power, it is a little like the Wizard of Oz. Once seen, we realize that we ourselves are the source of its power. This paper is about learning to see that force and to work in harmony with it in order to bring leadership to the self-creation of our organizations as self-organizing leaders.

THE TIES THAT BIND

This force, which one writer once described as having a "hold over our perception of reality so overwhelming that we can't possible imagine any other way of looking at the world", is the paradigm or world view we and the fellow members of our society, adhere to. While sentient beings and paradigms have always co-existed, it is only very recently that the latter have been recognized as discrete phenomena.

It was   a young Harvard professor, Thomas Kuhn, who first saw behind the Wizard's screen while organizing a lecture series on the origins of 17th century mechanics in 1947. Fifteen years later, his enormously influential book, The Structure of Scientific Revolutions, described the role of scientific paradigms in the shaping of all scientific thought. It was not long before Kuhn's ideas, which he had restricted to scientific communities, were being applied to all of human society. In the process, the word "paradigm" has taken on a life of its own, and not necessarily always one that does justice to the original depth and power of Kuhn's work. To recapture and apply the full potential of the concept of paradigm as an instrument of self-organizing leadership, it is

necessary to first understand the power of a paradigm in shaping human affairs and then to renew understanding of Kuhn's original concept.

Scientist John Casti compares our knowledge of the world to the terra incognita of ancient mapmakers, and a paradigm to the map that evolves through a series of explorations and adjustments. At first fairly crude, its details are filled in with each new wave of returning explorers. Using this analogy, one need only recall the experience of wandering in a strange city without a map to understand the importance of a paradigm. With no map, we have no way of knowing where to look, how to plan, little or nothing by which to orient ourselves. This analogy is fairly representative of Kuhn's concept, but has two major omissions. First, when we use a map, we know that it is no more than an instrument for guidance and, as such, we can make choices about how much we rely on it as we move about. Paradigms in this regard, are much more akin to invisible blinders, shaping our perspectives without our knowledge or our choice. It is as if we begin to take them as the territory itself rather than someone's best estimate of it. Then, when we find our new map doesn't fit our experience, we feel betrayed, and usually decide to go back to the hotel and put our feet up in more comfortable surroundings. Secondly, a paradigm shapes every aspect of a society, not just its "explorers." Correspondingly, when a paradigm shift occurs it is irreversible, it colors everything we see after that and usually leads to reinterpreting old events and experiences in light of this core view change. It is, however, on expeditions into the unknown that we are most likely to touch the boundaries of our paradigm and to begin to feel its invisible constraints.

OF MAPS, PARADIGMS AND LEADERSHIP

In the world of business, our "expeditions" are any new venture, from organizational change efforts to new products and markets, and new alliances. In every case, we plan our expedition based on the prevailing map, and everything we see along the way is an interpretation based on that map. The hazard of this becomes apparent when we reach the edges of the territory and we find ourselves confronting not only new and unknown challenges, but also a plethora of maps and mapmakers, each proclaiming the truth of their map. The "beat to fit and paint to match" approach is the business equivalent to going back to the comfort and safety of the hotel's familiar environment. When we do so, we have succumbed, once again, to the force of our own mind's attachment to the old map or paradigm, no matter how inconsistent it seems to be with our own experience in the new territory.

So what's a leader to do? The old map seems to work less and less often these days and there's an abundance of new maps being offered, but how to choose? Quality circles? Self-Managed Teams? Ropes Courses? Total Quality Management? Just in Time? At an alarming rate, and in every domain, not just business, landmarks are crashing down or just slowly dissolving into what seems at times an ever-thickening fog of conflicting theories, dictums and predictions. From time to time a startling new idea comes along that seems to sweep the fog away and make the landscape clear once again.

But, just as quickly, another new idea and, then another one, comes on its heels and the fog drops like a wet blanket, thicker than ever.

There are increasing indications that the chaos we are experiencing is the result of trying to navigate a 20th century world using a 17th century map. The last fifty years have been rich with the discoveries of new scientist/explorers (with one key discovery - entropy - even going back to the last century), but so firmly entrenched is our 17th century picture of reality, that we exhibit remarkable inventiveness and determination in our drive to beat to fit and paint to match every new and literally world (view) shaking discovery.

Returning to Casti's analogy, when the reports of discrepancies between the standard map, and what has been actually observed reach a certain level, the Society of Explorers determines that it is time "to shift their allegiance to a new firm of mapmakers whose pictures of the territory seem more in line with the reports of the returning adventurers". Unfortunately for today's business leader trying to steer her or his firm through this newly bewildering territory, there is no Society of Explorers to collect data and determine the validity of the maps. Even if there were, new discoveries are now coming so rapidly that no central authorizing body could possibly keep up. More and more, each business leader must sort through the explorers' reports to become their own mapmaker.

SELF ORGANIZING LEADERSHIP

In this article, we refer to a new form of leadership needed to meet the challenges and opportunities of a transition time - one we call Self-Organizing Leadership. The central role of these leaders will be to reach out beyond the boundaries of the existing maps through seeing and anticipating the new order as it unfolds, and through creating visions that guide themselves and others to see and participate in the creation of their own future - as organizations and individuals. To be able to do so, they must first build the capability to organize their own thinking as a means of seeing the paradigm that defines our current boundaries. It is exactly for this purpose that Kuhn's structural definition of paradigms is so powerful.

A STRUCTURAL VIEW OF PARADIGMS

Scientists have long known the power of understanding something in terms of its underlying structure. Kuhn's work moved us from a philosophical concept of a "world view" to the more utilitarian theory of "paradigm" which he defined as a "constellation of group commitments" shared by a particular (scientific) community. He described these key elements as follows:

- **symbolic generalizations** which are deployed without question or dissent by group members and often take on the appearance of laws of nature. Frequently represented in formula or slogan form, they trigger in the mind a fixed set of relationships and consequences.

- **a set of beliefs in particular models of reality**. These models supply us with "preferred or permissible analogies and metaphors" — a powerful means of communicating ideas, knowledge and understanding, while at the same time reinforcing the community's worldview. In particular, these analogies and metaphors define, and thereby limit us to, what is "real", what is possible and what is impossible.

- **a set of fundamental value**s which we use to validate or discard theories that explain and predict how events relate, and unfold.

- **a set of Puzzle-Solutions or shared exemplars.** It is these shared exemplars (in business: case studies/ on-the-job training, etc.) which may have the greatest impact on reinforcing and communicating a particular paradigm. Through the sharing of these approaches, we crystallize within ourselves a "time-tested and group-licensed way of seeing". These are profoundly useful social mechanisms. The problem comes when we divorce them from the belief-based models and value-based theories from which they were derived.

Looking as these as a structure rather than just a list of separate elements, we might depict them as follows:

Set of Values

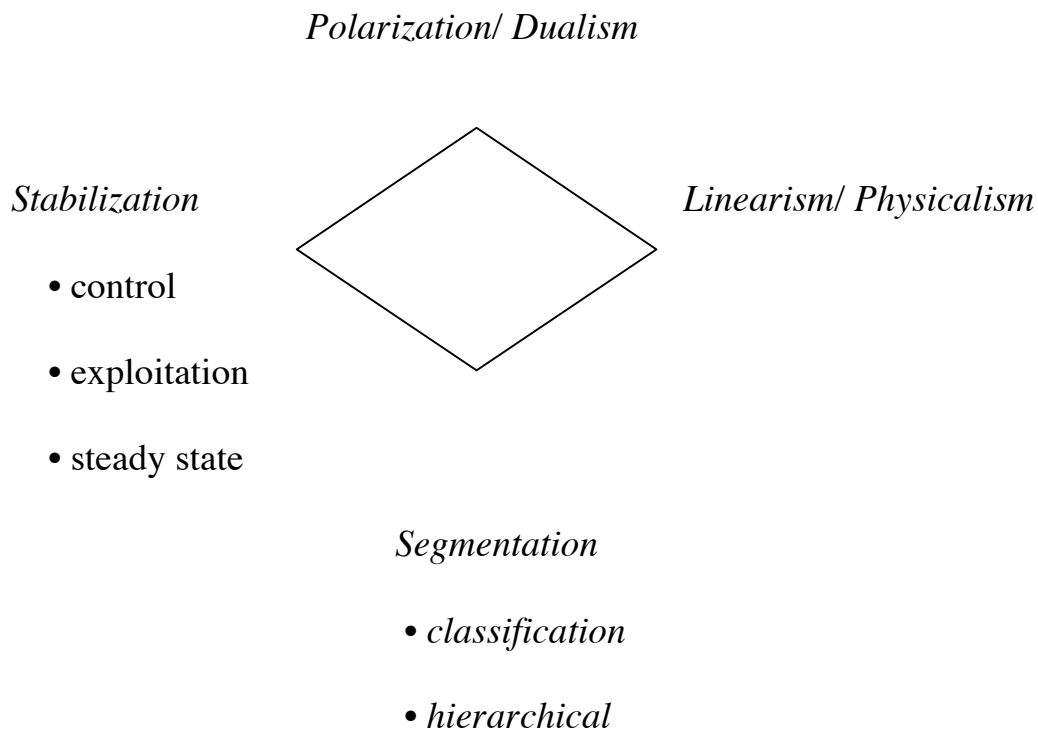| | Symbolic |
| Set of | Generalizations |
| Beliefs | |

Set of Puzzle Solutions
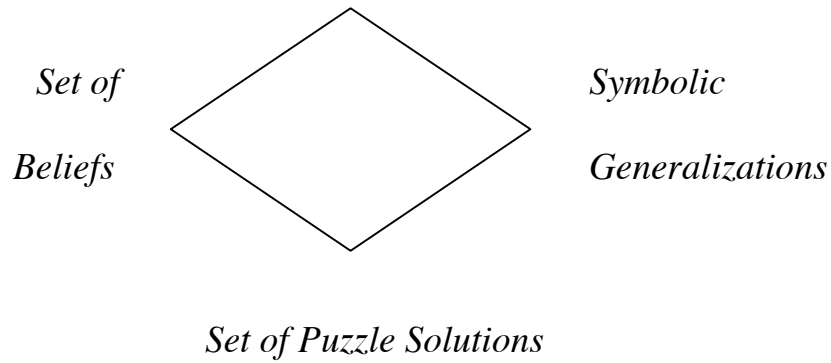
Paradigms In Business: Leader as Mapmaker

We started by asserting that so long as our current paradigm remains invisible to us, we cannot hope to see the emerging paradigm. As a result, we remove from ourselves the ability to make choices between them - an ability that is fundamental to becoming self-organizing leaders in self-creating organizations - to becoming our own mapmakers. Kuhn's structure provides us a "mapmaking" instrument that can help us see how our current "map" now shapes our daily business activities, and, even more important, provides as a framework for understanding and integrating the work of the new geographers and explorers into a new map to guide business adventures. The following pages provide an illustration of how this can be applied, starting with a look at our current paradigm.

Mechanical Age Paradigm:

The current, and currently unraveling, machine age or mechanical paradigm has remained fundamentally unchanged for over three hundred years. This view holds that history proceeds in a straight line, and unlike the Ancient Greeks who saw a world ruled by cycles of decay and rebirth where greater change and growth was associated with greater decay and chaos until the gods intervened again and started a new cycle. Our current view also holds that this linear progression of time is also a steady advancement toward increasing material affluence. Not only that, responsibility for this increasing material affluence is directly in man's hands whose task is to bend nature to his will to create the order and predictability needed for continuing progress. Using Kuhn's paradigm structure, we could depict this Mechanical World view as follows:

Polarization/ Dualism

Stabilization   *Linearism/ Physicalism*

• control

• exploitation

• steady state

Segmentation

• *classification*

• *hierarchical*

• *categorization*

Explorers/Geographers of the Mechanical Paradigm:

Isaac Newton, Frances Bacon, René Descartes, John Locke, and Adam Smith are the names most often cited as the primary sources of the Mechanical Paradigm. Reading them today, it is startling how much of their writings sound like contemporary statements still heard in many sectors of business and politics. One of the core beliefs that set the Mechanical Age View aside from its predecessors was the gift of Isaac Newton — that all of nature could be subjected to the laws of mathematics. In a world run by immutable, completely knowable and observable laws, a mechanical model is a natural outcome. With machine as metaphor, the major preoccupation becomes the creation and sustenance of a stable environment conducive to the unbroken production of material worth. Error and degradation are our enemies; control of nature their remedy. As Locke wrote, "land that is left wholly to nature... is called, as indeed it is, waste." ("Second Treatise," in Two Treatises of Government)

René Descartes and Francis Bacon both contributed to the value for "objective" knowledge that marks this World View. From Descartes came the faith that we could master the world by unraveling its truths, and the conviction that there is always a "right" answer to be found. (making of course, anything in disagreement wrong.) In a world of good/bad and sharply defined blacks and whites, any theory that is mathematically

nonmeasurable, or which doesn't point to an orderly, predictable sequence of events toward desired goals, is quickly discarded.

"Progress" became the banner behind which scientists, politicians and business people have marched with full confidence that, if we are diligent, hard working and hard nosed, life will proceed in a straight line with each stage inevitably better than the last.

Bacon's gift to this world view was the ideal puzzle-solution— the Scientific Method — a tidy and "purely objective" means of ascertaining the nature of the "real" world that relied on being able to segment the messy world of nature into tidy little packets which could be measured, analyzed and categorized. It worked so well in the physical world, that its carry-over to the world of living beings was almost a foregone conclusion. People became subject to, and could be understood in terms of, the same mechanical laws as machines. What couldn't be studied objectively was dismissed as irrelevant.

Emergent World View:

There is growing consensus that the current turbulence marks the emergence of a new world view, one which we call here simply the Emerging World View to remind us that it is still in process. There is also a growing consensus as to the key scientific and philosophical "explorers" who are nourishing its emergence. Using Kuhn's structure, we have drawn on these sources to describe how these new "landmarks" would manifest as an interrelated whole within our businesses. Structurally, they are depicted as follows

<center>*Developmental*</center>

<center>*Regeneration*　　　　　　　　　　　　　*Field*</center>

<center>*Holographic*</center>
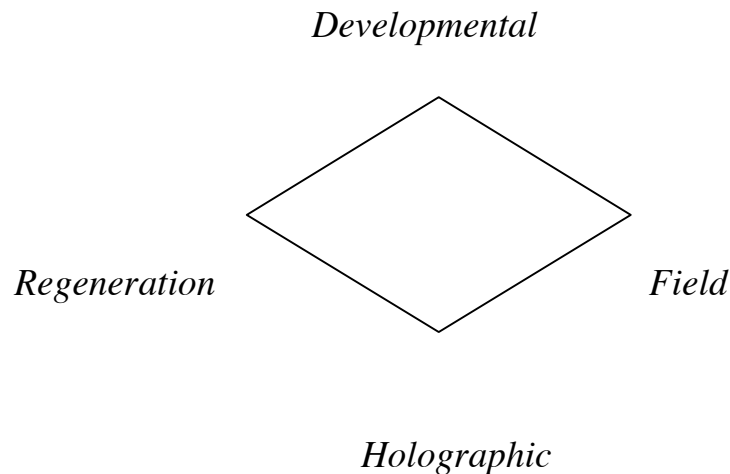
Explorers/Geographers of the Emerging Paradigm:

The fundamental challenges to the beliefs and therefore metaphors and analogies (e.g. Machine), are surfacing from the halls of Physics and Biology. In the late 1930's, Ludwig von Bertalanffy began to publish his research and philosophy of General Systems Theory, which directly challenges the Mechanical view of the World. Systems (whole entities acting in relationship to one another) have always existed. They had however been studied as parts separate and independent from one another. The introduction of General Systems Theory laid a foundation for many fields and disciplines. Three of the primary emerging architects, Ilya Prigogene, Erich Jantsch, and David Bohm, draw from a General Systems view of the world.   Prigogene (a Belgian Nobel Prize Winner) and Jantsch acknowledged some parts of the universe operate, like machines, as closed systems, unable to exchange energy across systems. These make up, at best, only a small

part of the physical universe. The vast majority of systems is open and cannot be understood in closed system terms. "These open systems are not predictive in advance in terms of the direction change will take. It is not possible to tell if the system will disintegrate into "chaos" or leap to a new, more differentiated, higher level of "order" or organization." (Prigogene 1984) They have given us a theory that says order can arise spontaneously out of order and chaos through a process called Self-Organization--thus the source of our title for the leader in the emerging paradigm. They invite us to learn to differentiate between these kinds of systems so that we work appropriately when engaging them. Otherwise we limit our creative energy to the prevention of disorder of variance, thus focusing people away from the emerging higher order possibilities.

David Bohm, a physicist from London's Birkbeck College, points out that contrary to the way the real world is, we operate with widespread and pervasive distinctions between people, which prevents us working together for a common good. He challenges the Mechanical World View's puzzle solutions that treat things as inherently divided, disconnected and 'broken up' into smaller and smaller constituent parts, by offering models for research and problem solving based on unbroken wholeness. He notes that even though science has developed radically new features in the models it uses, work in the daily world is still trapped in the problem-solving models of the Cartesian rectilinear grid. Bohm believes this fragmentation has also happened to individuals to such a degree that it interferes with our clarity of perception and that only by developing the insight to

work from a model of wholeness can we seek solutions and directions for our questions that brings clarity in ourselves and our world.

Emerging candidates for the new symbolic generalizations come from biochemistry and anthropology, offered by Rupert Sheldrake, a Cambridge Biochemist and from Gregory Bateson, the son of an English biologist. Sheldrake, postulates that things happen because of the way things have happened before. We create a kind of memory in our social fields, which tend to condition the way we see things. Out of these past habitual behaviors, we form a set of assumptions and patterns. When a significant shift occurs in the patterns, that becomes the new field to which people resonant and cause new habits for the social group. Learning becomes easier for each succeeding groups because the field in which they exist is forming a new pattern and reconditioning the whole.

Gregory Bateson must be mentioned because his work is so influential on many other scientists. A vastly incomplete summary of his work would have to include his work on learning how to learn. His primary premises were built on a belief in the existence of fundamental principles that can be recognized in both mental processes and biological evolution. Bateson believed it is possible to emerge into new thinking only when we can get into a non-dualistic view of the world, one where mind and matter are not separated as Descartes had advocated. He felt that because of this dichotomy, we endanger accuracy and learning by the demand for objectivity (looking for only what we can see and count in the material world). By this process we make life and interactions

"thing-like" and therefore loose the spirit and higher values that we so wish for in our lives and organizations. As creatures enamored with our senses, which can only discriminate differences, we tend to describe and consider only dual nature phenomena; and being ensconced in the physical world, we think only about what we can effect with our behavior and miss the true matrix of our lives, thus mistreating one another and other living entities. He offers alternate value based theories for building new learning processes which allow us to see the world in a new way, which would allow us to see the relationships between multiple parts in a complex living system.

And last on our incomplete list of architects is Karl Pribram, a brain researcher and neurosurgeon at Stanford University, who has developed a model of the brain as a Hologram, a theory Bohm also finds applies to the universe itself. An eerie idea perhaps, but the brain seems to distribute information throughout the system, each fragment encoded to produce the information of the whole. It seems that there are parallel processing capabilities whereby connections are by linear and non-linear connections. His research has shown that even when a part of the brain is destroyed in an accident, that the memory and other functions seem to be in tack. Bohm's research has extended this same concept to all living processes, which has implications for organizations and other social entities.

For lack of space we have left out the Linguists, the Developmental Psychologists, and many other important scientists, but this gives us an introduction to some of the earliest explorers into the emerging paradigm territory.

Comparing the Maps:

Having briefly sketched out the structural underpinnings of the current and the emerging paradigms, we turn now to looking at the differences between them with particular focus on what happens to the emerging paradigm landmarks as we try to paste them into our 17th century map, and on what new choices open up for us when we are able to consciously select which landmarks from the old are still appropriate for the emerging paradigm.

Key Beliefs: From Stabilization to Regeneration

The 17th century view of the universe as a precisely tuned machine in which nature can and should be controlled for our own purposes, led us to focus on making nature predictable so that our efforts to extract bounty from it could be done with the highest degree of assurance as to the results of our efforts. One result is an abiding belief in the drive toward stabilization as the fundamental requirement for progress. When we speak of accountability and responsibility in business we see them as synonymous with command and control, the most basic hallmarks of good leadership. What are some of the symptoms of a stabilization dominated world? Often we see people who are afraid to take risks for fear of making a mistake. We may hear supervisors withholding information in order to feel the power of control. We may hear managers who are more concerned about their own career or workers who are more concerned about what the

work rules are than they do customer satisfaction. As a way of demonstrating how dominating this element has been and still is, we will look at its impact in the business world on two powerful ideas which are sourcing the emerging paradigm, but whose application to business has been distorted by seeing them through the blinders of the mechanical paradigms drive toward stabilization.

Entropy:

Although the concept of entropy was actually developed in the middle of the last century, it seems newer since it took some time for it to work its way from a concept about the mechanics of steam engines to an "immutable" law that was held to govern the entire universe and everything in it. Basically, the "Law of Entropy" states that our physical universe and its contents are slowly but inexorably moving toward increasing disorder and eventual extinction. This is a particularly terrifying if not blasphemous idea in a paradigm in which a large part of organized activity comes from the urge to create a steady-state environment for the predictable conduct of affairs. The response, not surprisingly, has been to redouble our efforts toward control, a response not unlike trying to be understood by a non-English speaking person by speaking louder and louder, but still in English. We have put in place thousands of programs designed to stop, reverse or prevent entropy through increasing levels of control that manifest as more and more rules, regulations, laws, and prescribed procedures. (There are some who see the proliferation of laws and rules as a manifestation of entropy in itself). What we have

missed, by wearing the blinders of the mechanical paradigm, is the loopholes in the entropy law. Entropy governs the macro physical world, the horizontal time-space axis as Jeremy Rifkin describes it, but it does not govern the vertical axis of spirit and thought. Since the mechanical paradigm does not distinguish between universe as machine and human as machine, it is not surprising that we unknowingly transferred a physical universe model to the non-material universe and as a result treat living systems as machines that must be controlled. The good news is that human consciousness and capability allows us to go beyond the prevention and correction model necessary for the physical world. In the world of people and their thinking, where entropy is not dominant, we can operate from a model of evolutionary creativity or regeneration. This model enables us to expand our organizational energy from the narrow focus on slowing entropy, reordering our physical manufacturing process and designing systems that are needed for prevention. It also enables us to also use our energy for moving our businesses and our people into new territory, new arenas, with revolutionary new product and service venues. Our consumer products leader we have worked with asked his people to track through the environmental impacts they were building into new products and packaging. Rather than giving them a new set of specifications against which to manage quality control, he created an environment in which people feel encouraged to innovate in the area of specifications, to redesign continuously the procedures and process of production, to create substitute base materials in new products and packaging as a result of seeing the wide-spread and long-term impacts of their products. The result

has been regenerative and evolutionary thinking from the workforce, and a far greater benefit to the earth.

Homeostasis:

The significance of homeostatic processes was greatly expanded out of the systems thinking done this century.   Homeostasis in the biological world involves a process of adaptation to or adjustment to the environmental changes that occur daily or yearly. Its purpose is to keep the living entity stable even when there are fluctuations are occurring around it. (An animal gets a heavier coat for winter and sheds for summer). When our temperature rises in response to a virus, our body is seeking to regain homeostasis. This process is a part of everything living and has a high degree of usefulness for ensuring viability of an entity. The fact that the earth has maintained virtually the same temperature for over three billion years is a remarkable feat of homeostasis without which there would be no life on earth today. However, when this fundamental life-supporting concept is shaped by the mechanical age paradigm, it can produce results that are far from life supporting. With stabilization as the driver and an approach to solving problems by dividing things up, the first thing that happens is we isolate the organization/organism from the dynamic heterogeneous environment (larger system) in which it exists. Energy goes toward sustaining the boundary so as not to allow in anything that is different and therefore destabilizing. When we have to adapt to external forces, the desired method of doing so is by making shallow and reversible moves such as

adjustments in production volume, work force size, and cash flow adjustments in response to market cycles, economic trends, or a competitive product introductions. We quickly discover however that there has been no fundamental underlying change, only an adaptation with a return as quickly as possible to " Business as Usual". In the meantime, the environment continues to move on and we are left increasingly less able to adapt. What we miss with our mechanical age blinders is the heterostatic processes, without which a perfectly homeostatically balanced entity is left behind in the evolutionary dust. In a heterostatic change process, the boundaries of the entity are either figuratively or literally extended to bring into the system the diversity of its environment. This is, by definition, a destabilizing process, but a necessary one for creativity and regeneration to occur. By valuing both homeostatic and heterostatic processes, we focus as a leader, on guiding the appropriate energy toward homeostatic needs without losing touch with the external dynamics. We continuously seek to connect every member of our organization to the environment of marketplace, society, and the environment to ensure people have a vision or mission to work from and to set the context for innovation using principles and purposes. Instead of externally administered evaluations, we develop reflection processes that enable every employee to see our rate of improvement in moving into new territory, into the unknown. Particularly, we reflect on and plan for those arenas that provide the value, ableness and wholeness sought by the greater systems we serve (the marketplace, the earth, society, etc.) instead of planning for how best to protect ourselves from a diverse and seemingly chaotic environment.

Symbolic Generalizations: From Linear Change to Field Change

Our invisible mechanical paradigm provides us with glasses equipped with progression lenses - we see all change occurring linearly, each succeeding stage of history as an advance over the preceding one, despite increasing evidence of the contrary. In line with this, the word "progress" (read greater material abundance) has come to symbolize the goal of every individual, every family and every social institution. A related concept, the "survival of the fittest " has become the symbolization in the competitive world even though it is abundantly clear to any one in business for more than a few years that progression does not seem to be in a straight line and the definition of fitness does not seem to have any constancy to it as was suggested by our Darwinian extrapolations. Another clearly related mechanical age landmark that shapes our view of change is the phenomenon of physicalism. A descendent of, among other things, Newton's Laws of Nature (acceleration is directly proportional to applied force), physicalism leads us to see change occurring only as a result of some direct impact. Non-direct change - change not visibly resulting from our effort - is seen only as an aberration, a variance from the plan. We describe all actions and results in cause/effect terms. This symbolic generalization of cause-effect has come to hold within it the idea that nothing moves in the desired direction unless force is applied to it directly.

Reality is Habit Forming:

Turning to the emerging paradigm, the explorations of biochemist Rupert Sheldrake are bringing back startling new insights into how change occurs. His work is turning the traditional scientific community upside down, and has enormous implications for business. Sheldrake and other researchers are presenting us with a universe where there appears to be evidence of universal laws actually changing and they are changing in a way that transcends time and space. Although it is a concept that is hard to grasp, change seems to be transmittable through an invisible field of living energy much like it is with electricity. Sheldrake describes it as "reality is habit forming". It seems that once an emergent reality has reached a critical threshold, it becomes pervasive beyond any space and time connection. The emergent Field model suggests that once learning occurs in one group, it will be easier for the next group and even easier for the next groups and so on, until it does not even need to be taught or introduced, it is just known by all. With a field theory of change as our landmark, the form and processes of learning take on a new significance, and we set goals within our organization that are radically different in both scope and nature. In our experience the rate of change that an organization can successfully undertake speeds up dramatically as a result of shifting the focus of leadership from particulate one-by-one change to enabling the evolution of a field. A consumer products company introduced self-managing teams over a three year period using field model, and found that each system learned faster than the previous ones such that the last plant in the sequence actually started conceptually, and in practice, ahead of where the first one had three years earlier. Over this same period, the company cut the

rate of their product development cycle by 25% each year. Leading from a field model of change some principles that might guide a leader focused on nurturing a field for change rather than "driving change" include:

- Ask questions about what is moving, not what "is". (e.g., what has changed in what we think of as possible?)

- Always reflect on what movement has occurred as a result of an interaction on the part of   the change designers and the organization. (e.g. dedicate time after each meeting to reflect   on progress made during the meeting)

- Redesign to meet the new at a level always slightly ahead of where people are. - Train yourself to observe subtle changes; our tendency is to see people and groups where they   were the last time we met, and engage them there or where our limited picture of them may be.

- Prepare yourself and your organization to move your own thinking each time you come   together. The greatest hazard is holding onto a position too long.

Puzzle Solutions: From Segmentation to Holographic

One of the greatest advances of the original geographers of the mechanical paradigm was the scientific method - the puzzle solving process that seemed to bring order to messy, disorderly nature through the process of segmentation, and categorization or classification. We should not underestimate nor discard too readily this method - our issue here is not its utility but rather its application. As the machine metaphor extended

to people as well as the universe, and "non-measurable" dimensions such as consciousness, spirit, and thinking were discounted as irrelevant, the scientific method was distorted into a source for categorizing and segmenting people by type, and organizing them based on hierarchical and categorical classes. As a result, we began to lose the ability to see the wholeness of each individual and their uniqueness (ourselves and others, present and potential) in a business enterprise setting. We have developed a wide array of fine-tuned and costly instruments for categorizing, classifying and segmenting the performance of people. We take almost any process that could help us understand. The totality of ourselves individually and collectively, and convert it to a segmenting tool. As a result we are losing, or have lost, the valuing of diversity needed to gain wholeness and to support the heterostatic processes of regeneration required to survive in our rapidly changing environment.

What are the hallmarks of an organization trapped in the segmentation model? People identify themselves and relate to others as "types" on a (pre-packaged) pre-set behavioral classification model. Racism and sexism are often significant problems. (one more e.g.) Classifying and ranking and rating of performances limits the contribution of all people.

Wholeness as a Leadership Process:

Karl Pribram and David Bohm have articulated a theoretical base for developing and engaging consciousness based on the Holographic metaphor in which the part is in

the whole and the whole is in each part. What does this mean in a practical sense? It means that when we seek to exclude particular people--problem people--we are not seeing that they are only a reflection of the whole system's ability to be healthy. The problems will reoccur in the form of new persons because the whole is reflected in the parts. It also means that when we construct teams, we can be connected to the whole by selecting a holistic slice of the organization that is reflective of the whole (e.g. all functions, levels, perspectives). We have had excellent success for over twenty-five years with supporting the forming of such teams to serve as the decision making team for an entity, rather then the hierarchical decision model of cascading decisions already made or delegating authority for certain decisions down to the organization's lower levels. Hierarchical decision processes even when made at the "appropriate level" miss the whole and therefore miss critical considerations and learning process.

The holographic model also requires us to look at each individual as unique, continuously developing and having the possibility of making an increasing value-adding contribution. Our challenge is to collaborate with people as a leader to discover, develop, and match that uniqueness to the contributions that are needed by the business. If leaders could learn to see any problem or issue with a person as their own limitations in capability to see the "hologram", great strides would be made. One operator reports how the world looks from working in an organization working with a Holographic Model. "The way I view the operation has changed a lot. Before it was just a job. Now I'm part of the operation and I have more concern for the customer, the consumer, the earth, the

upstream supplier, I have a greater value for everybody in the system. We're tearing down the roles, eliminating 'it's not my job'. Everyone is responsible for the team." Machine Operator, shop steward, consumer products plant, Kentucky.

Examples of Holographic Leadership:

We actually change our thinking about who are leaders. As Bob Porter Dupont Memphis plant manager reflected to me, " I have to catch myself, stop myself from thinking that all the communication and leadership is my job. Watching an operator or a mechanic stand in front of his peers and superiors (including me), providing leadership to major change efforts and projects is really inspirational to me. What I am living is a fundamental change in the way I always thought about being a leader, but I feel really alive". In a similar vein, Rod Lawrence, Operations Manager of James River Paper recently stated: "For the last few years, multi-level development has been our standard. I didn't know how rich and creative this was until I was recently put in a more traditional process. I really feel poorer when I'm not learning with operators on a regular basis".

Values: From a Polarizing to a Developmental Paradigm

For the geographer/explorers of the mechanical paradigm, the excitement of the universe as machine metaphors of the scientific method as instrument was that, at long last, one could know the right answers with certainty and these could then guide man's endeavors smoothly along the path toward continuing material progress. Unfortunately,

we have become a nation of people trapped by the search for the "right" answer, certain that if we do not "know" the answer, we are doomed to "failure" and unable to see this as experience, building as past experience are a rich opportunity for learning in itself.

This duality or bi-polar thinking goes all the way back to the platonic ideal and its three premises: That all genuine questions have only one true answer, that those answers are knowable, and together they form a single coherent whole. The platonic ideal fit beautifully with the mechanical paradigm. As we have lived out the platonic ideal, we have come to more and more duality in our thinking. If there is only one right answer, all other answers are wrong. We have extended this to every element of our thinking and interacting. We have only two terms or two options for each question, so it is important to hurry on to the answer. We hire consultants and experts and expect them to give us the right answers. We have lived with this belief for so long, that we now actually interpret (and limit) reality with this worldview. At best it gives us an incomplete worldview and understanding. At worst it gives us dogma, tyranny, and war in our political and social contexts.

Learning to "Know" - Developing to Learn:

To be able to move our organization into the unknown, we need a model of development that includes consciousness and capability and thrives on diversity and wholeness. Charles Krone has differentiated development from growth and learning as a way of understanding how being guided by development in the emerging paradigm

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differs from the growth dominated model of the mechanical paradigm. He describes growth as having a fixed end point and it occurs by drawing nutrients from the environment like our physical body or a flower bush. Growth is a precondition to development, but not sufficient to the emergent paradigm. Development is the process of increasing our scope and power to do and to be. Development is more focused on bringing potential, that which has not yet been manifest, into actuality. We can only develop by doing something new or by causing movement in a new direction. We must take on something we do not readily know how to do. This places a demand on us to find more of ourselves, more about ourselves and to develop more in ourselves. We must then act on that potential in ourselves in order to add the needed value to the cause or purpose we have set for ourselves. Without newness and uncertainty we cannot engage in development.

Conclusion

The 17th century businesses that surged to the forefront of the Industrial Revolution were those able to rapidly translate the early mechanical paradigm explorer's discoveries into new production processes and products. In many cases, the scientists of the day were personal friends of the leaders of these businesses. A major source of creativity for the next generation of business vision will come from those who are able to draw from the rapidly advancing wave of discoveries being made by the emerging paradigm explorers. The very holographic and holistic nature of their work is extending

its relevance to all domains of business - not just the technology - and at a rate unmatched in human history. This is the opportunity, and the challenge, that lies before those who would become self-organizing leaders guiding the self-creation of their organizations into the future.

References and Bibliography

Ackoff, Russell L., "The Corporate Rain Dance," The Wharton Magazine, The Wharton School 1977

Bateson, Gregory, Mind and Nature: A Necessary Unity, E.P. Dutton, New York, N.Y. 1979

Bateson, Gregory, Steps to an Ecology of Mind, Ballantine Books, New York, N.Y. 1972

Bateson, Gregory, and Mary Catherine Bateson, Angels Fear: Towards an Epistemology of the Scared, Macmillan Publishing, New York, N.Y. 1987

Bohm, David, Wholeness and the Implicate Order, Routledge and Kegan Paul Ltd., London, 1980

Casti, John L. Paradigms Lost, William Morrow Co, Inc., New York 1989

Eisler, Riane, The Chalice and The Blade: Our History, Our Future, Harper and Row, San Francisco, CA., 1987

Gardner, Howard, Frames of Mind: The Theory of Multiple Intelligences, Basic Books, New York, 1983

Harman, Willis and John Hormann, Creative Work: The Constructive Role of Business in Transforming Society, Knowledge Systems, Indianapolis, IN, 1990

Hutchins, Robert M., The Learning Society, Praeger, New York, 1968

Krone, Charles, Notes from Public Lectures and Private Papers, 1977-1990

Kuhn, Thomas, The Structure of Scientific Revolutions, Second Edition, University of Chicago Press, Chicago, IL. 1970

Prigogene, Ilya and Isabelle Stengers, Order out of Chaos, Man's New Dialogue with Nature, Bantam Books, New York, N.Y. 1984

Sheldrake, Rupert, A New Science of Life: The Hypothesis of Formative Causation, Blond and Briggs Ltd., London, 1981

Sheldrake, Rupert, The Presence of the Past: Morphic Resonance and the Habits of Nature, Vintage Books, New York, N.Y., 1988

Watson, John B. Behaviorism, W. W, Norton, New York, 1925

Wilber, Ken, Editor, The Holographic Paradigm and Other Paradoxes, Shambhala, Boulder, CO., 1982