Ongoing Discussion "Thought Piece"

The Leverage Point at the Heart of Systems Transformation

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Some of the biggest challenges individuals, communities, organizations, nations and civilization face in today's rapidly converging world are ever increasing complexity, unproductive conflict, resistance to change and environmental sustainability. In response, Systems Thinking is rapidly becoming the dominant intellectual framework for business consulting, organizational improvement, community development, environmental sustainability, educational improvement, health care, brain science, information technology, network theory and bio-informatics. The ascendance of Systems Thinking comes from research and a desire to more accurately understand the ever increasing complex challenges we are confronted with in a world where everything is connected. Utilizing the leverage point at the heart of human systems we can continuously improve interactions, keep conflict productive, innovate, decrease resistance to change and evolve consciousness to create a world that works for everyone.

Systems Thinking

One of the central models in Systems Thinking is Complex Adaptive Systems or CAS. All CAS's are self-regulating, self-correcting, self-sustaining and evolve towards increasing complexity. They are a dynamic network of nested sub-systems or parts that have inputs, processes, outputs and ongoing feedback among the various parts. The quality of the interactions determines the quality of the systems outcomes. Systems self-regulate, self-correct, and sustain themselves by creating "negative balancing feedback loops" that reduce variation in established patterns of behavior and interactions with the environment. However, when the interactions between the system's parts change, generating some chaos, a creative self-organizing process can produce a new pattern of expression or attractor. Through a short lived "positive reinforcing feedback" a new sub-system or part is created which alters the systems interactions with its environment.

In human systems everything self-organizes around identity. Each of us self-organize multiple sub-personalities, roles or sub-systems like the Techy, Manager, Perfectionist, Mother, Father, Doer, Dreamer, Buddy, Judge etcetera. The process of self-organization in human systems involves identification with an attractor- an image, idea, belief or perceived way to satisfy a need or want in some context. We typically project or imagine ourselves thinking, feeling or behaving in some way that fits the context. Repetition and positive feedback turns it into a nested sub-system, role or habit. In family and organizational systems we become identified with social roles, cultural memes, beliefs, mental models and ways of doing things. Once we become identified with something, it becomes an extension of who we are, forming a powerful psychological attachment. Sometimes, the beliefs and behaviors of some of these parts are the result of some form of individual or cultural psychological wounding.

Similarly, family systems and organizational systems self-organize multiple sub-systems. In a family system there are parental sub-systems, sibling sub-systems and family player sub-systems. Each of these sub-systems is also made up of sub-systems, parts or roles like Mover, Opposer, Follower, Bystander, Blamer, Placator, Commander and Distractor. In an organizational system there are also sub-systems that take the form of processes for getting things done, decision making and power sharing. There are also cultural values, a sense of the future, departments, functions and perceived historical success strategies like "bet the company on an innovation and depend on heroes to deliver". Some of the family systems roles like Mover, Opposer, Blamer and Commander also show up as parts of organizational systems.

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As we move through our day we automatically identify with whatever sub-personality, sub-system or role is associated with the context or has the greatest pull on our sense of "I" or self. We in effect switch heads without thinking about it. Our "I" or self moves from one consistently recurring sub-personality, sub-system, habit or aspect of our overall identity to another. Once we become identified with an idea, emotion, assumption or sub-personality we in effect put blinders on. We select out data or information and make inferences that are consistent with how that sub-personality or sub-system sees the world. The mindset / purpose / beliefs / knowledge and values are silently working in the hidden assumptions we make before we think about it. What we hear in thought are the inferences and conclusions.

It is through some part of our identity that we make sense of various situational contexts and the world. Systems Thinker, Margaret Wheatley puts it this way "in all human systems everything self-organizes around an attractor that someone identifies with, there is a 'self' that gets organized. Once this identity is set in motion, it becomes the sense-making process of the organization. In deciding what to do, a system will refer back to its sense of self. We all interpret events and data according to who we think we are. We never simply "know" the world; we create worlds based on the meaning we invest in the information we choose to notice. Thus, everything we know is determined by who we think we are."

Accordingly, virtually all resistance to change, greed, unsustainable habits and unproductive conflict are a result of over-identification with some aspect of identity. Once we become over-identified with some mental model, world view or belief, we can become so attached to it that different points of view are perceived as personal threats evoking a defensive reactive response. Our "I" gets pulled into defensive sub-personalities like the Judge, Guardian, Protector, Fighter, Victim or Gossiper. From a Systems Thinking perspective our self-regulating "negative balancing feedback loop" goes into overdrive to defend and maintain the existing mental models or paradigms. In larger systems like families, organizations, cultures, countries and religions we see similar cycles of blaming and self-defense. Some of these end up as wars. When an individual or cultural system is over-identified with being the best or the greatest they tend to go around telling others "be like me" and "think like me."

Leverage Points to Intervene in a System

One of the keys to improving the interactions of people, overcoming resistance to change and facilitating system transformation is to discover the leverage points in the system. Donella Meadows identified the following 12 leverage points to intervene in a system in decreasing order of effectiveness:

- 1. Power to transcend paradigms
- 2. Mindset or paradigm that the system its goals, structure, rules, delays, parameters arises from
- 3. Goal of the system
- 4. Power to add, change, evolve, or self-organize system structure
- 5. Rules of the system (such as incentives, punishment, constraints) 6. Structure of information flow (who does and does not have access to what kinds of information)
- 7. Gain around driving positive feedback loops
- 8. Strength of negative feedback loops, relative to the effect they are trying to correct against
- 9. Length of delays, relative to the rate of system changes
- 10. Structure of material stocks and flows (such as transport network, population age structures)

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- 11. The size of buffers and other stabilizing stocks, relative to their flows
- 12. Constants, parameters, numbers (such as subsidies, taxes, standards)

The leverage point at the heart of systems transformation is the power to transcend paradigms or mental models. For example, many people today see all our natural resources as stocks to be converted for whatever people want or need. Unless we collectively transcend that paradigm we are in for an ecological and ultimately human disaster. Systems Thinking practitioners generally depend upon various forms of dialogue and thinking skills to gain awareness of mental models, learn as a team and transcend paradigms. There are also many critical and meta-cognitive thinking strategies that help people think about their thinking and deploy specific thinking skills in specific contexts.

The systems oriented psychological model Psychosynthesis offers profound insights and many techniques that enable awareness of sub-personalities, sub-systems, mental models, paradigms and facilitate inner harmony, self-mastery and spiritual growth. One of the most powerful Psychosynthesis techniques is dis-identification. It involves the discovery of the "I" the center of awareness and will. The "I" or "self" in Psychosynthesis is different from the many selves, subpersonalities or sub-systems. The independent content less "I" can become aware of how we are thinking and what we are identified with in the moment enabling us to dis-identify or step back from and transcend the sub-system, paradigm, mental model, belief or reactive response through an act of will. Understanding the psychological rules that define the feedback relationships between physical attitudes, sensations, thoughts, images and feelings enables us to leverage our will for greater self-management. For example, one of the rules is 'ideas and images evoke related emotions, needs and drives.' When we think about or imagine a vision of achieving a goal we will likely begin to feel more passionate about it, awakening the need, desire or drive to actualize. Another rule is 'emotions, needs and drives evoke related ideas and images.' When we feel angry or upset we generate ideas and images that express those feelings. Another rule is 'physical attitudes evoke related emotions, images and ideas.' If we make a tight fist and hold it for awhile we will likely generate angry images, ideas and feelings. Understanding and leveraging these rules enables us to intervene in the positive and negative feedback loops for greater self-management. I call it iPower. With iPower we can wear our various "success strategies", sub-systems, parts or paradigms as loosely fit clothing that we can be peripherally aware of, in the moment. This loose identification enables us to transcend paradigms, selfmanage reactivity, increase role agility and deliberately self-organize new roles or sub-systems. A system that can see itself and act on what it sees is inherently more agile, effective and adaptive. In a coaching or training context people can be guided to discover this deeper "I" using dis-identification exercises and by gaining awareness of the various roles they play as they move throughout their day. The creator of Psychosynthesis, Roberto Assagioli, MD puts it this way. "We are dominated by everything we become identified with. We can master, direct, and utilize everything from which we dis-identify ourselves."

Resistance to Change

Loose identification accelerates individual, group family and organizational change. When faced with change in the environment, most people experience some form of resistance or unwillingness. Consciously or unconsciously they in effect are saying "I don't want to (change the way)...". At a deeper level they do not want to disconfirm something they are identified with. While "I don't want to" has many rationalizations, it is usually accompanied by some form of denial that things will actually change and/or a rejection of the need to change. Other drivers of resistance are fear of failure and resentment for the initiators of the change. The rejection is

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usually sustained by justifications like, "we don't need this change" or "I got to where I am today because I've been doing things right ... so why should I change now." Most reluctance to change and virtually every crisis-every stuck place in a person's life are signals telling them: "Let go-you are over-identified with something that is now too small for you."

Chris Argyris, in his *Harvard Business Review* article Teaching Smart People How to Learn labeled the ability to assess the environment and to make minor changes as single-loop learning. He pointed out there is another level of learning: the ability to look at ones mental models (i.e. our assumptions about how the world is and should be) and how it affects ones behavior. This Argyris called double-loop learning. The most successful people within an organization are usually good at single-loop learning. But fundamental changes in the environment call for fundamental changes in behavior. Unless these people have the capacity to dis-identify and question their own perceptions, they may inhibit personal and organizational development by reasoning defensively and not being receptive to feedback that suggests ways to improve the system. Everyone needs to recognize that being smart doesn't necessarily mean being a better learner. Dis-identification helps you find the leverage point in your personal operating system and reduce the strength of the negative feedback loops that block double loop learning and maintain automatic identification with existing mindsets. It also enables you to smooth the progress or gain of positive feedback loops that create new identifications or success strategies. You might call this triple loop learning.

Many People Working as One Mind

Thinking systemically also requires thinking together to understand a problem or situation. It is typically easier for separate minds to conclude "what" is the problem. It is much harder for minds to come together to see and understand together "what" is the problem and "what" is causing the problem.

Physicist David Bohm introduced a concept of dialogue stating "that dialogue can be considered as a free flow of meaning between people in communication, in the sense of a stream that flows between banks." The aim of dialogue is to change the way thought processes occur collectively. In most dialogue, there is no specified agenda, decision to be made or meeting goal except to explore the groups thinking. The idea is to see what emerges. Appreciative Inquiry, Open Space, Future Search and World Café are meeting methodologies to facilitate dialogue and organizational change. The outcomes of any form of dialogue depends on how well people loosen their identification with their mental models, beliefs, opinions and judgments including the ones they may have about their approach to meeting and dialogue. People can become overidentified with a particular rule or method of dialogue or thinking and not realize when it is not serving the intended purpose.

Another approach to loosening identification and system transformation is to facilitate a Self-organizing Inquiry. Using this approach, participants are guided to creatively discover what is already trying to emerge from their collective higher unconscious or meta-mind. The operating assumption is that in today's rapidly converging and changing world there is always some new attractor, pattern of expression or adaptive success strategy trying to emerge. Unfortunately, few look for it until there is trouble and chaos which tends to beckon more power than insight. By creatively facilitating self-discovered insights into what is already trying to emerge you can avoid unproductive conflict and tap powerful motivation to make it happen. The importance of self-discovery cannot be underestimated. It is the basis for the Discovery Method in adult learning, which is probably the most carefully studied innovation in learning methods since programmed

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instruction. Self-discovered insight taps the mainspring of creativity and releases powerful self directed motivation to make it happen. Carl Rogers describes the intimate relationship between evolving and creativity this way; "The mainspring of creativity appears to be man's tendency to actualize himself and become his potentialities as he forms new relationships to the environment. This tendency may become deeply buried and awaits only the proper conditions to be released and expressed." Creative insights, especially in the form of images, metaphors and symbols are narratives that have immediate psychological traction. They become "attractors" that organize the various means of the mind to their ends. With some intention, attention, action and positive feedback they become living "self-organized success strategies" that take on a life of their own. Here is an example; http://www.slgllc.com/SelfOrganizingInquirySunMicrosystems.pdf

Loosening Identification in Others

In order for people to think and interact together in a way that generates light in the stream and innovation participants need to be loosely identified and utilize the appropriate self-management, thinking and communications skills to fully understand each other. This way innovation, arising from different points of view is not blocked or reduced to unproductive conflict, personal attacks and lingering resentments or pebbles in people's shoes. The derivation of understanding is the old English word *understandan*, from *under* + *standan*, an earlier form of stand. The underlying idea is "to be close to or stand under together." The flip side of understanding is fear.

Loosening others identification with their beliefs, mental models, opinions or judgments can be tricky. The first step is to remain loosely identified with your own viewpoint and maintain a presence born of calmness and childlike curiosity. Second is to make inquiry to explore and understand their mental models, beliefs, opinions and judgments in a way that makes them visible to them without evoking a defensive response. Maintaining a calm curious listening presence is even more important when they get defensive. A few of my favorite questions are:

Help me out here. There's something about what you said that I might not be getting. Walk me through your reasoning so that I can appreciate more fully what you're saying.

You know, my assumption is that you mean...., but I'm not clear. I'm asking about your reasoning or underlying assumptions here because I'm interested in

Please help me understand from your perspective?

Hmm, What do mean when you say? What does that mean to you? Could you give me an example of what you mean by that?

When someone gets uptight or you sense defensiveness, slow things down and let them talk it out.

Maybe we should talk another time about this.

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Remember, the purpose of the inquiry is to make their thinking visible to them. It is not to search for faults in their reasoning or guide them to your point of view. Temporarily letting go of your point of view and calm childlike curiosity is key.

It also helps to model loose identification by making your thinking visible when you are discussing your point of view. Some of my favorite opening lines are:

Here's what I think and here's how I got there.

The context-purpose, goal, vision or plan is / was......

My operating assumptions are / were... My observable data/information is / was...

My interpretation is / was...

My mental model .. My conclusion ...

The upside or advantages are..... the downside or disadvantages are.... some interesting questions about this are.....

What do you think? Is there anything I've said you have a concern about, or that you see differently?

Are there important POV's I've missed?

If you could help me think through this aspect of it, I would appreciate it.

Is there any place that you see things differently?

I came to this conclusion after looking analyzing the information or data....from many different viewpointsand exploring various assumptions....

Well, from a (systems, technical etc.) point of view this particular strategy or approach seems to be the best. From a business point of view though, it makes more sense to do it this way ...

In this particular situation, the business point of view is the most compelling...... So, that's why I came to this conclusion.

Evolving Consciousness - "YOU" to "ME" to "WE" Thinking

Perhaps the most profound outcome of discovering the leverage point at the heart of systems transformation is the evolution of consciousness. Noted psychologist Carl Jung states, "In the history of the collective as in the history of the individual, everything depends on the development of consciousness." Jane Loevinger, Robert Kegan, Bill Torbert, Ken Wilber, Roberto Assagioli and Abe Maslow have all postulated somewhat comparable models of stages of development in adults that illustrates the evolution of consciousness and identity-- from "YOU" to "ME" to "WE" thinking or worldview. Torbert's terms are in parenthesis.

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1. Conformist - (Diplomat) "YOU"

> Strong need to fit in and get along. Tend to conform with or rely on decisions of others.

2. Conscientious - Conformist - Expert / (Technician) "YOU" to "ME"

Conforms and exhibits self-discipline, self-control and reliance on own experience and judgment.

3. Conscientious – (Achiever) "ME"

Independence, strong intention to succeed, be the best. Low mutuality - projects problems onto others.

4. Inter-individualistic – (Strategist) "ME" to "WE"

Shift towards concern for interpersonal relations, strategic systemic thinking and shared goals. Increasing self knowledge and awareness leads to loosening identification and appreciation of individual uniqueness. Less projection of problems and greater mutuality.

5. Autonomist – Magician (Alchemist) "WE"

Autonomy of self and others - true interdependent relationships – spontaneity, generosity, creativity, uniqueness and diversity - synthesizes opposites and provides transformative events for others. Sense of purpose.

Torbert's model has two "ME" stage, the Individualist, following the Achiever. Issues born of excessive "ME" thinking - self-centered, independence, ego driven competitiveness are the major source of problems in couples, groups and organizations, classrooms, communities, cultures and among nations. Studies led by Gervase Bushe indicates that less than 15% of the general population and less than 5% of managers have achieved the "ME" to "WE" (Strategist) level of development. Integral Psychology creator, Ken Wilber stated that dis-identification is the single biggest accelerator of the evolution of consciousness. Learning systems thinking and other metacognitive thinking skills are also contributors. Dis-identification, systemic thinking, mindfulness and recognizing individual uniqueness enables people to situationally suspend ME-based competitiveness and work, live and collaborate with others, not only with respect for differences, but with authentic appreciation, complementarity, mutuality and collective knowing. In this context "be like me" turns into "be yourself" and many people can work as one mind.

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BIBLIOGRAPHY

Loevinger, J., and Wessler, R. (1970) *Measuring Ego Development*, Vol. I, Jossey-Bass, San Francisco

The Washington University Sentence Completion Test, developed by Jane Loevinger and Associates

Torbert, W. & Associates (2004) *Action Inquiry: The Secret of Timely and Transforming Leadership.* (San Francisco CA, Berrett-Koehler)

Kegan, Robert. The Evolving Self (1982) and In over Our Heads: The Mental Demands of Modern Life (1994)

Bushe, G.R. & Gibbs, B. *Journal of Applied Behavioral Science*, Bushe, Gervase: "Psychological Development and Organization"

Stonefield, Peter, Natural Leadership, Association for Quality and Participation Journal.

Stonefield, Peter, Transformational Change-Co-evolving Strategy, Culture and Leadership, San Jose Business Journal

Wheatley, Margaret, Leadership and the New Science: Discovering Order in a Chaotic World

Assagioli, Roberto, Psychosynthesis: A Collection of Basic Writings

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BIOGRAPHY

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