

Systems Thinking Leadership

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What is Systems Thinking?

- Seeking to understand system behavior by examining "the whole"
- ... instead of by analyzing the parts.
- An unusual approach raises concerns:

This is risky ...

- Some new procedures are ...

Systems Thinking is not ...
... that's because it's based on principles fundamental to the nature of reality.
It's organic.
It's about feedback loops with delays.

What's the Problem?

- Problems
- Messes
- Wicked Messes
- How do you deal with them?
- Problems ... easy
- Messes ... systems thinking
- Wicked Messes ... political action, guided by systems thinking

Who's the Leader on an Airplane?

- Pilot
 - Navigator
 - Steward
 - other
-
- Talk with a partner for a few minutes ...

The LPP Leadership Perspective

- In your LPP Journal:
- "Being a trustholder of the community means serving it as you would a good steward.
- ... to pass the gift to future generations in a better state than that in which it was received."
- Stewards aren't designers, but they provide valuable input to the policy makers and organizational leaders who are the designers.

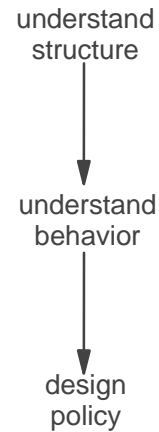
The ST Perspective: Leader as "_____"

- ... in order that the airplane / organization / community can "fly stably" under turbulent conditions.
- It's not about "preparing for a predicted future."
- It's about _____ ... "creating an imagined, desired future."

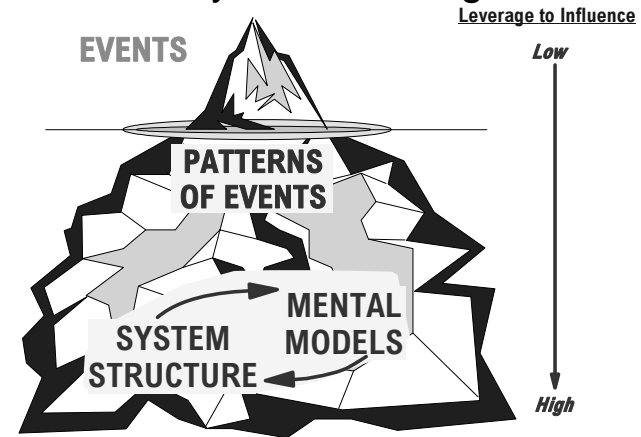
A Bell

- Why does a bell ring?
- Talk with a partner for a minute ...
- A bell rings because _____ ... its behavior is determined by its _____.
- A bell is a _____ just waiting to _____.

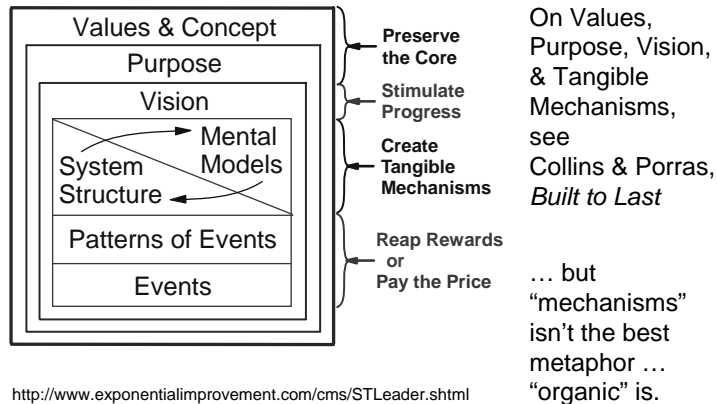
An Example of Structure



System as Cause & System Leverage



The Leadership Hierarchy



<http://www.exponentialimprovement.com/cms/STLeader.shtml>

Community & the "Common Good"

- In your LPP Journal:
- "Community Trusteeship involves holding the entire community trust, or taking responsibility for and acting on behalf of, the common good."
- This is itself controversial ... very controversial.
- It's a "fundamental source of conflict":
the individual vs. the collective.
- Are you an "individual" or "part of a collective"?
- You're BOTH!

“Either-Or” vs. “Both-And”

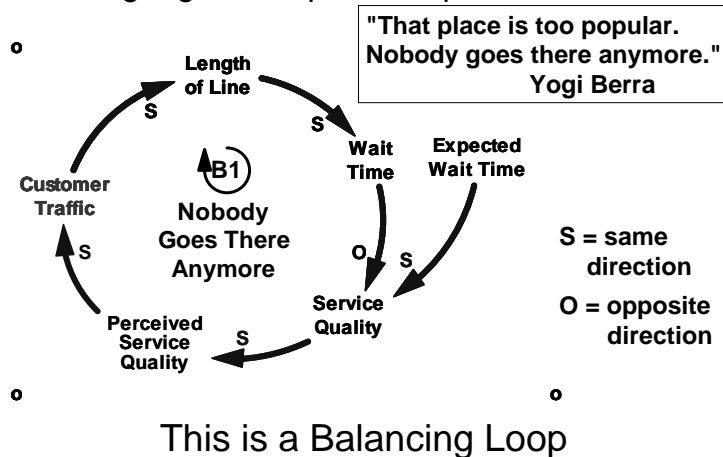
- Systems thinking is not “either-or” thinking, it’s “both-and” thinking.
- “Either-or” thinking is misleading at best ... destructive at worst.
- “Both-and” thinking is valuable in promoting diversity ...
- ... for integrating (from LPP Journal) “diverse voices” & “contradictory positions”

What Causes What?

Self
Confidence

Athletic or
Academic
Performance

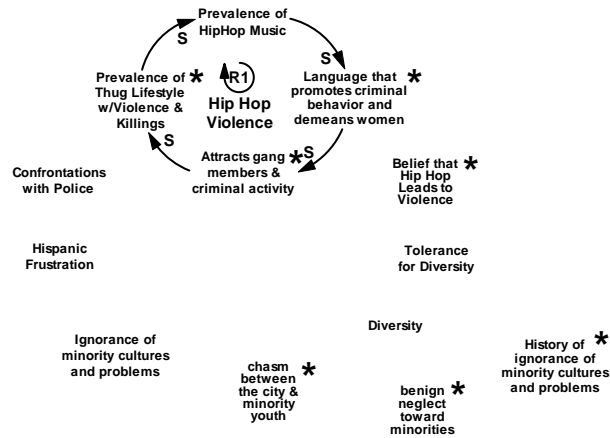
Language Example: A Popular Restaurant



Long-lived Systems

- In long-lived systems are there more reinforcing or balancing feedback loops?
- Talk with a partner for a minute ...
- There are more _____
- We'd better understand system structure (feedback loops & delays)
... or change initiatives will fail.

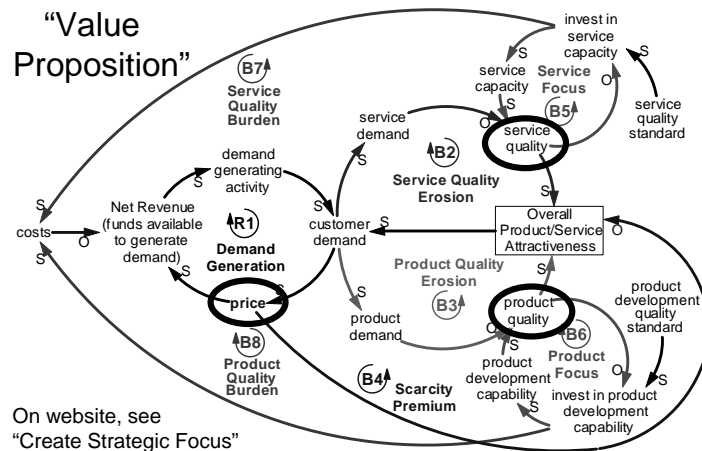
Hip-Hop Story Variables



Systems Thinking

- Systems thinking: Seeking to understand behavior by examining the whole instead of the parts.
- It's not that we don't look at the parts ...
- It's that we look at the whole to see how the system itself is creating the observed behavior.

A Critical Structure to Understand: The Attractiveness Principle

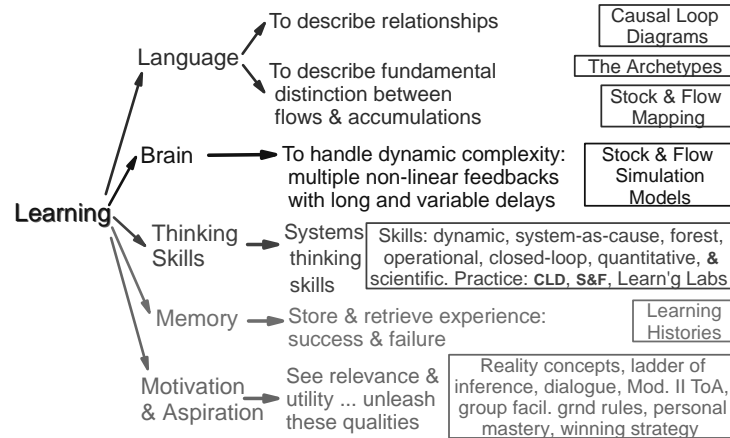


It's a Reality Fact of Life

"There is no utopia in social systems"

- No restaurant can be all things to all people.
- Can't have all at once:
lowest price, best quality, best service
- The same is true for regions of the country
- A corollary: Given free migration, no place can long remain more attractive than any other place
- We must think in terms of how we'll become unattractive ... **"strategic unattractiveness"**
- It's a "Gilda Radnor world" ...

To Learn, We Need



Learning Requires Languages, Brains, & Skills
<http://www.exponentialimprovement.com/cms/learning.shtml>

Traditional Business Thinking Skills

- Static thinking
- System-as-effect thinking
- Tree thinking *
- Factor thinking
- Linear thinking
- Measurement thinking
- Proving-truth thinking

Systems Thinking Skills

- Dynamic thinking
- System-as-cause thinking
- Forest thinking
- Operational thinking
- Closed-loop thinking
- Quantitative thinking
- Scientific thinking

* physical condition: simultanagnosia

Going from Loops to Action

| Key Success Loops & Driving Forces | | | | | | |
|--|---------------------------------------|---|---|---------|------------------|---------------------------------------|
| Group or Individual | Loop R9 IT/College Strategic Feedback | Loop R3 Education & Prevention Reduces Problems | Loop B5 a,b,c Staff/Maintenance /Infrastructure Support Costs | Loop XX | Driving Force YY | Summary of Strategy for each Function |
| ITS | | | | | | |
| President | | | | | | |
| Development | | | | | | |
| Human Resources | | | | | | |
| Other | | | | | | |
| Summary of Strategy for Each Loop or Driving Force | | | | | | |

Long Delays in Complex Systems Require Long-term, Systems Thinking

Suggested reading:

- *The Fifth Discipline* by Peter Senge
- *The Logic of Failure* by Dietrich Dorner
- The "Growth Facts of Life" at <http://www.exponentialimprovement.com/cms/growthfacts.shtml>

"Dynamic complexity" is when we have multiple feedback loops and long delays.