



Continuous Improvement Associates Creating Reality

Systems Thinking:
It's more than you think. SM

Reality doesn't just "happen."
Our self-confirming attributions and
self-fulfilling prophecies help create it.
Let's explicitly recognize the feedback that does it.

Creating reality?

As individuals and organizations we participate in creating reality. This has both benefits and pitfalls. Systems thinking helps us understand the feedback that produces this dynamic ... and how we can both take advantage of the benefits and avoid the pitfalls.

Systems thinking also explains how "Winning Strategy" — a way we find to deal with the world that helps keep us safe and helps us get what we want — results in reality-creating feedback where our greatest strength can also be our greatest weakness.

Do we create reality?

To what extent do we create reality? Figure 1 shows the remarkably wide distribution of responses from CIA workshops. Because our society tends to radical individualism, it may not be too surprising that most believe we have great influence in creating reality.

Do we? Well, we do and we don't.

Figure 2 shows how "everything that happens" has the potential to affect us, and also how "what we do" can influence the portion of "everything that happens" that actually does affect us.

So "what we do" both influences how others direct their actions at us and the kinds of things that happen to which we subject ourselves. For example, when we're angry, we're more likely to provoke angry responses; and, if we walk in dangerous neighborhoods, we're more likely to be mugged.

So this is an example of where we need systems "both-and" thinking, rather than "either-or" thinking.

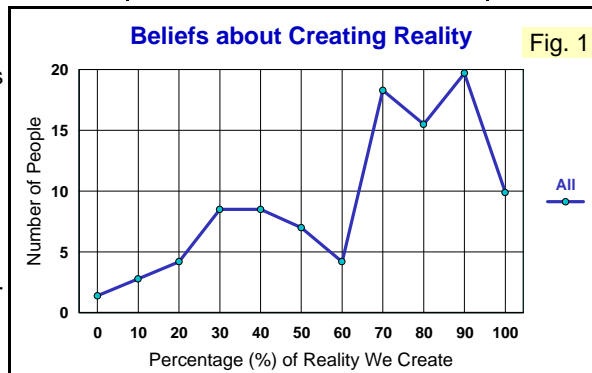
Conflict

"Team-building" must address the conflict we experience when an organization is composed of people at the extremes of be-

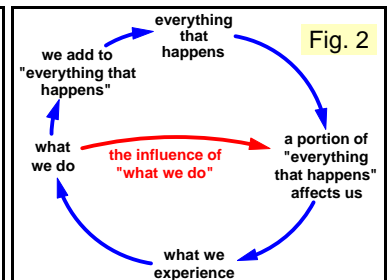
What is systems thinking?

Seeking to understand system behavior by examining "the whole" ... instead of by analyzing the parts.

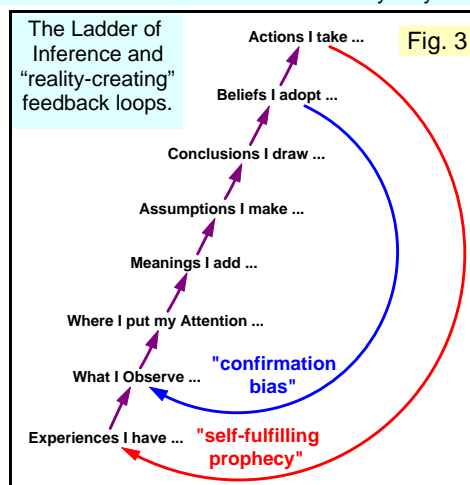
lief about creating reality. It may be perceived as unfair when those near the "100%" extreme either attribute too much credit or too much blame to individual actions. It may pro-



Beliefs about whether we create our reality vary widely!



This shows how we are both subject to "everything that happens" and how we influence the portion of "everything that happens" that affects us.



voke resentment when others near the "0%" extreme lack initiative and appear apathetic.

"Reality-creating" feedback

By going down the "Ladder of Inference" in Figure 3 from disagreements on Actions and Beliefs, we can determine the source of disagreement. This figure also shows two feedback loops that create reality. First, our beliefs lead us to form self-confirming attributions and, second, our actions lead us to certain experiences. These can be empowering feedback loops that create a reality we desire or they can lead us into "reality traps" — creating reality, but not the only, or necessarily preferred, reality.

It's as if reality were a river. Instead of flowing along with the river, we may exist in "reality traps," eddies near the bank.

An example of a reality trap

A *Geech* cartoon shows a waitress saying to a customer, "You call that a tip?" He replies, "I tip according to the service." In the next panel, she says, "And all this time I thought I was serving according to the tip." Now that's a reality trap.

Most leading businesses owe their prosperity to a fresh competitive formula As the formula succeeds customers multiply All this positive feedback reinforces managers' confidence that they have found the one best way, and it emboldens them to focus their energies on refining and extending their winning system ..."

Donald N. Sull, "Why Good Companies Go Bad," *Harvard Business Review*, Jul-Aug 99

Figure 4 shows the dynamic: **Initial Events(s)** produce an **Action** that results in an **Event** that prompts an **Interpretation** that forms a **Belief** ... leading to **Action** based on **Belief**: a feedback loop.

A major trap: "Winning Strategy"

In *The Last Word on Power* Tracy Goss describes Winning Strategy as "a lifelong, unconscious formula for achieving success." She writes, "You did not design this Winning Strategy, ... it designed you. It is the source of your success and ... the source of your limitations. It defines your reality, your way of being, and your way of thinking. This, in turn, focuses your attention and shapes your actions, thereby determining what's possible and what's not possible for you"*

Winning Strategy examples

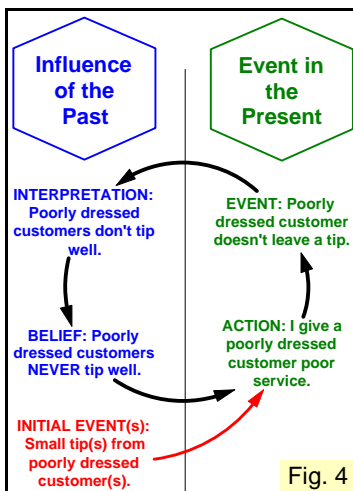
We all adopt Winning Strategies for dealing with the world to keep us safe and bring us what we want. Examples:

- Using humor to get attention or smooth things over
- Building relationships & communicating well
- Solving or preventing problems
- Challenging or provoking
- Facilitating and empowering
- Providing security
- Taking control

Whatever our Winning Strategy, we tend to approach every situation with it in hand. It's the "If all you've got is a hammer, everything looks like a nail," syndrome.

The downside

Eventually we face challenges that not only cannot be overcome by using our Winning Strategy, the Winning Strategy actually *prevents* our success.



An example of how past events and experiences can create beliefs that set in motion recurring patterns of behavior and experience: "reality traps."

"In stressing the force of history on an organization, I have drawn from the legacies of European psychologists who argue that the behavior of individuals is determined primarily by past events and experiences, rather than by what lies ahead."

Larry E. Greiner, "Evolution and revolution as organizations grow," *HBR*, May-June 1998

Does this happen in organizations?

You bet! See the quotes in the boxes on this page. This is quite consistent with systems thinking principles: nothing grows without a reinforcing process; and nothing grows forever, limiting forces always arise.

Adapting is really difficult

The more successful a Winning Strategy, the more difficult it is to give up. It's even difficult to accept advice or hear that there *might be* a better way. After all, it's easy to think, "I've been really successful; who the heck are you to tell me I what I'm doing won't work?"

Different Winning Strategies is another major source of conflict; we tend to devalue other Winning Strategies.

Conclusion

Random initial conditions and feedback actually create our Winning Strategy — our standard approach for dealing with our challenges. Developing Winning Strategy variety, and being willing to adapt when what we're doing isn't working and a situation calls for a different approach, is one of the greatest challenges we face as humans.

The Self-Fulfilling Language of Economics
 "Language is powerful, ... and theories of human behavior become self-fulfilling. We act on the basis of these theories, and through our own actions produce in others the behavior we expect." Examples:
Shirking: "If we believe people will work hard only if specifically rewarded for doing so, we will provide contingent rewards and thereby condition people to work only when rewarded."
Free riding: "If we expect people to be untrustworthy, we will closely monitor and control them and by doing so will signal that they can't be trusted — an expectation that they will most likely confirm for us."
 Jeffrey Pfeffer, "Six dangerous myths about pay," *Harvard Business Review*, May-June 1998

Systems thinking helps us understand how our Winning Strategy hinders us in responding to changing circumstances. It's vitally important that we base our actions, not on the past, but on current and future challenges.

See **Creating Reality Consciously** for more on this dynamic and how we can harness its power to serve us, instead of trapping us.

"There is no reason any individual would want a computer in their home." Ken Olson, president, chairman and founder of Digital Equipment Corporation, 1977

Feedback is Power - Tap It

Success and failure arise primarily as a result of the internal system structure and policies:

- even where it's clear there was an external cause,
- even though people are capricious, independent, and we think what they do can't be modeled ... we'd like to think so, but we're driven by the systems around us,
- even in cases where there's not enough information to develop a "system" ... there is, we're just not making good use of it.

Jay Forrester, *Power of Systems Thinking Conf.*, May 1995, Boston, MA

Workshop Benefits

A group examines and answers the following questions (among others):

- What is our organization's Winning Strategy?
- How did it develop? Under what conditions?
- How has it promoted our success?
- Under what conditions has it, or will it, fail us?

Winning Strategies Trap Us

"Active inertia is an organization's tendency to follow established patterns of behavior — even in response to dramatic environmental shifts. Stuck in the modes of thinking and working that brought success in the past, market leaders simply accelerate all their tried-and-true activities. In trying to dig themselves out of a hole, they just deepen it.

Donald N. Sull, "Why Good Companies Go Bad," *Harvard Business Review*, Jul-Aug 1999

Continuous Improvement Associates

Bob Powell, Ph.D., MBA
 6992 Blackhawk Place
 Colorado Springs, CO 80919
 Phone: (719) 599-0977

Web Site: exponentialimprovement.com
 E-mail: scuba@usa.net

* Tracy Goss, *The Last Word on Power*, 1996, p. 35