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Every month **Attractors** shares tips and tools from human systems dynamics. In this month's edition, Glenda Eoyang reflects on  
***SYSTEMS ACTING***

*Systems thinking* has become a kind of mantra for the first decade of the new century. Given the global, interdependent, and rapid nature of change, it is hard to deny the necessity for thinking about systems in everything we do. Our clients reflect this trend:

- A non-profit Board sustains improvements in opportunities for regional youth.
- A federal agency invests in infrastructure to support service delivery.
- A state-wide network improves outcomes for people with disabilities.
- School administrators engage diverse constituencies.
- Ombudsmen encourage reform to strengthen the sustainability of traditional mediation.
- Isolated research projects come together in generative communities of practice.
- Organizational and procedural silos break down amid pressures for more effective and efficient services.
- Technical consultants confront resistance to change.

Each of our current clients is dealing with systemic issues. Every one of them draws upon a range of innovative methods and tools to make sense of their complex and unpredictable environments, but each one approaches their challenges in unique and creative ways. What, then, does it mean to do systems thinking? And how does systems thinking connect to effective action?

I had the privilege to spend two days last week with Louise Diamond and a group of "systems thinkers" she brought together. The stated purpose was to explore our various perspectives and create a short list of simple rules to support systems thinking in US policy.

It was a worthy and challenging goal. We all associate ourselves in various ways to systems thinking, but the differences among our perspectives were quite stark. Of course we held many assumptions in common, but as usual, the differences drew my attention. Louise and others will be writing more extensively about our shared inquiry and dialogue. At this early point in the process, I will articulate what I saw as the differences that made a difference in that room. I will explore how I have seen those differences become barriers and bridges to moving from **systems thinking** into **systems acting**.

**A system is an emergent whole that unfolds the unity of existence.** This system definition is popular in some sectors because of its perceived universality and power. Often it is accompanied by a spiritual community, identity, or practice, though the sources can be quite varied. Both new age and age-old beliefs support this metaphysical view of systems and systems thinking.

This perspective offers a range of rules for being and action:

- Respect all living things.
- Commit to a regular practice to strengthen individual and collective consciousness.
- Contribute to the evolution of an emergent system of being and knowing.

**A system is a whole, which includes interdependent parts.** It is hard to deny this fundamental definition of *system*. We certainly see examples of such systems around us every day: a bicycle, a tree, a family, an economy, a culture, a government, an organization, and so on. There is no denying that each of these is composed of parts, each of which depends on all the others to be a healthy, coherent, or effective whole. When you think about systems from this perspective, values emerge that should help shape action. Examples include:

- Value connections.
- Don't take others (and their problems) for granted.
- Expect unanticipated consequences.

All of these are helpful pieces of advice. Other approaches to systems thinking provide other opportunities for action.

**A system consists of stocks and flows.** This definition of system opens the door to a wonderful method for modeling, exploring, and optimizing processes of all kinds. Traditional systems dynamics, the most common of these systems thinking methods, provides a set of tools to replicate the key features of a system. The replica can then be used to make and test hypotheses about how the system functions and how its functions might be adjusted over time. Various kinds of systemic action are also indicated by this approach:

- Find and manipulate the system lever(s) to improve performance.
- Pay attention to feedback and lag times.
- Be clear where the system ends and the environment begins.

All of these can be powerful guides to action in systems that can be modeled as a series of interconnected stocks and flows. A fourth system definition provides another set of options.

**A system is a collection of independent agents whose interactions generate collective patterns.** This system definition, a foundation for human systems dynamics, acknowledges the transformation of emergence while embracing the opportunities of more analytical systems approaches. Here, a pattern is defined as

*Similarities, differences, and relationships that have meaning across space and time*

Any change to similarities, differences, or relationships results in a change in the pattern; and any change in the pattern is a change in the system. Three conditions influence how and how quickly new patterns emerge. Those conditions provide options for systemic action, including:

- Define and be willing to change boundaries.
- Pay attention to differences that make a difference.
- Build and maintain transforming relationships.

There are many other technical and not-so-technical approaches to systems and systems thinking. Some grow out of physical sciences, some out of social sciences, and others out of spiritual, personal, or professional practice. Each one makes assumptions about the worldview, rules, and reality that inform options for understanding and action. The differences among these systems approaches are great, but they pale in comparison to the differences between systems and non-systems approaches.

A non-systems view would also provide options for action that, whether explicit or not, might include:

Respect yourself and people who are significant to you.

Commit to a regular practice to strengthen your self.

- Contribute to the evolution of your own power.
- Value connections that pay off for you.
- Take others (and their problems) for granted.
- Expect only the consequences you have planned.

- Find and manipulate the system lever(s) to your advantage.
- Pay attention to feedback and lag times to increase your benefits and reduce your risks.
- Be clear where your system ends and the environment begins.
- Define and defend your boundaries.
- Pay attention to differences that make a difference to you.
- Build and maintain beneficial exchanges.

Today, the speed and ubiquity of communications tie us together in global patterns of action and results. We need new rules to succeed in such a system-driven environment. The old rules, that have served some of us so well in the past, must be exchanged for rules that can serve all of us in the future. If we are not able to both think and act more systemically, perhaps none of us will have a future worth having.

For more information about how HSD Institute and its Associates can support you and your systems thinking and action, visit our website at [www.hsdinstitute.org](http://www.hsdinstitute.org).

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