

Social Entrepreneurship & Complexity

An abstract graphic consisting of several overlapping, curved lines in various colors (red, orange, yellow, green, blue, purple) that sweep across the background of the text. The lines are pixelated and have a hand-drawn, sketchy appearance.

Social Entrepreneurship Has Complexity Science Written All Over It

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International Social Innovation Research Conference 16 September 2009

Center for Complexity and Social Entrepreneurship



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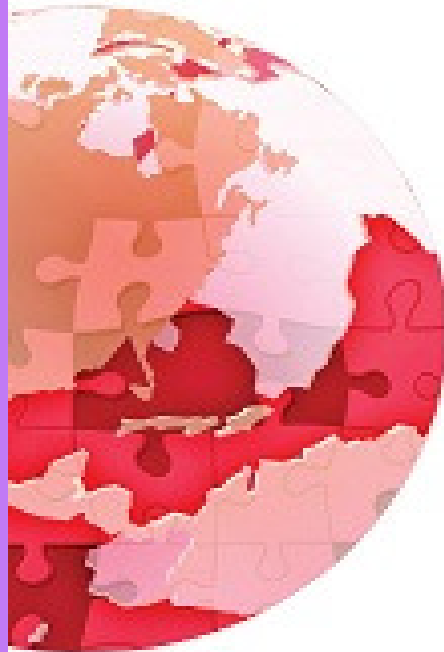
[Http://socialentrepreneurship.wikispaces.com](http://socialentrepreneurship.wikispaces.com)

Overview

- Conference, Center & Publications
- What is Complexity Science?
- Renascer – Social Networks
- A Dynamical Systems Change Model
- Case Study: Soft Systems Methodology

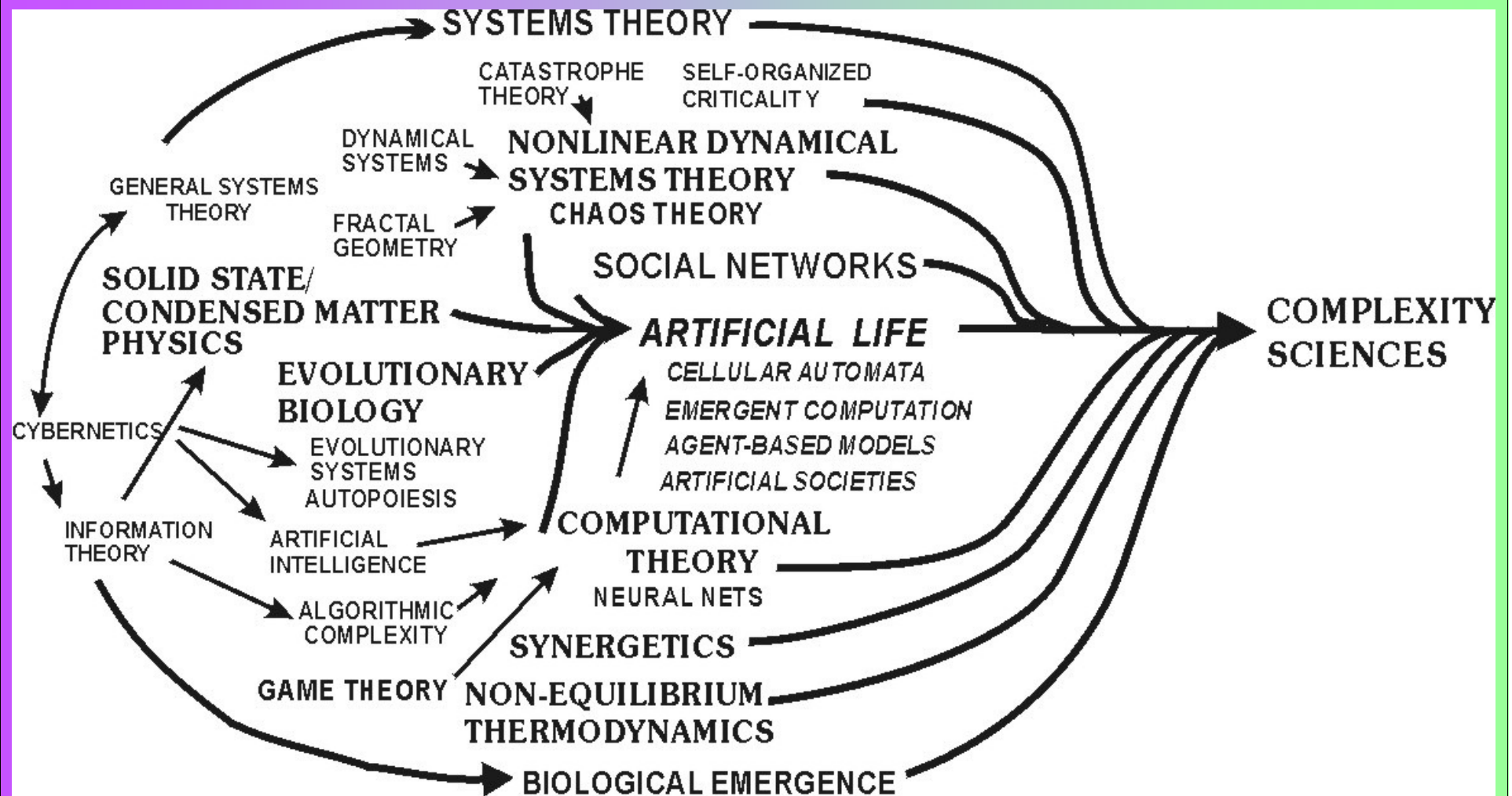
COMPLEXITY SCIENCE & SOCIAL ENTREPRENEURSHIP

Adding Social Value Through Systems Thinking



Edited by
Jeffrey A. Goldstein
James K. Hazy
Joyce Silberstang

Exploring Organizational Complexity: Volume 3



Right now it's only a notion, but I think I can get the money to make it into a concept, and later turn it into an idea.

- Woody Allen

There is nothing as practical as a good theory.

- Kurt Lewin

Why Social Entrepreneurship, Systems Thinking, and Complexity?

Associação Saúde Criança Renascer

- **1991--founded by Pediatrician Vera Cordeiro because of recidivism rate of children with same health problems; meeting with 50 colleagues**
- **Reach-out to families (mothers) in favelas re: treatment plans, medical education, antiseptic conditions; enlisted other docs, nurses, etc.**
- **Many more joined as volunteers, set-up physical location, began work inside the favelas and instituted job training and small businesses involving dress making, crafts, cooking**
- **Free nutritional supplements as incentives**
- **Funding from government, Ashoka Foundation, dues paying members, help from McKinsey Consulting**
- **Replication: scaling outwards to 14 other hospitals in Rio, Sao Paulo, and Recife. (from Bornstein, 2004)**

Success Factors in S.E. What to Emphasize?

Odilon Arantes (Head of Pediatric Ward at Hospital da Lagoa): “Here I can say with absolute assurance that the main element for Renascer’s success was Vera.”

“[Vera] acknowledged she... had brought people together, but it was their collective energy that made it all happen.” [Bornstein, p. 145]

———— **Charismatic heroic leader**

———— **Networks, Emergence,
Resonance--Complexity**

Social Entrepreneurship has Complexity Science/Systems Thinking Written All Over It

- **Innovation/Emergence**
- **Self-organization**
- **Nonequilibrium Conditions**
- **Nonlinear Dynamical Systems**
- **Networks/Graphs/Collectivity**
- **Distributed Control/Heterarchy**
- **Differences/Information Flow**

Social Entrepreneurship has Complexity Science/Systems Thinking Written All Over It

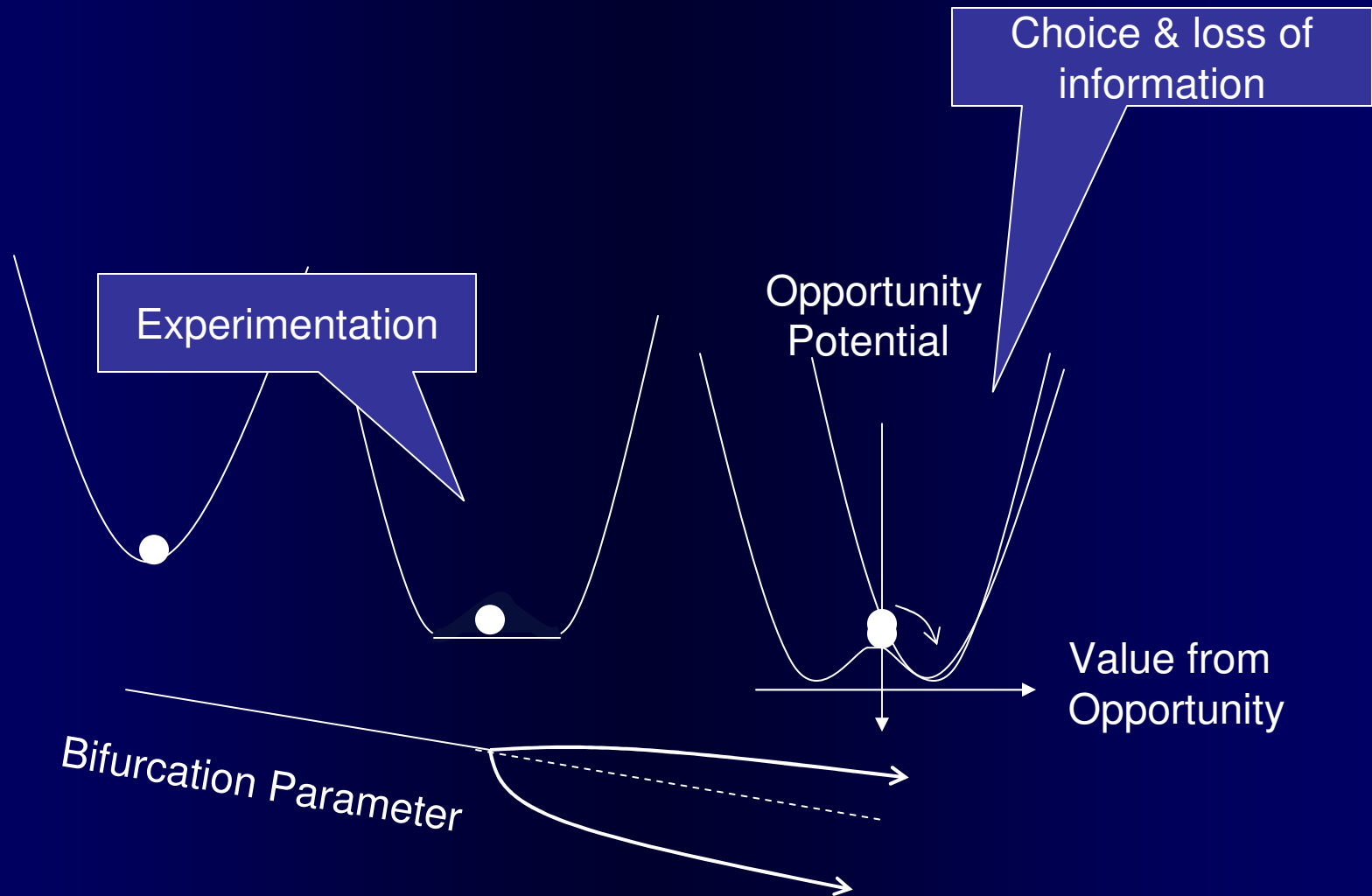
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Nonlinear Dynamical Systems

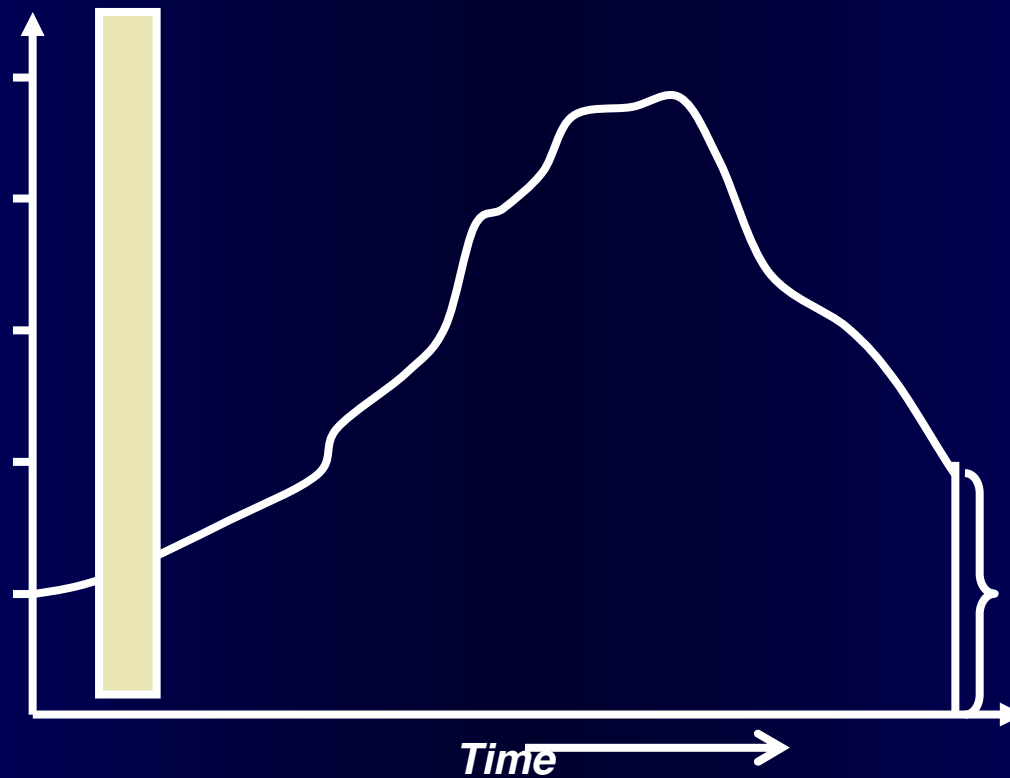
A Scalable Systemic Model of Social Change

- **Nonlinear Relationships vs Linearization**
- **Stability – Instability – Stability**
- **Constraints – Control Parameters**
- **Experiments in Novelty - Social Entrepreneurship**
- **Information Gathering and Use (Gell-Mann)**
- **Order Parameters (Haken)**
- **Social Value Creation Metrics**
- **Social Innovation & Social Reordering**

The Dynamics of Change



Information Available from Experimentation

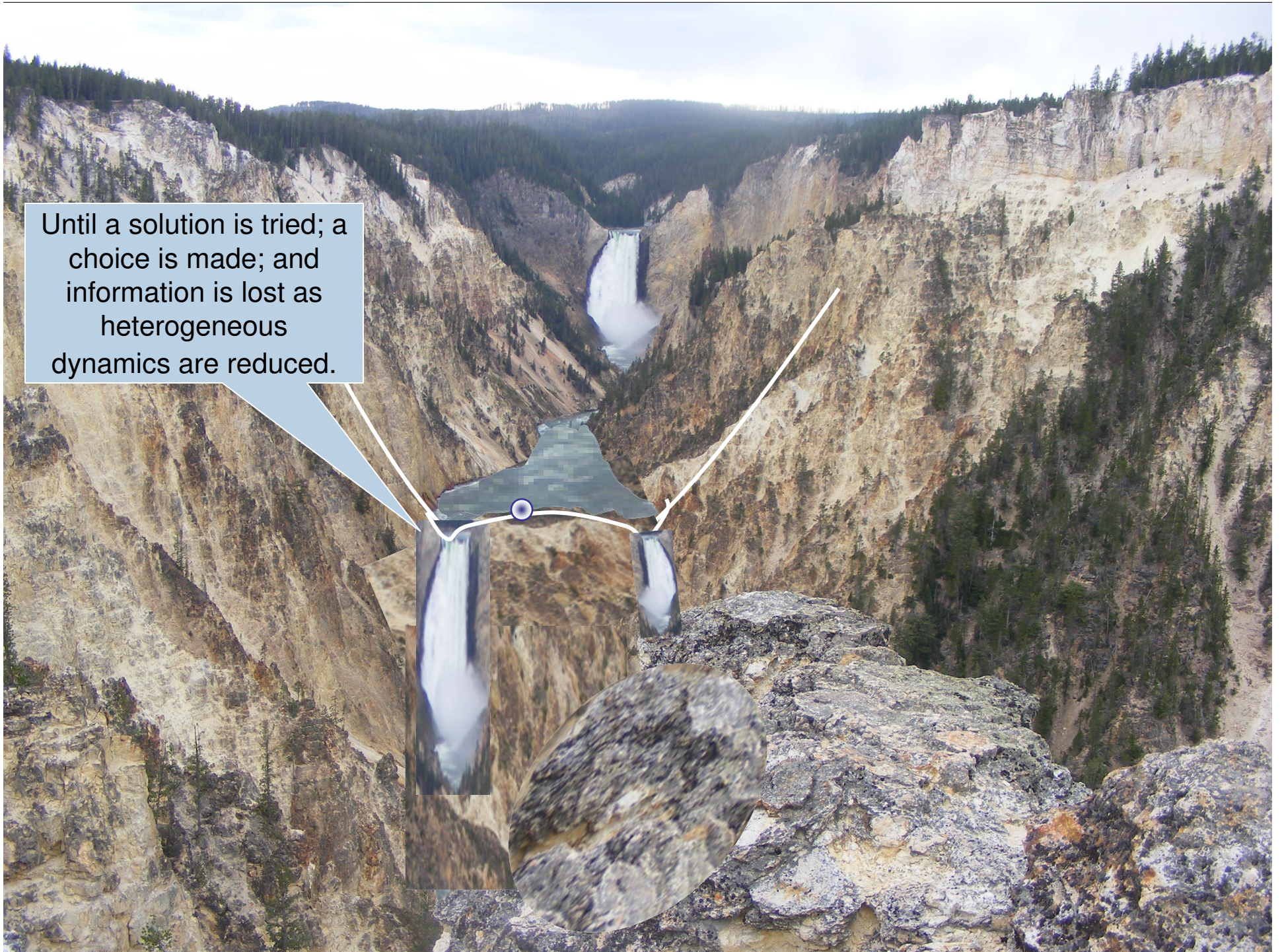




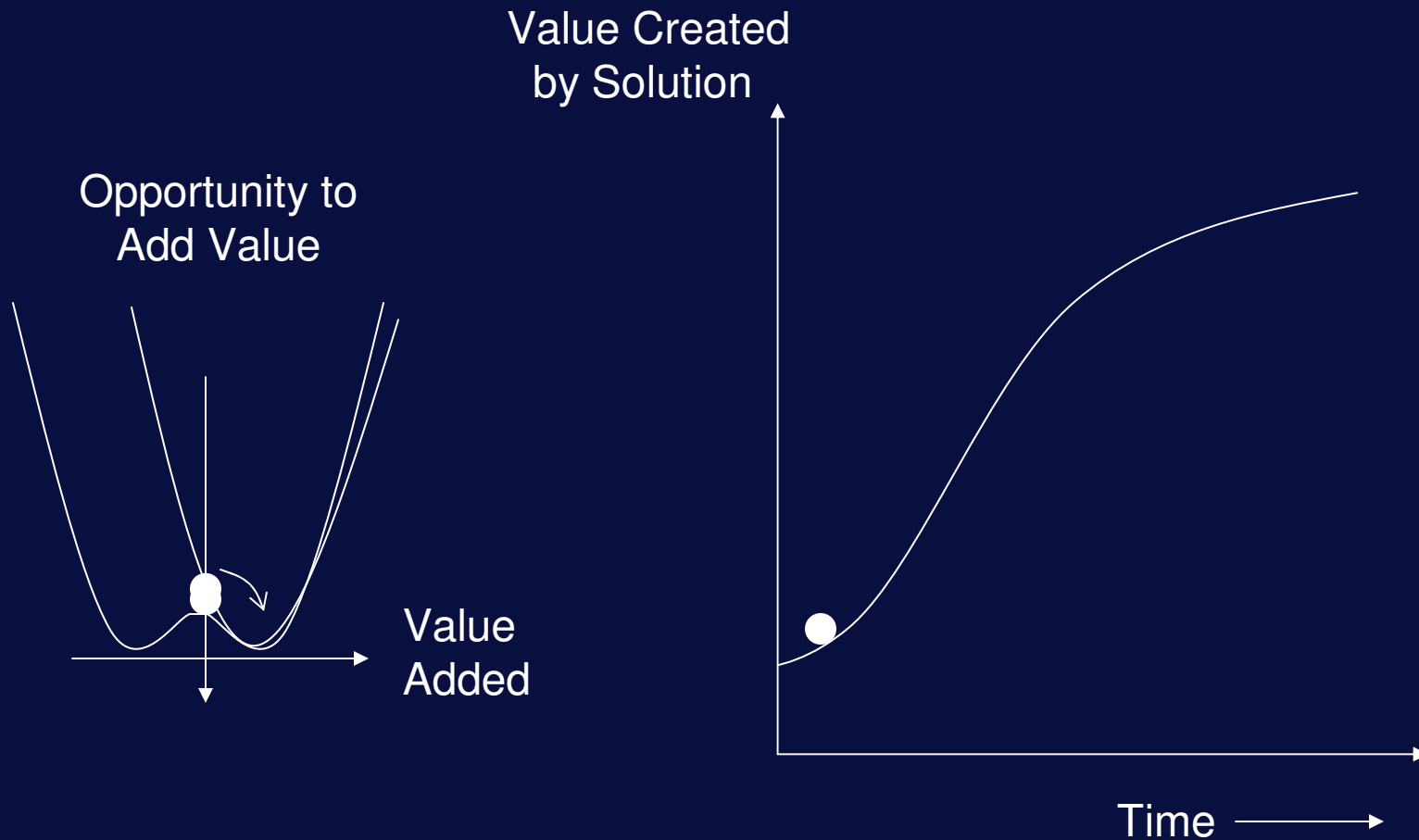
This leads to heterogeneous dynamics (experiments) & an increase in information which increase instability



Until a solution is tried; a choice is made; and information is lost as heterogeneous dynamics are reduced.



A Solution Finds a Groove & Takes Off!

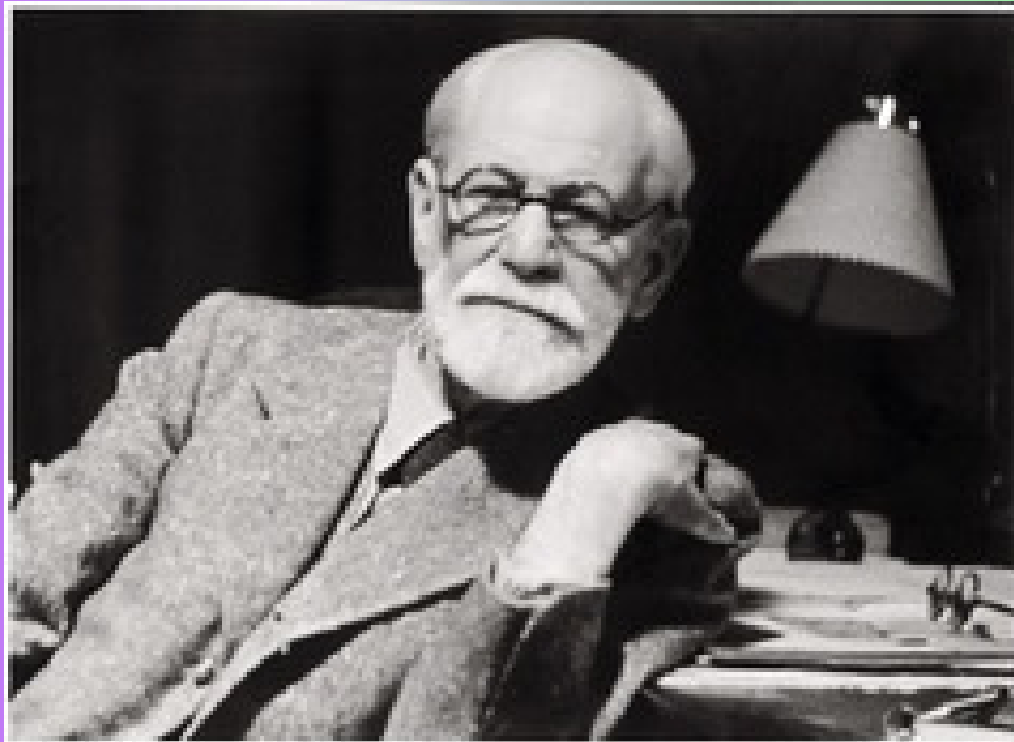


... and a new future is created

Social
Innovation
Reordering



Looking Beyond the Obvious



Generating Positive Social Outcomes

A Case Study of Applying SSM in Community Revitalization



Gail Faherty, Doncho Petkov, Richard Staron, Eric Martin & Mike France

*Complexity Science & Social Entrepreneurship: Adding Social Value
Through Systems Thinking*

Soft Systems Methodology

- Brought in stakeholders usually excluded from the process
- Included and encouraged multiple perspectives

Translating Theory Into Action

- The result
 - Development of overall vision for downtown
 - Master Plan of Conservation and Development
 - Creation of alternate housing
- The result
 - Expanded information rich social networks
 - Emergence of new structures and dynamics
 - Dynamical model to replicate further efforts

Conclusions

- “Social Entrepreneurship has Complexity Written All Over It”
- Social Innovation Demands New Ways of Thinking
- Complexity offers Useful Conceptual and Practical Tools