## *Linear vs. Systems Thinking*

Linear thinking (Figure 1.4) is also known as "open loop" thinking because decisions are "unaffected by the decisions themselves"[i] This is quick-fix thinking. A problem needs fixing, so apply the fix and the problem is solved, or so linear thinkers contend. Linear thinking assumes that cause and effect are "close in time and space."[ii] Senge clarifies that "effect" means the symptom or issue resulting from the underlying, undetected problem, which might be declining attendance, ineffective discipleship, non-existent outreach, or decreased giving, for example.[iii]

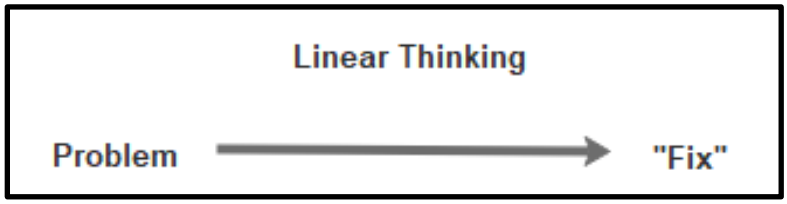


*Figure 1.4 Linear (open loop) Thinking*. *Source*: J. Messer, 2020.

Systems thinking, on the other hand, is "closed loop" thinking (Figure 1.5). Closed-loop thinking understands that every decision affects the system and its context. And that decision will produce change in the system and the context, which will, in turn, impact the system.[iv] In closed-loop thinking, "every change changes everything."[v]

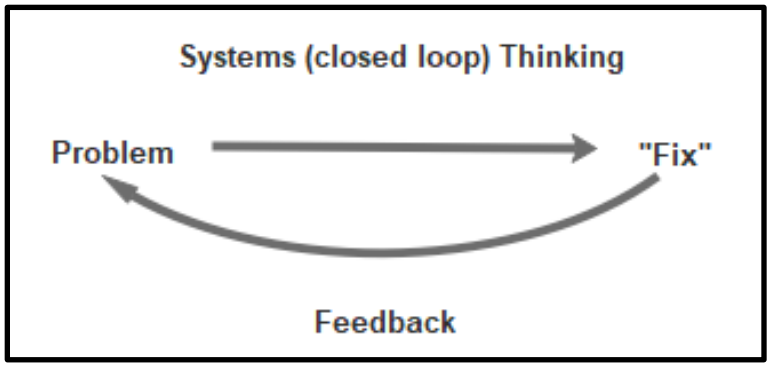


*Figure 1.5. Systems (closed loop) Thinking*. *Source*: J. Messer, 2020.

Systems thinking is based on the reality that actions impact the issue, or change impacts the decision. It is a circular process, a closed loop.

Linear thinking is an event-focused approach that emphasizes reacting to change rather than leading proactive change within the organization. Senge identified the greatest danger of linear thinking for church leaders: "An event orientation will eventually drive out real vision, leaving only hollow 'vision statements,' good ideas that are never taken to heart."[vi]

| **Linear vs. Systems Thinking** | |
|---|---|
| **Linear Thinkers** | **Systems Thinkers** |
| Break things into component pieces | Are concerned with the whole |
| Are concerned with content | Are concerned with the process |
| Try to fix symptoms | Are concerned with the underlying dynamics |
| Are concerned with assigning blame | Try to identify patterns |
| Try to control chaos to create order | Try to find patterns amid chaos |
| Care only about the content of communication | Care about content but are more attentive to interactions and patterns of communication |
| Believe organizations are predictable and orderly | Believe organizations are unpredictable in a chaotic environment |

*Table 1.1. Linear vs. Systems Thinking. Source*: Ollhoff and Walcheski, "Making the Jump to Systems Thinking," *The Systems Thinker* 17, No. 5 (June/July, 2006), 10.

As embarrassing as it is to acknowledge, I can say that some vision statements I have invested in were more concerned with overcoming current problems than embracing God's preferred future. In my interactions with churches, the evidence supporting Senge's thought about hollow vision statements abounds. Vision statements can easily, but unconsciously, become an attempt to fix undetected system problems and mitigate symptoms more than we might want to admit. Systems thinking contributes to robust visioning because it understands systems as changeable, regardless of who or what created the current reality.[vii]

Table 1.1 compares linear thinkers to sytem thinkers. Notice that systems thinkers concentrate on finding patterns in chaos, an important leadership skill in the VUCA context. Finding the pattern in the chaos is also advantageous to leaders since most leadership attempts to control chaos are ineffective. Discovering the patterns in chaos allows leaders to change the underlying structures that produce the patterns, which consequently reduces chaos. Systems thinkers are focused on the process, not just the content. In other words, they focus on how and why a problem occurs, not just the content of the problem.

**Strategic Planning**

My training as a leader included a significant amount of strategic planning. What would we do if A happened? Or, if B, then C? Strategic planning has value as a thinking tool, but it is slow to anticipate and respond to change. In a VUCA world, it is not as helpful as systems thinking.

*Strategic Planning vs. Systems Thinking*

| **Strategic Planning** | **Systems Thinking** |
|---|---|
| Once every 3–5 years | Continuous |
| Data-driven | Patterns and behavior over time trends |
| Analysis | Synthesis (cause and effect) |
| Forecasting (a single fixed future) | Scenarios (multiple possible futures) |
| Focus on parts in isolation | Focus on the interaction of parts |
| Linear | Non-linear (closed causality and feedback) |
| Predictable outcomes | Emergent outcomes |
| Driven by expert/senior management | Participatory: management, staff, and stakeholders |

*Table 1.2. Strategic Planning vs. Systems Thinking. Source*: Kambiz Maani, *Multi-Stakeholder Decision Making for Complex Problems: A Systems Thinking Approach with Cases* (Hackensack, NJ: World Scientific Publishing, 2017), 20.

Table 1.2 compares strategic planning with systems thinking. Notice that the major differences include the continuous, closed-loop nature of systems thinking in contrast to the linear, open-loop nature of strategic planning. Again, in my experience, systems thinking is more responsive and able to anticipate feedback, which makes it more valuable to leaders in VUCA environments.

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[i] Jac A. M. Vennix, *Group Model Building: Facilitating Team Learning Using System Dynamics* (New York: Wiley, 1996), 43.
[ii] Senge, *The Fifth Discipline*, 63.
[iii] Senge, *The Fifth Discipline*, 63.
[iv] Vennix, *Group Model Building*, 43.
[v] Herrington, Bonem, and Furr, *Leading Congregational Change*, 153.
[vi] Senge, *The Fifth Discipline*, 215.
[vii] Senge, *The Fifth Discipline*, 11.