EXECUTIVE SYSTEMS THINKING TRAINING SEMINAR 3 March 2015

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Premise of this Seminar

1. A systems perspective helps us to understand what shapes the way society thinks and acts.

2. By using a systems approach, we can better understand what lies underneath various social issues in order to develop long-term solutions.

Seminar Objectives

- Introduce systems thinking as an effective problem analysis and solution approach.
- Share some practical systems thinking tools, methods, and techniques.

Robert Steel – Systainability Asia - Part of A global network dedicated to sustainability strategy learning, and inspiration



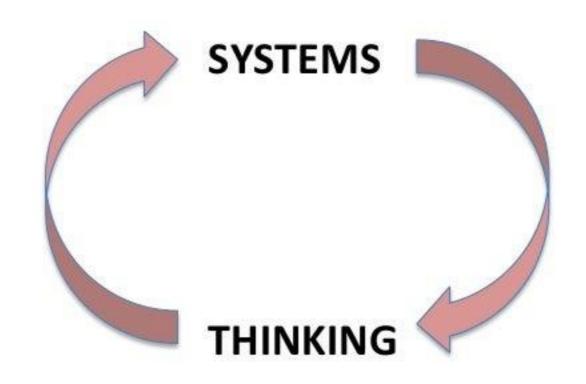
Current And Past Clients Include:

Levi Strauss & Co. • Ernst & Young • Nike • Baltic 21 (the 11 nations of Northern Europe) • European Sustainable
Development Network • Brother, Inc. (Japan) • Earth Charter International • Swedish SIDA's Advanced International
Training Programs • United Nations Division for Sustainable Development Egyptian National Competitiveness Council
• Government of Singapore • Greater New Orleans, Inc. • SEIYU (Japan) • SERDP - Strategic Environmental Research
& Development Program (US Government) • Seliger Forum 2010 (Russia) • Sustainable Fashion Academy • States of
Queensland, Victoria, NSW, and South Australia • Stockholm County • Sustainable Seattle • Heinz Endowments •
Toyota • UNEP • UNDP • Nile Basin Initiative • Bank of Indonesia • Volvo Cars

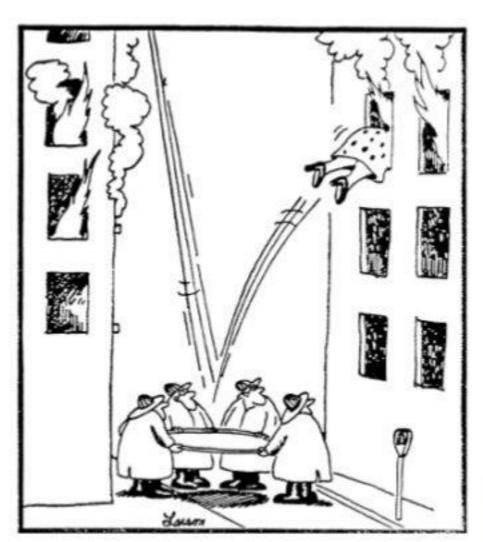
A little Thumb wrestling



Part 1 - What is Systems Thinking?



Important idea: "Good people can make bad or harmful decisions if the systems within which they are making those decisions are poorly designed.



Artist: Gary Larson

What Is A System?

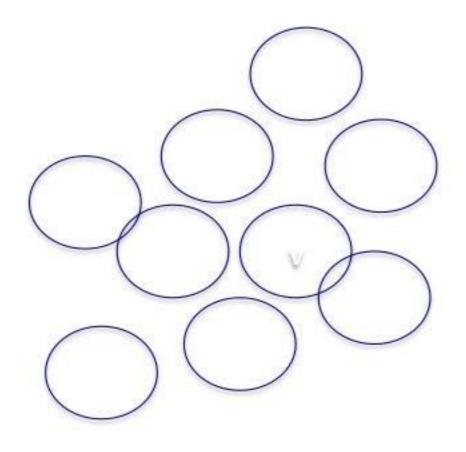
A system is a set of elements whose interconnections determine their behavior.

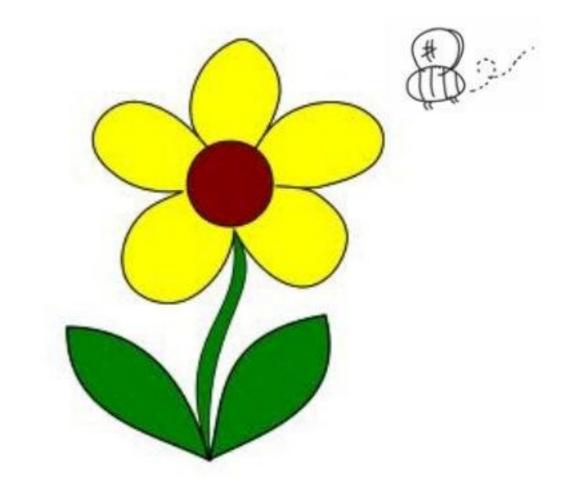
Systems are bound together by the laws of cause and effect, and governed by flows of information, energy and materials.

Note: People give definition to systems based on an idea of what should happen at a given point in time. Thus, systems have a purpose.

Not a System

A System





Bigger more Complex Systems

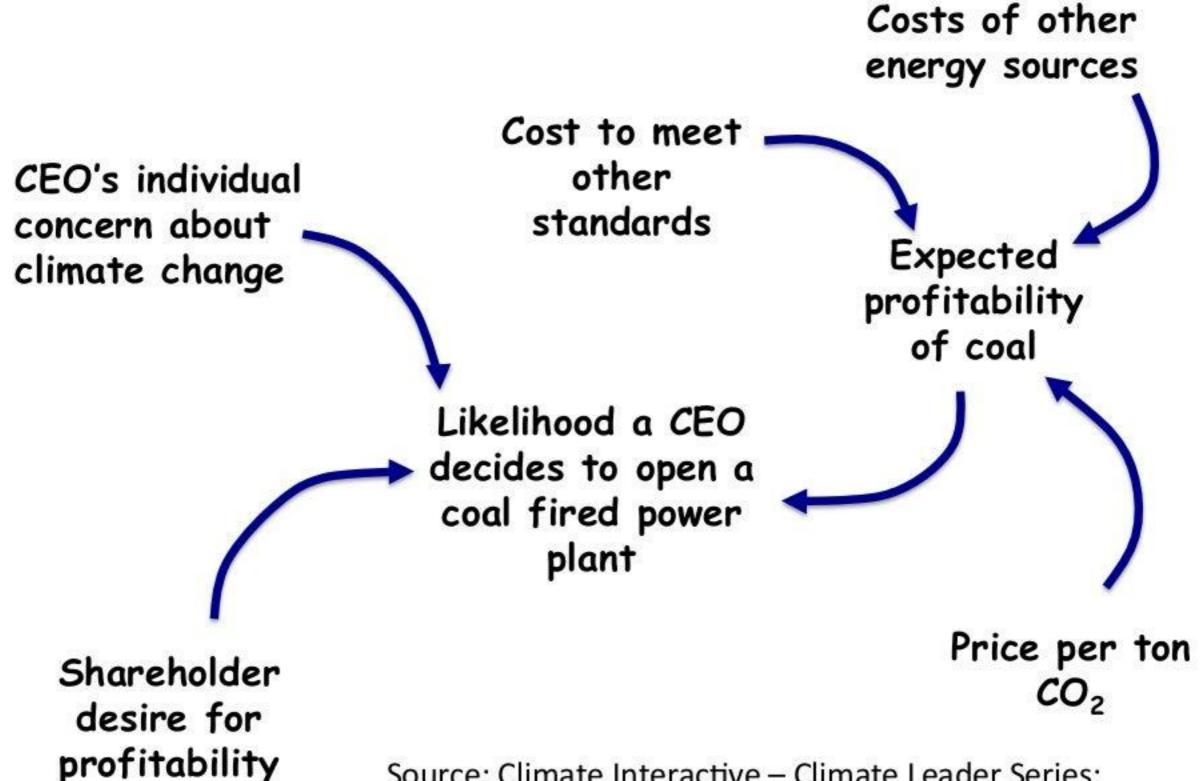








An example of system dynamics...

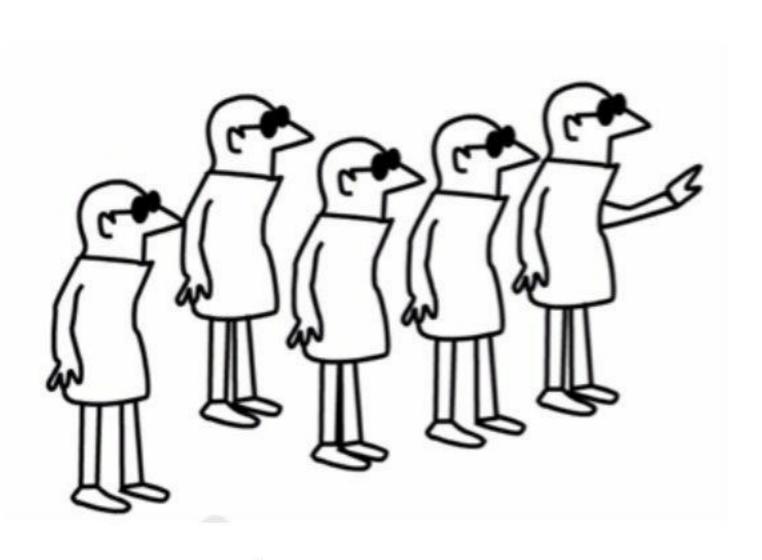


Source: Climate Interactive – Climate Leader Series; http://theclimateleader.org

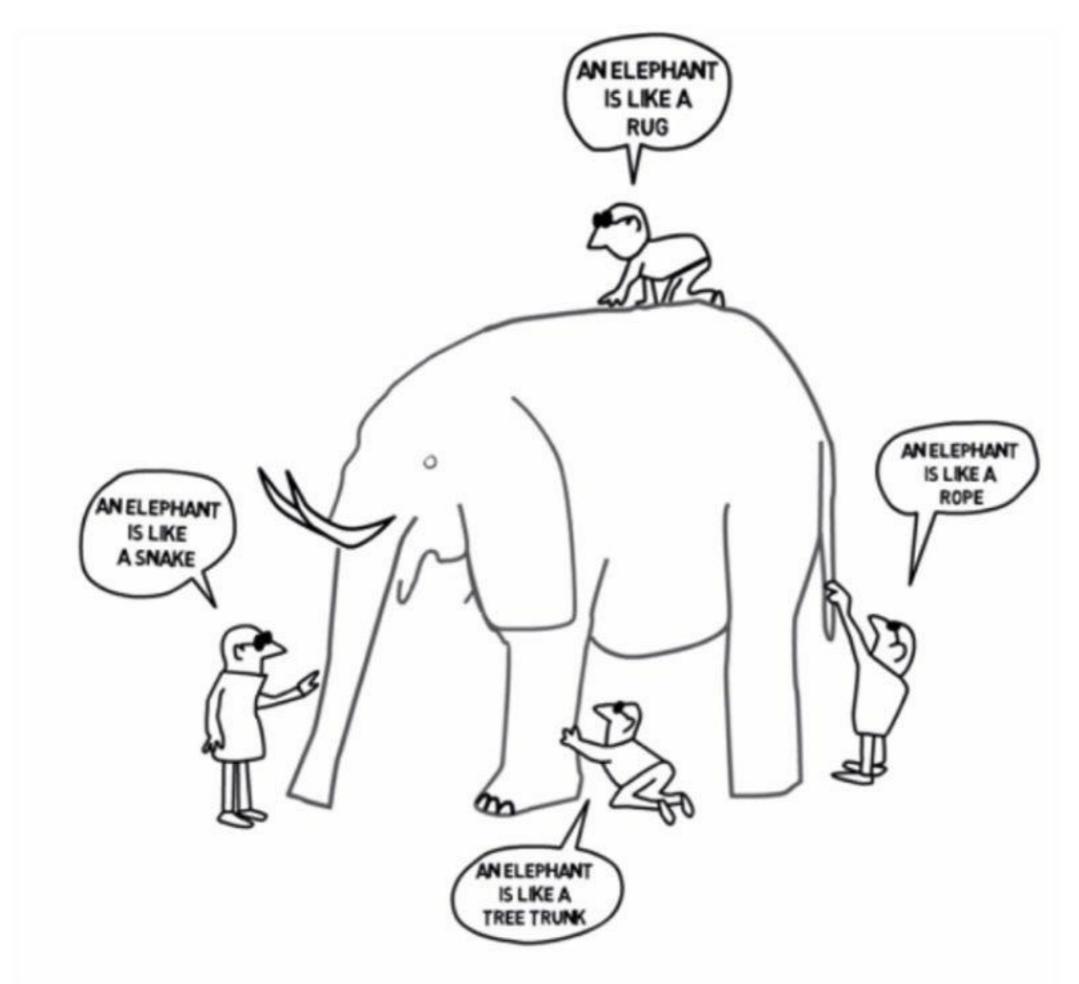
Would a new decision maker placed in the same system make a different decision?



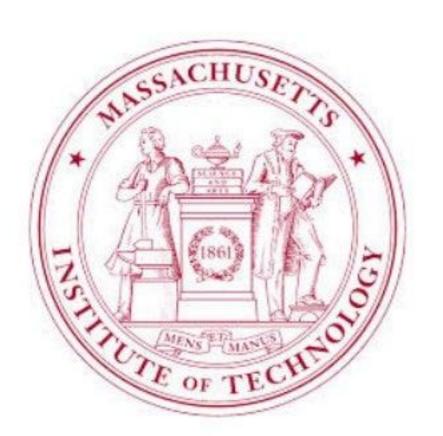
A Systems Perspective



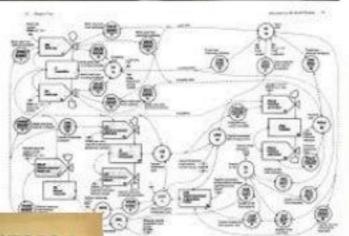




A little background on System Thinking



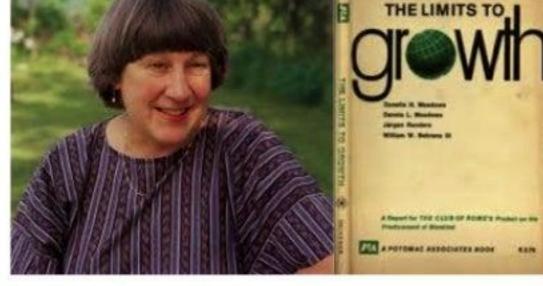




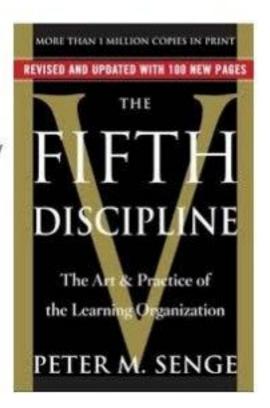




Peter Senge Senior Lecturer, Massachusetts Institute of Technology

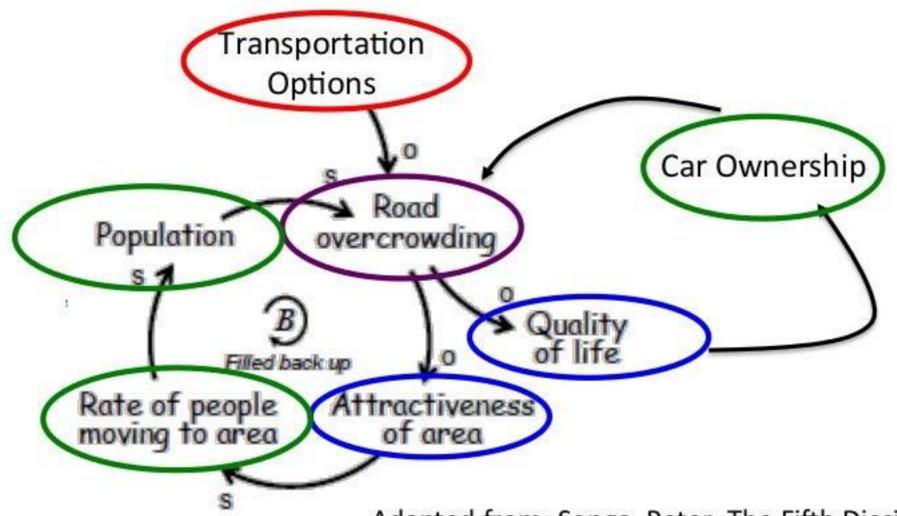






Systems Thinking helps us to . . .

. . . move the focus away from events and patterns of behavior (which are symptoms of problems) and toward systemic structure and the underlying mental models



Adapted from: Senge, Peter, The Fifth Discipline, 1996.

Systems Thinking has a Special Language

- Source
- Stock
- Flows
- Sinks
- Feedback
- Reinforcing
- Balancing
- Leverage Point