

PATTERNS

From the Editor:

According to the annual report for the year 2006 produced by the **Drum Major Institute for Public Policy** (www.drummajorinstitute.org) "This was the year of Systems Failure. Most Americans were tired of the status quo—on the war, on the economy, on the lapsed ethics of those entrusted to represent our interests. The result: on Election Day, they rebooted, ready to try again."

I can't help asking myself if that is the educated view of the recently organized "progressive" think tank, *where is any hope for change if "most Americans" are merely "rebooting"?* Increasingly in the USA, equating "Democracy" with the right to vote has become rhetoric. I am realizing how my own perspective on the potential ability of humans to change has been changing.

Through internet communication I am seeing that increasing numbers of thoughtful citizens are beginning to question (as the Cyberneticist Heinz von Foerster has questioned in the body of his work) whether "**the gigantic problem-solving conceptual apparatus that evolved in our Western culture is counter-productive not only for solving, but essentially for perceiving social problems.**"

We are learning that Western Science developed out of the perceptual need to take things apart in order to understand them. It is based on "objective observation" separating the observer from the observed thus creating a world in which humans unconsciously function as competing individuals separated not only in our socio-political relationships, but also within our natural selves as mind/body opposition.

Perceiving ourselves and our world in patterns of dual oppositions, (good/bad, right/wrong, either/or, leader/follower, powerful/powerless, etc.) we find ourselves aware of the rapidly growing divide

(continued on next page)

Dancing With Demons: Pathogenic Problem Solving

By Kathleen S. Long Ph.D.

This paper explores the way in which we define and deal with social problems such as crime and proposes a new way of thinking about them. Criminality, poverty, illiteracy, addiction and child abuse are some of society's most acute and intractable problems. Despite countless attempted remedies, these complex social problems have continued to grow around the world. Although we have developed systems to address these problems, their operation routinely increases problem severity and scope. They are, in effect, perfectly designed to grow the very pathologies that they were designed to eliminate.

To confront these paradoxical outcomes, I took a trans-disciplinary approach to develop a new systemic view for designing systems to cope with the emergent meta-problems. Anchored in second-order cybernetics, and ethnography, this research re-contextualized the problem within a self-reproductive economy of interaction and meaning-making, drawing its boundaries on the basis of its systemic operations and conditions of connectivity across intersecting roles related to the problem-solver, the problem host and the identified problem itself.

The result is a model of pathogenesis as nested interactions appearing iteratively from individual to societal levels, revealing a self-referential, recursive and paradoxical structure. Within the multitude of self-referential systems, both biological and social, this research provides a new framework, which exposes those factors that initiate, reinforce, escalate and perpetuate unintended evolutionary consequences, and identifies specific alterations required to systemically produce beneficial results.

KSL

Introduction: Crime is not a new problem

In all of recorded history, crime has been present. For over two thousand years, we have struggled, from every conceivable philosophical position, to contain crime and its associated social ills - and today we are no closer to improving this situation than we were two thousand years ago. In fact, the situation is actually worse. (Schlosser, E 1998) How is it that the efforts of so many dedicated people and organizations have failed to solve or even contain this problem? Despite our best efforts, crime and terrorism have reached epidemic proportions, the escalating effects of which threaten to destroy our very culture. The "doctors" (experts) have prescribed their best cure, but the patient (society) is dying. Why? To fully comprehend this issue, we must return to "ground zero" to the very way we observe crime as a phenomenon, then encapsulate and define it.

Observers and Epistemology

In ancient Greece, scientific, philosophic and religious thoughts were combined. Over time, they were separated and pursued as separate activities by professionals in different disciplines. Since the turn of the century, we have further specialized into yet smaller categories of distinction within a reductionist hierarchy of sciences. We have become a culture of specialists who fail to grasp the interrelatedness of the whole. In any given discipline or science,

(continued on next page)

Inside

| | |
|---------------------------------------|---|
| Dancing with Demons | 1 |
| From the Editor | 1 |
| Quantum Comedy | 5 |
| Book Review | 7 |
| American Society for Cybernetics..... | 9 |

ASC Conference
March 29 - April 1 2007
Urbana, Illinois USA

PATTERNS EDITOR:
Barbara Vogl bdawesvogl@yahoo.com
Production: Polly Hughes
<http://haven.net/patterns/>

between rich/poor, for example. It was "the people" who were first to respond to the tragedy of the Katrina and Rita hurricanes—and the Tsunamis—and incidents of political genocide around the world. It is people in general who are "experiencing" the electronic revolution, "creating" it personally to meet their needs for expression, imagination, excitement, communication, something better than the status quo.

The potential for change is in the people and I, for one, am getting tired of seeing "The People" used as the scapegoat, constantly being manipulated by media moguls and the political elite. Who, but the people, are the ones in the streets protesting the war and expecting the members of Congress to represent them? Yes, this has been a year of "Systems Failure" and will be next year, and the year after that, unless we see that we are trying to solve increasingly complex problems with inadequate out-of-date conceptual tools. As Heinz would say, "We do not see what we do not see."

In this issue of **PATTERNS** we reflect on the need to understand how we perceive the world around us—our perception of perception. We are increasingly aware that the systems we have created are not doing the job we intended for them and as we circle back into ourselves in order to attempt to understand how we have arrived at our present socio-political-economic predicament "out there," we are learning that we are all truly connected and that the habit of blaming others has become an obsessional *dance macabre* reminiscent of our historical "dark ages."

Today, popular attention appears to be drawn inward as indicated by the growing interest in such films as "The Secret" in which we are admonished to use the potential of our own minds to create our reality. Motivational literature of the think and grow rich variety has been circulating for ages but, coupled with the popularity in the western culture of the ancient Buddhist and Hindu teachings which have all said that the mind is extraordinarily powerful if you really put it where you want it, and last year's surprise box-office hit film, "What The Bleep Do We Know," which introduces the perspective of Quantum Physics, this phenomenon appears to be growing. It is hard to know whether this is an indication of wishful thinking in response to a fright-filled time, a sign of

academicians, theorists and practitioners interact with one another in a community for the mutual exchange of ideas and to maintain intellectual interaction. Professional associations provide a formal organization to carry out this function. Such organizations, both formal and informal serve as thought collectives, which pervade its culture and act to constrain, inhibit and determine a way of thinking. Operating mostly beneath awareness, individuals are linked together by a shared thought style which influences perception. (Fleck, 1979) Such thought collectives have generated our attempts at reform.

It is our habit to perceive something in a certain way and then act upon that perception. The act of observing is to focus attention upon a specific part of one's experiential field through categorization as a means of separating figure from ground. Key to understanding is the role of observer. (von Foerster, 1979; 1984b) Traditionally, scientists have placed themselves outside and separate from observed phenomena, presenting their findings as objective, explanatory maps. This "outsider's" view, however, fails to account for the role of the observer in shaping and framing research questions, hypotheses and results. Second order cybernetics as epistemology emphasizes the connectedness between the observer and the observed through perceptual processes. Rather than experiencing ourselves as outside the system we attempt to describe, we can examine the mental models we employ to explain its behavior. Instead of describing properties of an external organization or system, we can examine how people create the relation among the parts and the relations among the relations that define the identity of the organization. This perspective allows for the inclusion of the observer in the system which is, through recursive interactions, generated from perception, and socially created by way of meanings, roles, and rules which comprise its organization. (Maturana, 1985; Maturana, 1989; Maturana, Mendez, & Coddou, 1988; Mead & von Foerster, 1968; von Foerster, 1979; von Glasersfeld, 1988)

Unraveling Complexity: Language and Epistemology

Even as "system thinkers", it is nearly impossible to escape the constraints of language. The act of defining a problem takes place in thought, which arises from language. Despite our attempts to avoid it, our language requires us to make unidirectional, causal statements. Try as we might, we haven't been able to grasp the patterns that give rise to the problem we label "crime". This issue of language is central to our failure to conceptualize such problems. (von Foerster, 1984b)

We point to "crime" as though it were a "thing". To communicate about it, I must begin with an analog idea called "crime", and then digitize it using grammar to take my idea apart and out of my context in hopes that you can reconstruct it. It is more useful to describe crime in terms of dynamic patterns. The epistemology for forms and patterns is different from the implicit epistemology of hard science. Korzybski's map is not the territory. (Korzybski, A, 1933): The phenomenon we call "crime" is an abstraction, not the pattern itself. We can compile crime statistics or list events we can point to, but how do we capture the full multidimensional pattern? If I am on a roller coaster, I could measure the speed, but how would I "measure" the multi-sensory experience we call fun? And what would be the "accurate" measure of such movement on a roller coaster? The way we "language" perception, which has produced linear one-level models, is key to our misunderstanding of this issue. "The central problems of today are societal...the gigantic problem-solving conceptual apparatus that evolved in our Western culture is counterproductive not only for solving but essentially for perceiving social problems." (von Foerster, 1979)

Theories are important shapers of behavior. They help us organize and describe experience, predict consequences of future actions and enable us to better control the conditions, which influence us. (Argyris & Schön, 1974)

What is missing to unravel this complexity is any language that can address the structure, (Simon, 1973; Gödel, 1962; Hofstadter, 1979; Bateson, 1972; Bateson et al., 1956) behavior and phenomenology of social patterns at the multiple levels of intra-psychic, interpersonal and organizational behavior across time: A language which captures the dance.

Social phenomena are all aspects of a greater whole: a dynamic, complex, network of behavioral patterns – a dance - extending across many interlocking systems. (Bateson,

1979) In order to understand the complex issues we face, we need to examine, not the labeled phenomenon, such as "crime," but the underlying contextual patterns that connect such phenomena to the rest of society. The most persistent and paradoxical problems we confront today have defied traditional analytic methods. A major perceptual task, therefore, is to examine the ways in which we have bounded a phenomenon to perceive it, and to discover a different perceptual device to generate new solutions. (von Foerster, 1979)

Ed. Note:

As Long continues in this article which is presented in full at www.ISSS.org (Proceedings of the International Society for the Systems Sciences, July 2006) She points out that she is introducing a mode of expression that allows a more effective elicitation of the dynamics of this phenomenon in order to:

- *Maintain the problem of crime in its context using natural story telling which provides clear examples of the phenomenon (Glaser & Strauss, 1967; Spradley, 1979). The story emerges as a phenomenologically-oriented ethnographic case study, from which patterns may be elicited, enabling a multilevel system model from the lived experience. The story provides us "something to look at" while cybernetics provides a language for describing what we see.*

- *Examine synergy in human interaction as a separable, viable, self-organizing system, which interacts with other systems to create and cultivate such as crime via the act of attempting to solve it.*

- *Examine the phenomenon of crime as sets of coupled, entrained systems operating (or dancing) as a unity - what Bateson refers to as a "dance of interacting parts". Rather than treat the criminal justice system as one system in an environment containing the criminals and citizens, I reconceptualize system boundaries at the interface between structurally coupled populations such as police, criminals and citizens at all levels of recursion.*

- *Construct a model that incorporates the structural, the cognitive, the affective, the economic, the chronological and the spatial aspects of this phenomenon (Bateson, 1972) as facets of a unified complex. In order to examine this pattern, its qualities, attributes and adjectives refer to at least two sets of interactions in time. In order to model its mechanics, I emphasize this system's structure, behavior, and phenomenology or experience.*

Continuing in the tradition of Gregory Bateson, she presents a grounded formal theoretical model in the complete article in order to provide a shared perceptual framework and to bring underlying assumptions into awareness. The model also provides a language enabling discussion among diverse people with differing viewpoints.

In the next section, she presents one story – a first person narrative.

Contained in the story are the matrices that give rise to the patterns of interaction I highlight. A story could be described as a little knot of connectedness or relevance. (Bateson, 1979) Its parts are patterns, woven and connected through time, in a context. Without this context, words and actions are devoid of meaning. Thus, stories and myths tell what is "true" about a person, a family, an organization or society. Such is not the "truth" found in official records, reports, statistics or other artifacts, (which are removed from their contexts) but rather it is an understanding, or sense-making, in terms of present consciousness. (Mc Whinney, 1992) The way we perceive events in order to construct "truth" serves to maintain the coherence of our world view, but may prevent us from perceiving different aspects of events. (Kuhn, 1970) My purpose, therefore, is not to persuade the reader that the story is true, but rather to provide a first person account from which to build a new way of examining the crucial problems we, as a society, face today.

Understanding the Story by Modeling

The story presents a number of key relationships relating to citizens, crooks, cops and others in the criminal justice system. The cop describes the full multi-sensory experience: the excitement of going out on a call; the strange, the bizarre and the mundane. I explore the three sets of relationships in two ways. First, through the interactions among actors, and then via the processes which generate their behavior. I employ the storyteller's language and metaphors to describe people and events. Since

(continued on next page)

spiritual evolution, or a growing interest in constructivist epistemology, or all three. For film critic Bill Forman, the message is clear. He remarks, "I think by presenting it (mind over matter) more as a scientific principle, it helps people get past the idea that it's just a belief issue. We saw that in 'What the Bleep' and we are seeing it more. We are co-creators. We're not total creators, but we're not victims either. The more we participate and take an active role, the more difference it will make." (www.metrosantacruz.com) Certainly, the reality of an evolving electronic environment in which there is freedom of expression has something to do with encouraging the changing perspective of ourselves.

In this issue of PATTERNS we present the insights of Kathleen Long in her work with the "wicked problems" our leaders are so unsuccessfully addressing. These problems help us to see how we are truly "Dancing with Demons" and her article suggests how we, through a shift in perception, can change the pattern of the dance.

Criminality and poverty and their associated concerns stand out as social ills basic to the fabric of world society. She points out that, "Although we have developed systems to address these problems, their operation routinely increases problem severity and scope. Systems like these are, in effect, perfectly designed to grow the very pathologies which they were designed to eliminate." Today, for example, people feel trapped in a war no one wants. We need only examine the logic of present military decisions to begin to understand this phenomenon.

Dr. Long notes that wicked problems are elusive; every effort to alleviate one problem usually produces yet another problem. "Wicked problems may be an indicator of pathogenesis when the problem itself seems to have a life of its own and every attempt at remediation actually increases the scope and severity of the problem."

As preface to our lead article, *Dancing With Demons: Pathogenic Problem Solving*, Dr. Long notes that while working with professionals in the child welfare system during the 1980's, over time, across numerous individual agencies, she noticed an "alarming" pattern. *The problem of "child abuse" was increasing even as skilled, caring professionals intervened to protect the children, while the system*

(continued on next page)

itself seemed to be "abusing the children" through its policies and practices. In a later study extending over five years, she concluded that certain human service agencies and law enforcement services employed to solve such problems as crime, illiteracy, child abuse, drug addiction, poverty and homelessness actually operate within a hidden inherent logic that perpetuates and exacerbates the very "problems" they were designed to alleviate.

"If the purpose of a system is "what it does", then the purpose of such pathogenic systems is to create problems."

Long emphasizes that "It is not incompetence or error, rather the behavior of these systems is a result of an emergent yet fundamental design flaw. Problems need not be solved, they need to be *dis-solved*. This is a basic shift in perspective that gives birth to different conceptual tools.

There are many dimensions to this shift in perspective and we offer the pages of PATTERNS, the quarterly newsletter of the **American Society for Cybernetics** as a field for exploration, design and creation of socially viable systems.

We are making arrangements to produce an electronic version of PATTERNS as well as exploring the role that networking international websites and "Blogs" might play in communicating how the epistemology of systemics and cybernetics, a way of thinking and being that brings us closer to our natural selves and our connection with the universe, can contribute to the welfare of humans and the planet.

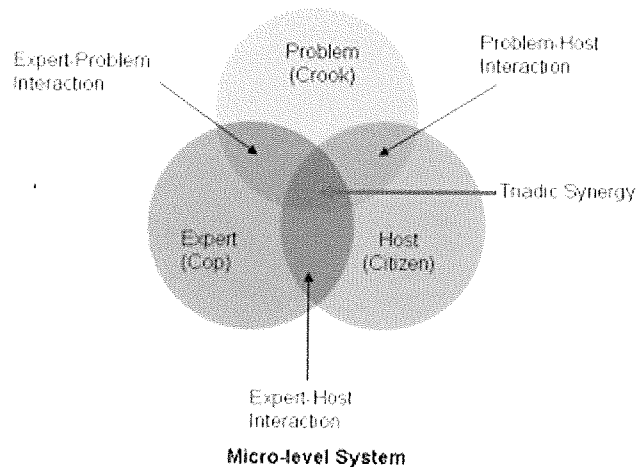
On Page 6 we have a review of the book, **The View from the Center of the Universe: Discovering Our Extraordinary Place in the Cosmos**, by Cosmologist **Joel R. Primack** and **Nancy Ellen Abrams**, innovative writer on the history and philosophy of science. They have written a book based on the latest discoveries in astronomy, physics, and cosmology that help us understand the realities of how we, as individuals, are truly connected and are central to the universe. Above all, it is a "good read" resulting in a sense of continuity with our ancient ancestors and a truly satisfying perspective of our evolving selves as co-creators with the universe.

This book stands out as a guide to what these discoveries might mean to our emerging global culture and our personal lives.

our conceptual system in terms of which we both think and act is metaphorical in nature and communication is based upon the same conceptual system that is used in thought and action, language is an important source of evidence for what that system is like. (Lakoff & Johnson, 1980) Therefore, I use the storyteller's words referring to police officers as cops, those suspected of violating the law as crooks and people in the community as citizens. When referring to the way these roles function within a problem solving system, I use the language of the model: The cop as Expert (the one who must solve the problem), citizen as Host (the one who "has the problem.") and the crook as Problem.

Micro Level System

The primary structure and network of interactions the cop discusses can be visualized as three interlocking dyads at both individual (micro) and collective (macro) levels. Figure 1 depicts the three micro-level sets of functional relationships generated by the story as three intersecting dyads: Expert-Host, Expert-Problem and Problem-Host. The storyteller's words are in parentheses. The system boundaries are drawn at the interface where the synergy in their interaction is represented by the shaded portions. The first dyad I address is the Expert- Host. (cop-citizen) (I use the term "Expert" for the role of a problem solver or professional such as, but not limited to, a police officer, therapist, physician, social worker or educator. In the following description of the micro level system, the expert is a "cop")



Over the last fifty years we have been swept up in a maelstrom of change. We are bombarded with information (Bateson, 1972) and new technology. Social and emotional pressures fueled by the media create derivative needs, promote gratification of every kind of desire and convey a world where anything can happen in an instant, any wish is attainable and means justify ends. At the same time we are aware that the ozone layer is disappearing, the tropical rain forests are being rapidly depleted and every day another creature becomes extinct. The AIDS epidemic continues to escalate and each day the world seems more dangerous. To survive we develop adaptive (or maladaptive) coping strategies. (Lipowski, 1971) This barrage of information, both technical and emotional, creates a condition of overload. (Milgram, 1970; Toffler, 1970) Put in systems language, the variety generated by the rate of change and increased options in society-at-large is not matched by the variety-absorption capacity of people in society. As a result, combined with a disintegration of supportive structures and core values, we increasingly turn to experts for help.

In any society oriented toward "open-ended enrichment", people come to believe that technology can be used to change the human condition and we have adopted the paradigm that specialists or experts, armed with technology, can transform the human condition (Illich, 1976) This affects the way we approach problems such as crime. In times past, the cop on the beat had a personal relationship with the neighborhood. When there was a problem, he responded in a personal way – often with the aid of citizens – to keep the peace. However, as situations and problems became more complex even the cop on the beat has responded by becoming increasingly specialized. (Beer, 1974) Over time, we have dealt with complexity through a

(continued on next page)

Quantum Comedy

The Global Intelligencer

(<http://www.theglobalintelligencer.com>) is an example of the popular movement exploring individual, social, and global transformation. In an article by Frank Levitt that brings us a sense of the movement toward perceptual change, he introduces us to a new kind of comedienne.

Picture this. You're in a nightclub in New York City (no longer smoke-filled of course), waiting for the comedy act to begin. A tall, dark haired, rather exotic looking beauty strides onto the stage and up to the mike. Expecting the usual comedy shtick about ex-husbands, mothers-in-laws or first-date fiascos, you hear a different patte

"We human beings don't relate to our view of life like it's a view. We relate to it like it's the truth! We see this narrow slice of reality and we insist it's all of it! It's like we have on one of those cones they give your dog when he's been neutered: (mimicking a dog with a cone on its' neck): Oh My God! I cannot lick my sore genital area! Life sucks! Oh, great, and I will not be sniffing butts today. Great, just great."

What's this? A New Thought comedy routine about consciousness and personal evolution? Yep - and it ain't just nice comedy for what Vanda calls "The Angel and Dolphin crowd". Throw in a few jokes about particle physics, superposition and multiple potentialities existing at the same time and you begin to get the flavor of Vanda Mikoloski's outrageous quantum comedy routine; a way-out of the ordinary laugh at life as we know it. Take Vanda's response to the state patrol officer who has just stopped her for speeding. "Let me explain superposition to you, officer, because clearly you're enslaved by a Newtonian viewpoint. See, there is a Vanda going 85 in a 55, but there's also a Vanda going 55 in an 85. There's a speed of light Vanda and a perfectly still Vanda. There are many, many Vanda potentials, officer, you see? You just collapsed the wave function on the wrong Vanda, that's all."

Speaking of wave functions - the fact that Vanda's collapsed back into comedy after a nine year absence is pretty outrageous, especially considering she left the smokey-bar routine to pursue work as a

reductionist "engineering paradigm" from which we identify and apply depersonalized (Weber, 1947; Parkin, 1982) scientific rules to classes of problems. (Taylor, 1947)

Most problem-solving systems, including the criminal justice system, are organized as bureaucracies. That is to say that there are task-specific divisions of labor, vertical hierarchies with power at the top, promotion by seniority and clearly defined rules and regulations. Weber's ideal was the completely dehumanized structure, which eliminated from official business all purely personal, emotional irrational elements that escape calculation. We generate "solutions" in hopes of producing an engineered, problem-free existence and we proliferate programs and specialties to reduce "variety overload". In so doing, we have separated people from their problems, (Matson, 1964) and problems from their contexts. This paradigm pervades our thinking. Isaac Newton's image of the universe as a great machine banished man from the center stage, transforming man from subject to object. Although we may espouse humanitarian values, the underlying machine-like structures we have created to solve human problems, point to human as object with experts as observers, standing apart.

More and more we rely upon specialists and experts, and increasingly we abrogate personal responsibility for the future into one that is managed by experts and their agencies (Illich, 1976) and we rely on them to manage and control (Bookchin, 1982; Haley, 1991; Szasz, 1974) our internal states and milieu. As experts have discovered new pathologies and new cures, (Pask, 1970) we have increased our dependency on them. The result is lowered levels of internal coping and reduced tolerance for discomfort. (Illich, 1976) There is a fine line between helping and social control and this change has been gradual and difficult to detect, because although we are sensitive to rapid change, in cases of gradual change we tend toward accommodation or habituation. This change has produced increasingly symbiotic relationships between hosts and experts. We can see how this relationship is manifested in the relationship between the citizen and the cop in the story.

Ed.Note:

The complete article describes the story and the model in a way in which the reader begins to 'experience' the complexity of the cop, citizen, crook relationships giving rise to the metaphor of the dance. Long continues: In examining the structure of the triad, we can see that each element contains a mental model of its relationships, each of which is missing one segment of the triad. When we put them together, something happens: completion. At this point the triadic system is viable and functional as a separable entity. (See full article where Long continues the dance)

Once this dance begins, the dancers rotate easily from one role to another among the Expert, the Host and the Problem. Eventually everyone becomes the Host, Problem or Expert from some actor's point of view. Because the cop is the storyteller, we can see examples of this rotation in 'cop as expert', the 'cop as citizen-host' and the 'cop as crook-problem'. In the story, the citizen, cop and crook are dancing together to a shared melody.

Imagine Fred Astaire and Ginger Rogers whirling around the ballroom. As individuals, they are separate entities, but when they dance together, they become a coupled system exchanging energy and developing a resonance in which the rhythms of one are related to those of the other, creating entrainment. Entrained systems move as one and transfer energy efficiently through nonverbal communication. Although each partner has different steps (Ginger dances backwards, for example) each partner must know and be able to anticipate the moves of the other. But dancing takes energy. What is its source?

Systemic Energy

It takes two forms of energy to move this system: emotional drive and the flow of capital. The pathogenic problem-solving system is fueled by shifting blame and funded by shifting capital assets. Capital assets (or revenue) can shift in two ways. One way is by rotating assets among citizen, cop and crook (host, expert and problem) and their extended networks in the macro system. For example, lawsuits against cops, such as Rodney King's, can cost in the millions of dollars. Stated differently, such lawsuits generate work and revenue for all the individuals and organizations involved and their suppliers.

full-time yoga and meditation instructor. So what induced the professional yogi to return to the mike? Coincidence? Happenstance? ...Actually, LA comic Rick Overton, who is friends with Elaine Hendrix, the actress who played Jennifer in the quantum physics meets religion movie *What the Bleep Do We Know!?* suggested the idea of quantum comedy to Vanda. "I told him, 'I don't want to be back in night-clubs!' and he said, 'You're an elder. It's time to give back to the tribe now.' And it was like one of those pivotal things that people say to you. I came out of my cave and thought 'What do I want to give my life for?'"

Encouraged by the thought that greater years bring greater wisdom, Vanda realized she could re-approach comedy on her own terms, say what she wanted to say and attract the audiences she wanted to attract - a far cry from her earlier attitudes as a hungry young comedienne just looking for gigs. "I actually want to make a difference for people.

You know, when I'm not focused on survival, life looks like a big, fun, grand adventure. I thought it would be cool to make people laugh as I inquire into the things that fascinate me, like the trap of being human and, at the same time, divine. ...I love that whole paradox of the glorious divine coexisting with the petty human."

At the moment, Vanda finds herself writing and doing her routine in "New Thought" churches and at conferences more often than she does clubs and bars. But her routine seems to appeal to a wide audience. One day she finds herself with Byron Katie (author of *Loving What Is*) on her blog www.thework.com [1] then she hits the streets with the people who have never done any personal growth or spiritual work the next.

But, as Vanda points out, audiences will eat steak if you feed them steak, and hamburger if you feed them hamburger. Doing what she calls "writing up," creating higher-brow material than ordinary, works as long as you give the audience context and authentic examples. And "writing up" is what Vanda is all about. "I want to occasionally use the clubs to keep my chops, so I can access everyone, not just this rarified "spiritual" crowd," she says. "I do love Unity people and Unitarian Universalists and the Churches of Religious Science. Those guys are just so happy that a comic actually addresses stuff they care about."

"My intention is to have a comedy show that not only is funny, but one that actually inspires and heals people as we laugh at what unites us: our crazy humanity. What would it be like if you came back from a standup comedy show saying, 'Well I laughed a lot and that was great. I also perceive reality from an expansive context and ...I grew a limb back!' That would be way cool. Really."

(continued on next page)

Another way is through problem generation. This occurs when problems are continually divided into smaller units of specialization or when new problems are "discovered," requiring new specialties, programs or services.

Forexample, one pregnant teenage drug addict generates revenue for an army of service providers including police, probation officers, drug rehabilitation therapists, foster parents, parent educators, public health nurses, judges, social workers, attorneys and special education teachers as individuals and as collective organizations with overhead costs.

As roles are performed and rotated, the emotional drive is manifest by projecting responsibility, and shifting blame. Liability assignment is part of blame.

When the cop talks about the Rodney King incident, he frames it in terms of personal liability. His emphasis was not that it was morally reprehensible, but rather, that someone could seize his assets: his house, his boat, etc. He blames citizens for "holding the cop to a higher standard," thereby rendering him a "second-class citizen." Just as the cop is resentful toward both the citizen and crook, the citizen (Host) is resentful toward both the cop and the crook: Each actor in the triad resents, blames and projects responsibility to the other two. (In the complete article we see that in the story the net effect is that the cop and crook 'work together' to cultivate the crime, which sustains their dance. This is described in another article, *Angels and Demons (OD PRACTITIONER Journal Volume 39, Number 1, 2007)* in which Long explains this dynamic.

A citizen reports a robbery and the police investigation reveals that the perpetrator is part of a drug gang. Unfortunately there are many drug gangs and because the police have limited resources they must prioritize their cases. Because of a policy, which allows the police to seize assets from drug lords, they reason that it's more effective to pursue drug lord A who has more assets versus drug lord B, a petty criminal. One advantage is that the seized assets can fund drug education programs and other constructive community initiatives and perhaps even pay for additional officers to help win the war on crime. It sounds like a win-win situation until you consider that the money really comes indirectly from the unfortunate robbery victim who called the police in the first place. The irony is that it's a three-way exchange where the police, acting with the best intentions, are in effect working together with the drug lords to "rob" the citizen by receiving the stolen property, which is itself a crime. In this case, the behavior of the police mirrors that of the drug lord.

Remember, the purpose of the system is what it actually does, not what may have been intended. Because all the actions are distributed across a complex multi-level system, the police (experts), the drug lords (problem) and the citizens (like our clients) don't experience themselves as entrained in a shared dance. Like the proverbial fish in water, they are immersed in the dance and thus can't see it.

Dynamic Organization

A number of researchers have explored the concept of "group mind" and "group emotion" as an aspect of reciprocal roles. Parallel process describes unconscious dynamics in one system that may be played out, in parallel form, by another system with which it interacts. Such parallel processes occur in unconscious ways, invariably becoming active long before their impact is visible. They may begin at micro levels and cascade upward to infect more macro levels, or vice-versa. (Elmes & Gemmill, 1990; Searles, 1955; Wells, 1985; Alderfer, Brown, Kaplan, & Smith, in press.; Beer, 1979)

In an organization's culture, patterns of interaction are structured in certain ways providing a framework that prescribes how to view a given situation and how to behave in relation to it. (Gemmill, 1988) In this case the framework is the triad within which interactions are organized (Watzlawick, 1984)

The structure of interactions in the micro-level system then mirrors into the macro-level system manifesting recursively - generating, maintaining and recovering the same complex of processes that produced them - as unconscious parallel processes. (Gebser, 1985; Mandelbrot, 1977; McWhinney, 1990; Raphael et al., 1983; Smith & Berg, 1987; Smith & Crandell, 1984; Smith et al., 1989; Talbot, 1990; Zeleny & van Gigch, 1980) In this cognitive/social system "cognition computes its own cognitions through those of the other" as eigen-behaviors which manifest spontaneous equilibrium by generating themselves and creating their own closure.

(continued on next page)

To understand the mental framework for this kind of policy decision, we must examine the links among individual actors (micro level) and collective actors (macro level). In the next section I will describe the policy-making process that institutionalizes the Problem.

Macro Level System

When we examine complex living systems, we must take into account at least two different levels simultaneously. The patterns of the micro system are mirrored into and manifested within the framework of the organizational system. These are not two separate systems, but a single complex pattern. The micro-level makes visible the macro-level, which doesn't exist without the micro-level. Individual events, such as a crime, are an instantiation of the macro system that produces policy including laws, and it is the policy/law that defines the event as crime. Crime then, is an instance of something policy has defined as criminal. Rather than discovering crime, we could say policy or law invents it.

Because in a recursive system each level of the hierarchy contains and is contained by a system likewise organized (Beer, 1979; Luhmann, 1986), when we examine the collective system, the same organizational patterns that characterize the micro-system are found. At this level of recursion, the entire set of interactions and impacts from the micro system become the Problem in the macro system. (Figure 8) The Host is now the community and the Expert is the law enforcement system. If the cop must "think like a crook" to solve the Problem individually, then, law enforcement must do likewise to solve it collectively within the organization. This is the level of policy making and priority setting. When the cop makes the statement: "Now we are no longer in the business of justice. We're in the business of prosecution for profit... which determines our priorities." He is making a statement about the mentality of policy-makers. Policy is the institutional rule for how the organization will do what the individual actor does. Policies, such as asset seizure, arise from the structure of triadic relationships, out of the mentality of "cops" and "crooks" because that is the framework through which the actors view the situation. (Hofstadter, 1985)

The Epistemological Error

A major underlying premise in a pathogenic problem-solving system (and western culture in general) is that a separate "self" as agent, can perform an isolated "purposive" act upon an independent object, or externalized problem. (Hofstadter, 1985) Bateson refutes, as an epistemological error, the myth of "self power" as a disastrous variant of Cartesian dualism which divides mind and matter; conscious will (self) and the remainder of the personality. (Bateson, 1972) According to Bateson, in any system showing mental characteristics, one part cannot have unilateral control over the whole because, the mental characteristics are immanent, not in some part, but in the system as a whole. (Bateson, 1972)

Pathogenic problem solving systems suggest the same sort of epistemological error Bateson ascribes to the alcoholic. In his view, alcoholism is not a disease, but an error in epistemology. In taking the first two of twelve steps, (Alcoholics Anonymous handbook 1976) the alcoholic surrenders to a greater Power, which is the first step in correcting the epistemological error. In surrendering to a greater power, the alcoholic places himself in the same system as the "problem". The concept of autonomy is central to healthy surrender. The autonomous individual surrenders control, not accountability.

Similarly, in pathogenic systems, the focus and primary engagement is between the "Problem Solver" and "the Problem." The Host (the one "who has the Problem") seems to exist mainly to catalyze the dance of escalating competitive dominance between the Expert and the Problem.

When separated aspects of the problems are rejoined and internalized in a second-order context, which includes the problem solver, the emphasis, in the case of alcoholism, is on achieving and maintaining sobriety rather than conquering addiction. In the case of crime we focus on "chasing the crook", rather than in achieving and maintaining safe communities where citizens can thrive. In shifting the emphasis, we don't solve the problem, we dissolve it.

Creating Eugenic Problem-Solving Systems

My aim in undertaking this research is to put tools in the hands of people who can use them. I don't believe any one person can (or should) be the sole architect for the deep structural changes necessary to reverse the problems we, as a society, are facing.

(continued on next page)

Book Review

The View From the Center: Discovering Our Extraordinary Place in the Universe

By Joel R. Primack and Nancy Ellen Abrams
Riverhead Books. New York. 2006

Reviewed by Barbara Vogl

This book is a gem. The authors celebrate the advances in cosmology, a branch of astronomy and astrophysics, noting that "many of humanity's most dangerous problems arise from the seventeenth-century way of looking at the universe, which is at odds with the principles of science that we blithely use in countless technologies." Their stated aim for this book is not only to help people understand the universe intellectually, but also "to develop the imagery that we can all use to grasp this new reality more fully and open our minds to what it may mean for our lives and the lives of our descendants."

Part One describes past cosmological revolutions, the symbols and stories that gave meaning to our ancient ancestors' relationship with the universe and helps the reader get a sense of the purpose of this book. "To get a sense of the whole, we have to somehow absorb the meanings of all the symbols together, and this takes imagination." The authors note that it is ironic that seeing reality takes a lot of imagination.

In today's brutally divided world we speak of the importance of "seeing the big picture." That is "thinking cosmically" which helps us see ourselves situated among *all* intelligent life. According to the authors, this requires mythic language that belongs to *all* of us, not just the intuitive view of individual religions nor secular scientific "schools of thought."

Part Two describes the latest understanding of the physical universe made possible by the evolution of our technical advances in a way that "sandwiches" scientific fact and human meaning, the subject of the final Part Three, into a satisfying whole. The book is further enhanced by 72 pages of useful explanation and references notes.

For me, one of the values of this book is the clarification of what the

(continued on next page) 7

word 'myth' really means. "Myths don't just *represent* a reality people already know about: myths *present* reality. As the Structural Anthropologist Claude Levi Strauss commented. "Myths myth themselves in man's minds." Myth is an intellectual tool.

The authors use Joseph Campbell's definition of the word 'myth' as "*the highest-order explanations, the stories that people of any culture, at any time including today, communally believe and use to explain the larger reality, including their own place in it.*" They refer to the myths of the Huichol Indians of Mexico (a group with whom I have had personal experience) as not only having profound insights but, above all, they *viscerally* connect the people to their universe by experiencing the elements as their ancestors.

True to the book's scientific integrity, the reader is always reminded that the scientific revolution in cosmology is the discovery of *our* universe in the present time/space continuum and today we need to connect to *that* to discover our extraordinary place in the cosmos. This is more than a book *about* the universe, it is a "*how to*" book. How can the understanding of the power of mythic thinking to connect to an accurate picture of our universe help us understand *what* we are? "Our personal identity runs only as deep as our awareness of where we come from. This in turn depends on our level of scientific understanding and our willingness to experience that understanding metaphorically.

Here I am reminded of Gregory Bateson when he asked why we speak of humans as Homo Faber when we should see ourselves as Homo Metaphorico. I am struck by the resonance I find in this book with the overall theme of this issue of PATTERNS

"Our own thinking thus sets the size-scale for our possible connection to the universe....It is not mystical; it is as practical and essential as the visualizations that athletes do before a competition, or concert pianists before they go out on stage. It situates us in reality at our best."

However, together, revitalized with a shared framework, diverse people with differing points of view can examine and bring into awareness underlying assumptions that will enable constructive discourse about the issues.

The question now is this: How can we structure problem-solving systems that don't produce such pathologies? Instead of pathogenic systems, how can we design eugenic systems? There are no simple answers – no magic pill, but there are clues within the structure to guide us. There are two sets of three dyads comprising micro and macro levels. At the micro level in our example we see the cop-citizen-crook triad. At the macro level it becomes the Criminal Justice System-Crime-Citizenry triad. ... What will we do to correct the error that stimulates the dynamic of competitive dominance? How will we redesign the psychic and financial rewards and incentives? How will we shift rewards from the side of the equation, which generates and sustains the problem to the side that dissolves it? *Ed.Note: Long continues with more questions asking how do we open this recursive triadic structure to change, noting that "any solution must act to strengthen hosts so they are less vulnerable to problems and less needy of experts. Since Problems begin in the community of hosts, strong hosts who are capable of self-regulation, constructive interdependence, who are reflective and able to engage in third-order questioning and acting are unlikely to generate or become problems to society thereby reducing the number, scope and severity of problems society must address. With respect to crime, an accountable, literate, emotionally and socially intelligent citizenry produces fewer criminals and requires less policing."*

Dismantling this system will require insight to understand the deep dynamics that drive it and political savvy coupled with courage to take on the deeply entrenched special interests that protect it from political disturbances. We have created a malignant system, and like cancer, the cure could be more painful than the disease in the short-term. We will need to analyze the deep potential consequences of altering each dyad so we can anticipate the effects of our actions. A carefully planned and implemented "therapy" which addresses the issues outlined herein could, in time, transform this system from pathogenic to eugenic and alter the trajectory of our future.

Understanding the Model by Storytelling: Dancing With Demons

I began with a story and used a number of models as devices to help convey the dynamics of pathogenic problem-solving as they were illustrated in the story Now I will present a story to integrate the models back into the tapestry of human experience.

Our problem-solving systems are reminiscent of the Winchester Mystery House, a 160-room mansion in San Jose, California. Legend has it that the eccentric Sarah Winchester, on the advice of a psychic, spent the last 38 years of her life building this house to escape torment from the ghosts of all those killed by the Winchester rifle ("the gun that won the west"), invented by her late husband (Randall, 1987).

So, in 1884, she bought an eight-room farmhouse on 45 acres of land. To escape the demon' curse, she followed the psychic's advice to continue to add rooms, no matter what the cost, to provide shelter for the ghosts of the ever increasing number of victims of the Winchester guns. (Smith, 1967) Beginning in 1884 and using her monthly income of \$30,000 she kept a staff of 33 at work around the clock for 38 years until her death in 1922. The mansion, occupied only by her, cost over 5 million dollars and contains 40 bedrooms, 47 fireplaces, bathrooms, 52 skylights and more than 10,000 windows. There are 40 staircases containing 376 stairs many of which lead to ceilings or into walls and stairs that take one down seven steps and up 11, gaining only four steps. Of the 2,000 doors, there are doorways that open into airshafts and cupboards that open onto 1-1/2 inches of storage space. In her frantic efforts, Mrs. Winchester never conquered her demons, but she danced with them until the day she died. Like Mrs. Winchester, we too, are plagued by demons. Our demons are Problems like crime, child abuse, illiteracy, homelessness and drugs. We have worked diligently. We have spent enormous sums, and we can point to the sprawling, labyrinthine structures we have built to show our labor. Clearly, like Mrs. Winchester, despite the magnitude of our desperate undertaking, our demons continue to plague us.

Who is to blame? No one and everyone. To blame is to maintain the pathology. This is not a story of conspiracy, but rather one of collusion, for at the very core, we as Hosts create our own dependency and empower Experts.

(continued on next page)

References:

- Alcoholics Anonymous Handbook (1976)
- Alderfer, C. P., Brown, L. D., Kaplan, R., & Smith, K. K. (in press). Group relations and organizational diagnosis. New York: Wiley.
- Argyris, C., & Schon, D. (1974). Theory in practice: Increasing professional effectiveness. San Francisco: Jossey-Bass.
- Bateson, G. (1972). Steps to an ecology of mind. New York: Chandler Publishing Co.
- Bateson, G. (1979). Mind and Nature: A necessary unity (Bantam Trade edition, November, 1988 ed.). New York: Bantam Books.
- Bateson, G. (1991). Sacred unity: Further steps to an ecology of mind. New York: Harper Collins Publishers.
- Bateson, G., & Bateson, M. C. (1987). Angels Fear (Bantam ed.). New York: Macmillan.
- Bateson, G., Jackson, D. D., Haley, J., & Weakland, J. (1956). "Toward a theory of schizophrenia." Behavioral Science, 1: 251-264.
- Beer, S. (1974). Designing Freedom. Toronto: CBC Publications.
- Beer, S. (1979). The Heart of the Enterprise. New York: Wiley.
- Bookchin, M. (1982). The Ecology of Freedom. Palo Alto, CA: Cheshire Books.
- Elmes, M. B., & Gemmill, G. (1990). "The Psychodynamics of Mindlessness and Dissent in Small Groups". Small Group Research, 21(1, February), 28-44.
- Fleck, L. (1979). Genesis and development of a scientific fact (Benno Schwabe and Co. Basel, Switzerland, Trans.). Chicago: University of Chicago Press.
- Gebser, J. (1985). The Ever Present Origins. Athens: University of Ohio Press.
- Gemmill, G. (1989). "The Dynamics of Scapegoating in Small Groups". Small Group Behavior, 20 (4, November, 1989), 406-418.
- Glaser, B. G., & Strauss, A. L. (1967). The Discovery of Grounded Theory. Hawthorne, New York: Aldine de Gruyter.
- Gödel, K. (1962). On Formally Undecidable Propositions. New York: Basic Books.
- Haley, J. (February, 1991). "New Form of Therapy Described by Jay Haley". Family Therapy News, p. 20.
- Hofstadter, D. (1979). Gödel, Escher, Bach: An eternal golden braid. New York: Basic Books.
- Hofstadter, D. R. (1985). Metamagical themas. New York: Basic Books.
- Illich, I. (1976). Medical nemesis. New York: Pantheon Books.
- Korzybski, A. 1933 "Science and Sanity - an introduction to non-Aristotelian systems and general semantics". Institute of General Semantics
- Kuhn, T. S. (1970). The structure of scientific revolutions (2nd ed.). Chicago: University of Chicago Press.
- Lakoff, G., & Johnson, M. (1980). Metaphors we live by. Chicago: University of Chicago Press.
- Lipowski, Z. J. (1971). "Surfeit of attractive information inputs: A hallmark of our environment". Journal of Behavioral Science, 16(5).
- Luhmann, N. (1986). "The autopoiesis of social systems". In F. Geyer & J. van der Zouwen (Eds.), Sociocybernetic paradoxes: Observation, control and evolution of self-steering systems (pp. 172-192). London: Sage.
- Luhmann, N., & Nicholien, S. W. (1989). "Law as a social system". Northwestern University Law Review, 83(1-2 fall-winter), 136-150.
- Mandelbrot, B. B. (1977). Fractals: Form, chance and dimension. San Francisco: W. H. Freeman.
- Matson, F. (1964). The broken image: Man, science and society. New York: Braziller.
- Maturana, H. R. (1985). "What is it to see?" Cybernetic, 1(1), 59-76.
- Maturana, H. R. (1989). "Cognitive Strategies". In Conference Proceedings: American Society for Cybernetics, Old Dominion University, Norfolk, VA.
- Maturana, H. R., Mendez, C. L., & Coddou, F. (1988). "The bringing forth of pathology". The Irish Journal of Psychology, 9(1), 144-172.
- McWhinney, W. (1990). "Fractals cast no shadows". IS Journal Winter, 1990.
- McWhinney, W. (1992). "Myths and stories in organizational change". '92 Summer Session, The Fielding Institute, Santa Barbara, CA.

The American Society for Cybernetics

The Executive Board of the American Society for Cybernetics invites interested readers of Patterns to join the ASC. One of the main benefits of membership is affiliation with a group of people interested in pursuing the boundaries of human understanding in a novel, disciplined and engaging manner.

There are many definitions of cybernetics and many individuals who have influenced the direction of cybernetics. It takes as its domain the design or discovery and application of principles of regulation and communication. Cybernetics treats not things but ways of behaving. It does not ask "what is this thing?" but "what does it do?" and "what can it do?"

Because numerous systems in the living, social and technological world may be understood in this way, cybernetics cuts across many traditional disciplinary boundaries. The concepts which cyberneticians develop thus form a metadisciplinary language through which we may better understand and modify our world.

"Looking at the world today, it would be difficult not to conclude that a way of thinking which, rather than foster competition and conflict, deliberately aims at adaptation and collaboration may be the only way to maintain human life on this planet."
Ernst von Glasersfeld

The current Officers of the Society are:

President Louis Kauffman
kauffman@uic.edu

Vice President Ranulph Glanville
ranulph@glanville.co.uk

Past President Allenna Leonard
allenna_leonard@yahoo.com

Treasurer Rebecca Hibi
rhibit@msn.com

Vice President of Electronic Media
Randall Whitaker enolgaia@aol.com

*Please go to :
www.asc-cybernetics.org
for further information on how
to become a member*

What is Cybernetics?

Two major orientations have lived side by side in cybernetics from the beginning. One is concerned with the conception and design of technological developments based on mechanisms of self-regulation by means of feedback and circular causality. This has given us industrial robots, automatic pilots and other automata, and computers which in themselves have led to the field of artificial intelligence. This orientation today influences problem-solving through systematic studies in the relation between the controller and the controlled, government and the governed, management and political science. It is the basis of well-defined theories of regulation and control.

The other orientation has focused on the general human question concerning knowledge which, placing it within the conceptual framework of self-organization, has produced, on the one hand, a comprehensive biology of cognition in living organisms (Maturana, Varela) and, on the other, a theory of knowledge construction dependant on self-reference in the process of cybernetic circularity that brings it into conflict with the traditional western scientific concept of objective reality (von Foerster, McCulloch, von Glasersfeld).

The theories of relativity and quantum mechanics has contributed to the epistemological conflict and the physicists' theories and experiments confirm the cybernetician's view that knowledge must not be taken to be a picture of objective reality but rather as a particular way of organizing experience.

In the last few decades cybernetics has revolutionized our world. It has made possible the technology that opened the universe to greater understanding, the computer age that brings us together, and the shock-and-awe weaponry that tears us apart. But cybernetics has a far more fundamental potential. Its concepts of self-regulation, autonomy, and interactive adaptation provide, for the first time in the history of Western civilization, a rigorous theoretical basis for the achievement of dynamic equilibrium between human individuals, groups, and societies.

Ernst von Glasersfeld (Excerpts from the ASC membership Handbook)

- Mead, M., & von Foerster, H. (1968). "Cybernetics of cybernetics". In J. D. White, L. J. Peterson, & J. K. Russell (Eds.), *Purposive systems: The first annual symposium of the American Society for Cybernetics* New York: Spartan.
- Milgram, S. (1970). "The experience of living in cities". *Science*, 167, 1461-1468.
- Parkin, F. (1982). *Max Weber*. New York: Tavistock Publications.
- Pask, G. (1970). "Meaning of cybernetics in the behavioral sciences". In J. Rose (Eds.), *Progress of cybernetics* (pp. 23). London: Gordon and Breach.
- Randall, G. (April 23, 1987). "Spirited Mansion". *Sonoma Press Democrat*, Santa Rosa, CA
- Raphael, B., Singh, B., Bradbury, L., & Lambert, F. (1983). "Who helps the helpers? The effects of a disaster on the rescue workers". *Omega*, 14(1), 9-20.
- Schlosser, Eric . 1998. "The Prison Industrial Complex". *Atlantic Monthly*, December, pp. 51-77.
- Searles, H. F. (1955). "The informational value of the supervisor's emotional experiences". *Psychiatry*, 18, 135-146.
- Simon, H. (1973). "The organization of complex systems". In H. Pattee (Eds.), *Hierarchy theory* New York: Braziller.
- Smith, K. K., & Berg, D. N. (1987). *Paradoxes of group life*. San Francisco: Jossey-Bass.
- Smith, K. K., & Crandell, S. D. (1984). "Exploring collective emotion". *American Behavioral Scientist*, 27(6), 813-828.
- Smith, K. K., Simmons, V. M., & Thames, T. B. (1989). "Fix the women: An intervention into an organizational conflict based on parallel process thinking". *Journal of Applied Behavioral Science*, 25(1), 11-29.
- Smith, S. (1967). "The mystery house of Santa Clara Valley". In *Prominent American ghosts* New York: Dell.
- Spradley, J. (1979). *The ethnographic interview*. New York: Holt, Rinehart & Winston.
- Szasz, T. S. (1974). *The myth of mental illness* (2nd ed.). New York: Harper and Row.
- Talbot, A. (1990). "The importance of parallel process in debriefing crisis counselors". *Journal of Traumatic Stress*, 3(2), 265-277.
- Taylor, F. W. (1947). *Scientific management*. New York: Harper and Row.
- Toffler, A. (1970). *Future shock*. New York: Random House.
- von Foerster, H. (1979). "Cybernetics of cybernetics". In K. Krippendorff (Eds.), *Communication and control in society* New York: Gordon and Breach.
- von Foerster, H. (1984a). "Objects: Tokens for (eigen-) behaviors". In *Observing systems* Seaside, CA: Intersystems Publications.
- von Foerster, H. (1984b). *Observing systems*. Seaside: Intersystems Publications, Inc.
- von Glasersfeld, E. (1980). "The concept of equilibration in a constructivist theory of knowledge". In F. Benseler (Eds.), *Autopoiesis, communication, and society: The theory of autopoietic systems in the social sciences* Frankfurt (Main): Campus Verlag GmbH.
- von Glasersfeld, E. (1988). "An exposition of radical constructivism". In *Conference Proceedings of the American Society for Cybernetics*, Felton, CA
- Watzlawick, P. (Ed.). (1984). *The invented reality: How do we know what we believe we know?* New York: W.W. Norton and Co.
- Weber, M. (1947). *The theory of social and economic organizations* (A.M. Henderson Talcott Parsons, Trans.). Glencoe, IL: Free Press.
- Zeleny, M., & van Gigch, J. P. (Ed.). (1980). *Autopoiesis, dissipative structures, and spontaneous social orders*. Boulder, CO: Westview Press, Inc.

Dr. Long's multi-faceted background provides the breadth and depth to take on the complex issues facing leaders today. She has been on the front lines as a founding executive in a software startup, a foundation president, and an internal senior staff consultant for a Fortune 500 company. Her work has taken her throughout the world to places like Taiwan, Poland, Romania, Hungary, Slovakia and the Czech Republic. Her education combines the behavioral sciences to enable a deep understanding of both individual and system-wide issues. She earned a Masters degree in Human Development with an emphasis in perception and cognition as it relates to decision-making and behavior. Her grounded theoretical research in human and organizational systems with its practical application to problem solving in business culminated in a Ph.D. from the Fielding Graduate Institute.

She can be reached at Optima Research Group, Inc. P.O. Box 391401, Mountain View, CA 94039, USA
Kathy@OptimaConsulting.com

You are invited to attend

**The American Society for Cybernetics
*Annual Conference***

March 29 - April 1, 2007

Urbana, Illinois, USA

Constructivism, Design, Cybernetics:

Radical, Social, 2nd-order

This is to be a working conference for creating a three-way bridge spanning the thought and practice of:

- (a) radical constructivism that the reality we describe and perceive arises from our manner of living as perceivers & describers;*
- (b) social, architectural and artistic design –deliberate and improvised actions and structures that define and perturb what we call the social and aesthetic;*
- (c) second-order cybernetics -- an interdisciplinary weave of intellectual pathways connecting feedback, circular causality, self-organization, self-reference, cybernetics of cybernetics, taking ourselves into account.*

Further information is available at www.asc-cybernetics.org/index.htm

“Objectivity in the traditional sense is the delusion that it is not a delusion.. We do not see what we do not see. Objectivity is a subject’s delusion that observing can be done withoiut him. Invoking objectivity is abrogating responsibility, hence its popularity”

Heinz von Foerster.

PATTERNS
ASC Newsletter
Barbara Dawes Vogl, M.Ed.
5300 Glen Haven Road
Soquel, CA 95073
USA

Printed on recycled paper