

Journeying as a Systems Thinker

M a s u d S h e i k h



During my long IBM career, one pleasure of life was after-work conversations with colleagues. As a result of one such conversation in the lovely city of Istanbul, a colleague visiting from the U.K. gave me his copy of *Steps to an Ecology of Mind* by Gregory Bateson, with the comment “I think you will get more out of it than I can.” It was only many years later, after I took early retirement from IBM and got hooked on authors like Peter Senge, M. Scott Peck and Fritjof Capra, that I realized why I was given Bateson’s book. Apparently, I had long been some sort of a “systems thinker,” and Bateson was one of the truly great systems thinkers of the last century.

And why was Bateson a great systems thinker? For one, it was the range of subjects he dealt with. In his foreword to *Steps*, Bateson writes “Broadly, I have been concerned with four sorts of subject matter: anthropology, psychiatry, biological evolution and genetics, and the new epistemology that comes out of systems theory and ecology”. Bateson was able to see patterns and inter-relationships where none seem to have existed before. One section of his book, “Metalogues,” consists of conversations between a father and daughter on questions like “Why do things get in a muddle?” or “Why do things have boundaries?” Through these metalogues, Bateson could circumvent academic labeling and discuss concepts related to processes of communication and interaction of ideas.

Bateson had diverse interests. However, it is rare to find individuals who have mastery over so many subjects and who have traveled much and lived in diverse places. Another systems thinker, Meg Wheatley, talks about the need for conversations among people with diverse views:

It would be more fruitful to explore this strange and puzzling world if we were together. It would also be far less frightening and lonely. We would be together, brought together by our differences rather than separated by them. When we are willing to be disturbed by newness rather than clinging to our certainty, when we are willing to truly listen to someone who sees the world differently, then wonderful things happen.¹

Once I was hooked on systems thinking, a personal quest for me has been to see commonalities and difference between different types of systems thinkers: people as diverse as Jalal-ud-Din Rumi, Viktor Frankl, Peter Senge, Jay Forrester, Robert Fritz, Barry Oshry, Alan Greenspan, Martin Luther King Jr., among a host of others.

Lenses of systems thinkers

The lenses these people use to “see systems” are those of management theory, social sciences, engineering, biology, economics, and spirituality. The way they com-

municate what they see ranges from the stock-and-flow diagrams of systems dynamics to poetry, dance, computer models, pictures, movies, speeches, and conversations.

What is common to them all is that they do not see the world and its events as simple cause and effect. They see inter-relationships of the parts of a system and

realize that the whole is not the sum of its parts: in a healthy system, the whole is greater than the sum. The importance of looking at “wholes” is illustrated wonderfully by the ancient story of a group of blind men examining an elephant:

Since they did not know even the form or shape of the elephant, they groped sightlessly, gathering information by touching some part of it. Each thought that he knew something because he could feel a part. When they returned to their fellow-citizens, eager groups clustered around them, anxious, misguidedly, to learn the truth from those who were themselves astray. They were asked about the form, the shape, of the elephant, and they listened to all they were told. The man whose hand had reached the ear said, "It is a large, rough thing, wide and broad, like a rug." One who had felt the trunk said, "I have the real facts about it. It is like a straight and hollow pipe, awful and destructive." One who had felt its feet and legs said, "It is mighty and firm, like a pillar." Each had felt one part out of many. Each had perceived it wrongly.²

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In *The Dance of Change*, Charlotte Roberts and Art Kleiner make the point that since organizational change is complex, it is “essential to develop an intensive capability to see (and work with) systems. That capability, in turn, will gain strength and subtlety if you can understand systems with more than one approach.”³

“More than one approach” is crucial. We all need ways to crystallize and express our systemic insights, and different approaches are appropriate to different thinking and learning styles. It was from *The Dance of Change* that I initially learned of Barry Oshry’s approach to understanding social systems. I subsequently managed to attend a program led by him—at the Shambhala Institute’s 2003 Summer Program.

In spite of differences—in their areas of study and approaches to communicating their thoughts—systems thinkers have many similarities. To illustrate the point, let us look at two systems thinkers, Barry Oshry and John Sterman, who is Director of the Systems Dynamic Group at MIT. See these lines from Barry’s poem ‘Spaces’:

In spaces of common danger
we mobilize in holy war;
In spaces that separate us
we fall into a soul-shriveling I-ness.

Then notice similarities in the following quote from John Sterman:

Fundamentalism, whether religious or secular, whether the unquestioning belief in an all-powerful deity, the all-powerful state or the all-powerful free market, breeds persecution, hatred and war.⁴

Here is another similarity: John Sterman and Barry Oshry both realize that developing deeper systemic insights requires experience, which is often “expensive.” So they both run simulations, even though the nature of their simulations is quite different. John runs computer models, while Barry simulates roles in his workshops to observe human behaviour.

While developing systemic insights requires effort, deciding what to do with our insights may be an even bigger challenge. On occasions, it may be best to do nothing. This is because systems are complex, and it is difficult to decide where to intervene. Cause and effect are generally not closely related in time and space, and systems interact with other systems, leading to unintended consequences.

In his book *Leading Systems* Barry Oshry writes: “I have discovered recently that the philosopher Baruch Spinoza once said that he was less interested in changing the world than in merely understanding it. For many years that has also been my quest. Yet I am convinced that Spinoza and I share the belief that with deep understanding the world cannot help but change.”

“Give me a lever long enough...”

The question we have to ask ourselves when intervening in a system is, where can I have the greatest leverage? To answer, we not only need to clearly see the system being studied and its interconnections with other systems, but also *who* is doing the intervening. We need to know our own strengths and weaknesses, the quality of our relationships, our deepest assumptions, and the quality of our attention.

The question of leverage can perhaps be illustrated by the life of an exemplary systems thinker, the late Dana Meadows. Dana was a contemporary of Peter Senge and accomplished at systems dynamics. She was the lead author of a study published in 1972 named *The Limits to Growth* and became a leading voice in the sustainability movement. Thinking systemically, Dana seems to have decided that her contribution would be inadequate if she simply continued to publish scientific studies, and she decided to write a weekly column, “The Global Citizen,” where she commented on world events from a systems perspective. She also became an organic farmer, in effect becoming “the change she wanted to see” in the world.

In an article titled “Places to Intervene in a System,”⁵ Dana listed nine leverage points, ranking them from those having the least to the greatest leverage. Not surprisingly, the least leverage was assigned to “measurable” points that are within—and use the paradigm of—the existing system. Her top three leverage points follow, along with excerpted commentary:

Third: The power of self-organization. “The human immune system can develop responses to (some kinds of) insults it has never before encountered. The human brain can take in new information and pop out completely new thoughts. Self-organization seems so wondrous that we tend to regard it as mysterious, miraculous.”

Second: The goals of a system. “The goal of keeping the market competitive has to trump the goal of each corporation to eliminate its competitors. The goal of keeping populations in balance and evolving has to trump the goal of each population to commandeer all resources into its own metabolism.”

First: The mindset or paradigm from which the system arises. “The shared idea in the minds of society, the great unstated assumptions—unstated because unnecessary to state; everyone knows them—constitute that society's deepest set of beliefs about how the world works. There is a difference between nouns and verbs. People who are paid less are worth less. Growth is good. Nature is a stock of resources to be converted to human purposes. Evolution stopped with the emergence of Homo sapiens. One can ‘own’ land. Those are just a few of the paradigmatic assumptions of our culture, all of which utterly dumbfound people of other cultures. Paradigms are the sources of systems. From them come goals, information flows, feedbacks, stocks, flows.”

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And then Dana adds something else:

Zero: The power to transcend paradigms. “Sorry, but to be truthful and complete, I have to add this kicker. The highest leverage of all is to keep oneself unattached in the arena of paradigms, to realize that NO paradigm is ‘true,’ that even the one that sweetly shapes one's comfortable worldview is a tremendously limited understanding of an immense and amazing universe. It is to ‘get’ at a gut level the paradigm that there are paradigms, and to see that that itself is a paradigm, and to regard that whole realization as devastatingly funny. It is to let go into Not Knowing.”

And that “kicker” is perhaps her most profound point: After we have done the best we could, we are invited to have the humility to “let go into Not Knowing.”

To give a personal example: my systemic insights led me to leave my employer of 27 years and make my dream home in the city where I grew up. Subsequently, even though it was never a serious option earlier, I decided to migrate and make my new home in Canada. Was it the right thing to do? I believe so, but finally I have to “let go into Not Knowing.”

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Notes:

1. From “Disturb Me Please” at www.margaretwheatley.com
2. As retold by Idries Shah in *Tales of the Dervishes* (New York: E. P. Dutton, 1969).
3. Section entitled “Five kinds of systems thinking” in *The Dance of Change* by Peter Senge et al (New York: Doubleday, 1999).
4. “All models are wrong: reflections on becoming a systems scientist” in *Systems Dynamics Review* (Winter 2002).

5 Donella H. Meadows, "Places to Intervene in a System," *Whole Earth* (Winter 1997).

Downloaded from <http://www.wholeearthmag.com/>

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