

# Becoming a Systems Thinker



Becoming a deeply skilled systems thinker takes time, but it is definitely possible. We've learned that, on one level, systems thinking is child's play: We are born with the capacity to see connections and understand (though not necessarily tolerate) time delay. We've also learned that the very work of applying systems thinking tools and practices not only hones that capacity but also shapes who we are and how we see the world. This orientation in turn increases our effectiveness in applying the tools and practices.

This final chapter focuses on three ways you can become a more effective systems thinker. First, it helps you develop what I would call a systems orientation. Since we are a part of the system we seek to understand and influence, we need to cultivate a certain way of being and also learn new ways of doing things. We need to appreciate what Peter Senge calls the *essence* of the discipline—the state of being or life orientation that infuses your work as a systems thinker.<sup>1</sup> Thinking systemically is paradoxically not just a mental discipline but also an emotional, physical, and ultimately spiritual one.

Second, the chapter describes an effective way of learning to apply systems thinking for social change. It introduces a facilitated action learning approach that enables you to integrate systems analysis tools into the change management framework of this book and guides you to apply the framework and tools to a real change challenge in your organization or community. Finally, the chapter reviews a set of key questions you can ask to open the door for others to think systemically—whether or not they are visual thinkers, can draw a systems map themselves, or have previously learned to read these maps.

## Develop a Systems Orientation

Donella Meadows observed, “Social systems are the external manifestations of cultural thinking patterns and of profound human needs, emotions, strengths, and weaknesses.”<sup>2</sup> In other words, they cannot simply be changed by dictate, or even by introducing a few good ideas. Our effectiveness as social change agents is impacted by our own capacities and character traits as well as by the multiple dimensions of human experience that we seek to influence.

It is tempting to view systems thinking as just a mental discipline. However, this perspective misses the richness and breadth of the approach—which also includes emotional, physical, and spiritual dimensions. Integrating all of these dimensions increases your effectiveness in applying systems thinking to meet the complex challenges that organizations and other social systems face. Let’s look at each of these four domains in turn.

## *MENTAL*

Systems thinking is a language and set of tools meant to illuminate our thinking about how the systems we are all part of actually operate. Built into this language are important core principles about how systems function:

- **Feedback:** Performance of our organizations and systems is largely determined by a web of interconnected circular (not linear) relationships.
- **Growth and Stability:** Feedback helps us understand how systems both grow and remain stable.
- **Diversity and Resilience:** Systems grow and innovate through diversity, and they remain stable because of their resilience in the face of change.
- **Delay:** Actions we take have both immediate and delayed consequences that we do not always consider.
- **Unintended Consequences:** Today’s problems were most likely yesterday’s solutions.
- **Power of Awareness:** When we see and understand a system as it really operates, we build on its inherent strengths and avoid being controlled by its weaknesses.
- **Leverage:** Systems improve as the result of a few key coordinated changes sustained over time.

Systems language and principles often combine to create recognizable patterns or classic stories. The core story describes how people tend to fall short of the results they want despite their best efforts. System archetypes are all variations on this theme. They describe different ways in which these shortfalls can result from people's underlying assumptions and actions, as well as from the multiple and sometimes conflicting goals that compete for their attention.

### *EMOTIONAL*

It can be very difficult to acknowledge how your own thinking and behavior contribute to the problems you want to solve. One tendency we have is to blame others instead of taking responsibility when things do not work out as planned. Systems thinking is one of the tools we have to help us shift from blame to responsibility and hence empower ourselves by taking charge of our own reality.<sup>3</sup> A related tendency is to try to compensate for feelings of powerlessness by trying to control the system instead of partner with it. When we empower ourselves we are more able to work with the forces at play in the system—to both appreciate what works about it and respectfully address what does not—instead of to unconsciously work against the forces and often make things worse.

No matter how limiting our beliefs and assumptions, we tend to be emotionally attached to them because we equate who we are with what we think. Moreover, we are frequently rewarded for strongly advocating our beliefs. Therefore, changing how we think involves the humility, curiosity, and courage to take such emotional risks as admitting we might not be right, experimenting with new assumptions and behaviors, and learning from others. It is important to be accepting of everyone's views since they can contribute to our own understanding, and to be compassionate toward them since all of us have our own limited perspectives.<sup>4</sup> These are the competencies of emotional maturity and social intelligence.

### *PHYSICAL*

Systems thinking is a team sport. It works because stakeholders with diverse perspectives come together to share their views, expand their understanding, and develop a more complete picture of the reality they all face. The primary purpose of mapping a system is to stimulate catalytic

conversations that lead to shared insights and shared responsibility, which in turn provide the foundation for *coordinated action*.

Coordinated action takes place in the physical realm. It is made possible through a combination of *convening* systemically—bringing diverse stakeholders together to share their aspirations, viewpoints, and experiences—with *thinking* systemically—understanding a complex problem in terms of the interdependence of its parts. Convening systemically by itself tends to encourage people to try to optimize their part of the system at the expense of the whole, and thinking systemically in isolation tends to produce insights that people do not identify with or want to support.

## *SPIRITUAL*

Systems thinking is a spiritual practice because it helps you see that:

- Everything is connected.
- You have choices about furthering positive connections—or feeding dysfunctional ones.
- In order to make constructive choices, it helps to develop certain character traits.

Learning to see connections, make good choices, and cultivate character strengths are all spiritual practices.

### **See Connections**

Many spiritual traditions are based on a belief that everything is connected. The three monotheistic Western religions stem from a belief that we all come from and hence are connected by the same life source. In Buddhism, Indra’s Net symbolizes a universe where infinitely repeated mutual relations exist among all its members. In Hinduism, the true reality is the inner spiritual principle Atman-Brahman, which gives life and being to all things.

We hurt ourselves and the world around us when we fail to recognize and cultivate our essential connectedness. The very word *religion* has its roots in the Latin word *religare*, commonly translated as “to bind.” It is all about making connections. From this viewpoint, systems thinking can be viewed as the work of enabling people to make connections in service of the whole. Serving the whole has both moral and practical benefits: We strive to contribute to the greater good, including our own, and to build stronger support for change by appreciating everyone’s interests. The

connections we generate are not only emotional ones among people but also logical ones among the parts of the system that people identify with. Systems thinking enables us to transform the parts of a more complex problem into a shared understanding of the larger issue, and to organize parts of a strategy into a clear direction and navigable road map.

#### **Make Good Choices**

Just because everything is connected does not mean that all connections are positive. We can be connected for better—such as when my esteem of you enhances yours of me—or for worse, as when my disregard of you increases yours of me. In a different context, the market dynamics that fueled the housing boom also created the deep recession of 2008.

Connecting well means:

- Orienting your actions toward goals that serve the whole over time.
- Optimizing relationships among the parts of the system—instead of seeking to optimize just your part.
- Clarifying and expanding the boundary of the system for which you feel responsible.

Clarifying goals, cultivating positive relationships, and defining system boundaries are all choices. One powerful example is the story of pediatric surgeon Victor Garcia, the founder of Trauma Services at Cincinnati Children's Hospital. Garcia's patients included young children who had been caught in the crossfire of urban violence. Despite his best efforts as a doctor, he was not able to save the lives of all of them. One day the parents of a young boy who had died in his care sought consolation by asking him if he had done the best he could to save their child. In that moment, he realized that the answer was no. By confining his work inside the walls of the hospital, he had isolated himself from the causes of violence that had led to the boy's death. As a result, he chose to redefine "doing his best" as reaching beyond the hospital to address the dangerous and unhealthy conditions of the inner city where his patients lived. He found CoreChange to develop systemic solutions to poverty and its effects on these children.<sup>5</sup>

#### **Cultivate Character Strengths**

In order to make choices that produce positive connections, it is important to develop certain qualities or character traits within ourselves. These include:

- **Curiosity:** Being open to learning, particularly in the face of failing to achieve what you really care about.
- **Respect:** Assuming that everyone is doing the best they can with what they know at the time.
- **Compassion:** Recognizing that at some level people are unaware of the harm they do and that limited awareness contributes to suffering.
- **Awareness:** Knowing yourself, seeing more of the whole of which you are a part, and understanding how you might unwittingly be contributing to the very situation you want to change.
- **Vision:** Listening for what moves you and what is being called for by the world around you. Working for what you deeply care about and remembering, in the words of Václav Havel, that “hope . . . is the certainty that something makes sense no matter how it turns out.”
- **Courage:** Taking a stand for the integrity and sustainability of the whole in the face of seemingly more expedient alternatives. Going even farther and asking, “What might I or we have to give up in order for the whole system to succeed?”
- **Patience:** Developing the patience and persistence to stay the course in the face of uncertainty and time delay.
- **Flexibility:** Balancing the ability to stay on course with the flexibility to adjust in the face of new information.

## Learn by Doing

Trying to solve chronic, complex problems is daunting, and you don't have to be an expert to take the first step. Your abilities as a systems thinker will grow over time, and you can learn by doing.

Often groups recruit help. Michael Goodman and I developed an approach that enables participants to immediately apply the principles and tools laid out in this book to achieve significant changes in their own organizations and communities. We follow this approach when working with a wide range of stakeholders—foundations, NGOs, public agencies, and private businesses. The process can be designed to: solve one or more problems, develop a systemic theory of change, and/or build capacity in systems thinking. People benefit from a combination of working meetings, training, and coaching in real time over an average three- to six-month period.

Whether or not you are working with a consultant or coach to organize your systems-thinking process, you may find it useful to introduce the basic language, principles, and tools of systems thinking to people in organizations and communities who can benefit from the approach but do not want to become proficient in it themselves. For those who prefer to learn online, Michael has developed an interactive web-based course called “Applying Systems Thinking and Common Archetypes to Organizational Issues.”<sup>6</sup> There is also a wide range of additional resources on systems thinking that you can turn to (see Appendix D).

Finally, I encourage you to practice systems mapping on your own by taking any chronic, complex problem you are interested in—whether it be climate change, the expanding influence of money in politics, or a rift between you and a loved one—and using the tools outlined in chapters 3, 4, and 7 to understand it better. Working with an issue you are passionate about helps you overcome the initial awkwardness of learning something new and experience the satisfaction that can come with deeper insight.

Like any new language, systems thinking takes practice. I hope that the cases in this book inspire you to put in this practice so you can learn over time to create similar results for yourself with the people and causes you care about.

## Ask Systemic Questions

One of the most effective ways to become a systems thinker and help others do the same is to ask powerful questions. You can do this whether or not you are a visual thinker, draw a systems map, or expect others to read these maps. It can help to remember that, while the maps are great prompts to create catalytic conversations, asking good questions also opens the door to new ways of thinking, communicating, and understanding.

By way of review, here are some of the most useful questions you can ask:

- Where do our best intentions fall short of achieving what we really care about?
- Why are we not as successful as we want to be despite our best efforts?
- What might be our responsibility for the obstacles we encounter and shortfalls we experience?

- Are there people who share similar aspirations to ours but have very different views about the nature of the problem and/or the solution? If so, what can we do to help align our respective efforts more effectively?
- What can we learn from a preliminary inquiry into specific events related to our issue, underlying trends or patterns of behavior over time, and a consideration of deeper systems structure?
- How might the concepts of time delay, archetypes, and the Bathtub increase our understanding of systems structure related to the issue?
- Which stakeholders are we comfortable engaging now, and what are their motivations for change?
- By contrast, which stakeholders might we not choose to engage at the outset—and why? What might we miss by not involving them initially, and what strategies do we have for engaging them over time?
- How can we create common ground among the stakeholders we engage now?
- How do we increase people’s understanding of the issue in a way that integrates the richness of diverse perspectives with the simplicity required to act?
- How do we build support for an analysis that might be difficult to communicate or that challenges people’s underlying beliefs and assumptions?
- What is the case for the status quo?
- What might we have to give up in order for the whole to succeed?
- What interventions could enable us to achieve sustainable, breakthrough change?
- What might be the unintended consequences of our proposed solutions?
- How do we ensure continuous learning and outreach?
- What is our systemic theory of change?
- How do we evaluate progress toward our vision using a system lens?
- What actions can we take to become better systems thinkers?
- What do we intend to do next?

A US Park Services manager observed, “I used to think of the organization as a machine, and that things like rockslides and traffic jams

caused breakdowns in the machine; and now I see the organization as an organism where those are just events and the true sources of breakdown are egos, mental models, and poor communications/relationships.” Becoming a more effective systems thinker includes developing an orientation and way of being that incorporates the emotional, behavioral, and spiritual—as well as cognitive—dimensions of life. It takes time and practice with real-world challenges. And remember, even if you never draw a systems map on your own, you can always ask powerful questions that open the door for you and others to think systemically.

## Closing the Loop

- Systems thinking is not (just) what you think.
- Becoming a more effective systems thinker means developing your emotional, behavioral, and spiritual—as well as cognitive—capacities.
- The best way to learn is by doing, and there are many resources available to help.
- When you are not sure what to do next, ask a systemic question.