



# Tipping Towards Sustainability

Social Innovation in linked social-  
ecological systems

*The challenges now facing adaptive ways of  
dealing with novelty and uncertainty are not  
scientific or methodological, but institutional,  
organizational, behavioral, and political –  
C.S. Holling*

Frances Westley  
Waterloo Institute for Social  
Innovation and Resilience



# The Central Question


- Can we find innovative solutions to the linked, intractable social and ecological problems we are confronting?
- A report of emerging frameworks for understanding how social innovation occurs in complex adaptive systems.



Human capacity to innovate is undeniable. But our faith in the “technical fix” may be misplaced

# **INNOVATION CAN DO AS MUCH HARM AS GOOD.**

Lane et al. 2009



Innovation has unanticipated consequences and our ability to predict these is weak particularly at the level of complex systems (Homer Dixon, 2000)

- Biomass technology=

*Decrease in food security, biodiversity, human rights*

**11. Technological Governance:** Recognizing that the new tools of biomass transformation such as synthetic biology are just part of a suite of powerful new technologies at the nano-scale that have vast applications for the economy and the environment, governments meeting at Rio+20 should adopt a negotiating process that will lead to a legally-binding International Treaty for the Evaluation of New Technologies (ICENT). This treaty should allow for the monitoring of major new technologies by governments and all affected people.

Etc. Group, 2010

# Our institutions do not encourage or reward private sector innovation for sustainability

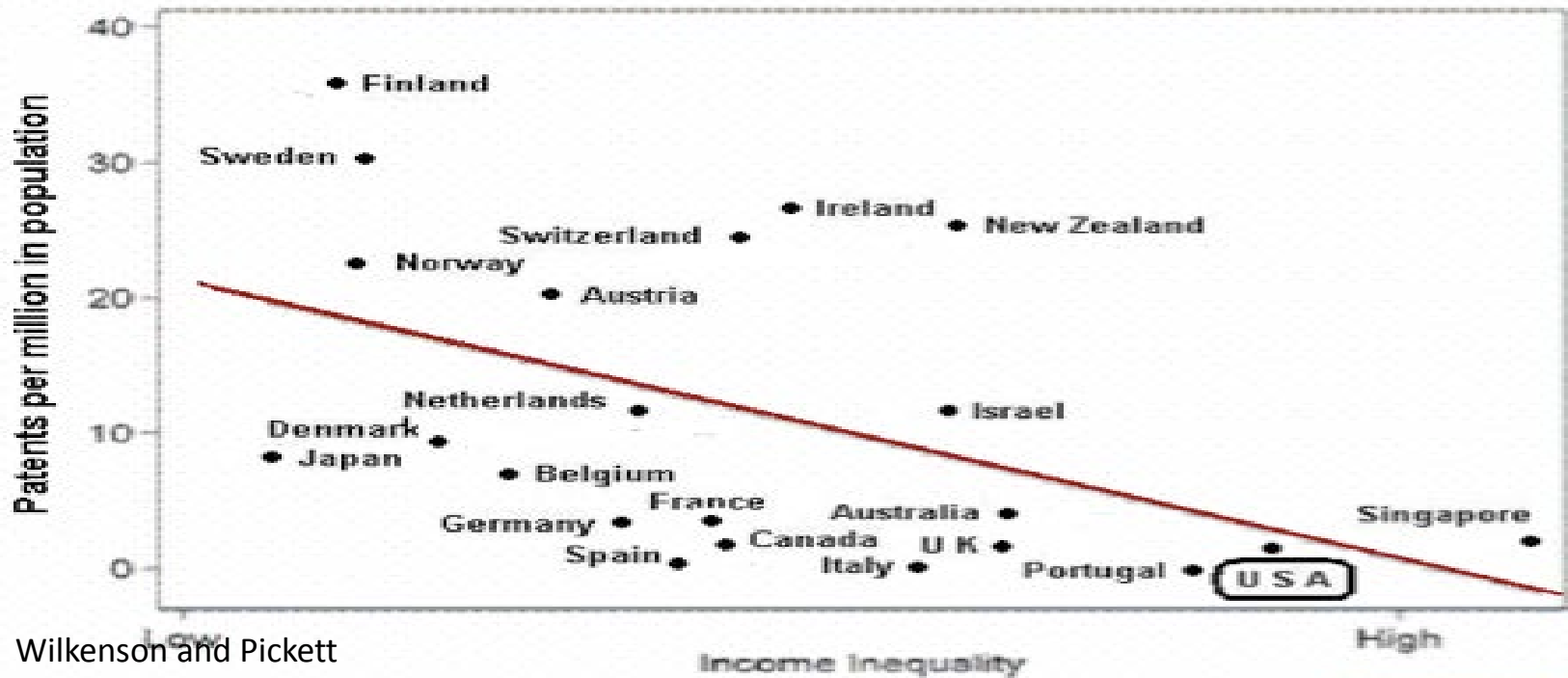
(Hall and Vredenburg, 2003)

- On the Folly of Rewarding A, While Hoping for B
- by: [Steven Kerr](#)
- *The Academy of Management Journal*, Vol. 18, No. 4. (December 1975), pp. 769-783.



# There is a tension between our individual desire for ever increasing standard of living and the social capacity for innovation it requires

More equal societies are more innovative



Wilkenson and Pickett

*The Spirit Level (2009)*

[equalitytrust.org.uk](http://equalitytrust.org.uk)

Equality Trust



What complexity science tells us about radical innovation and transformation in complex problem domains

**BUT INNOVATION IS ALSO  
OUR HOPE**

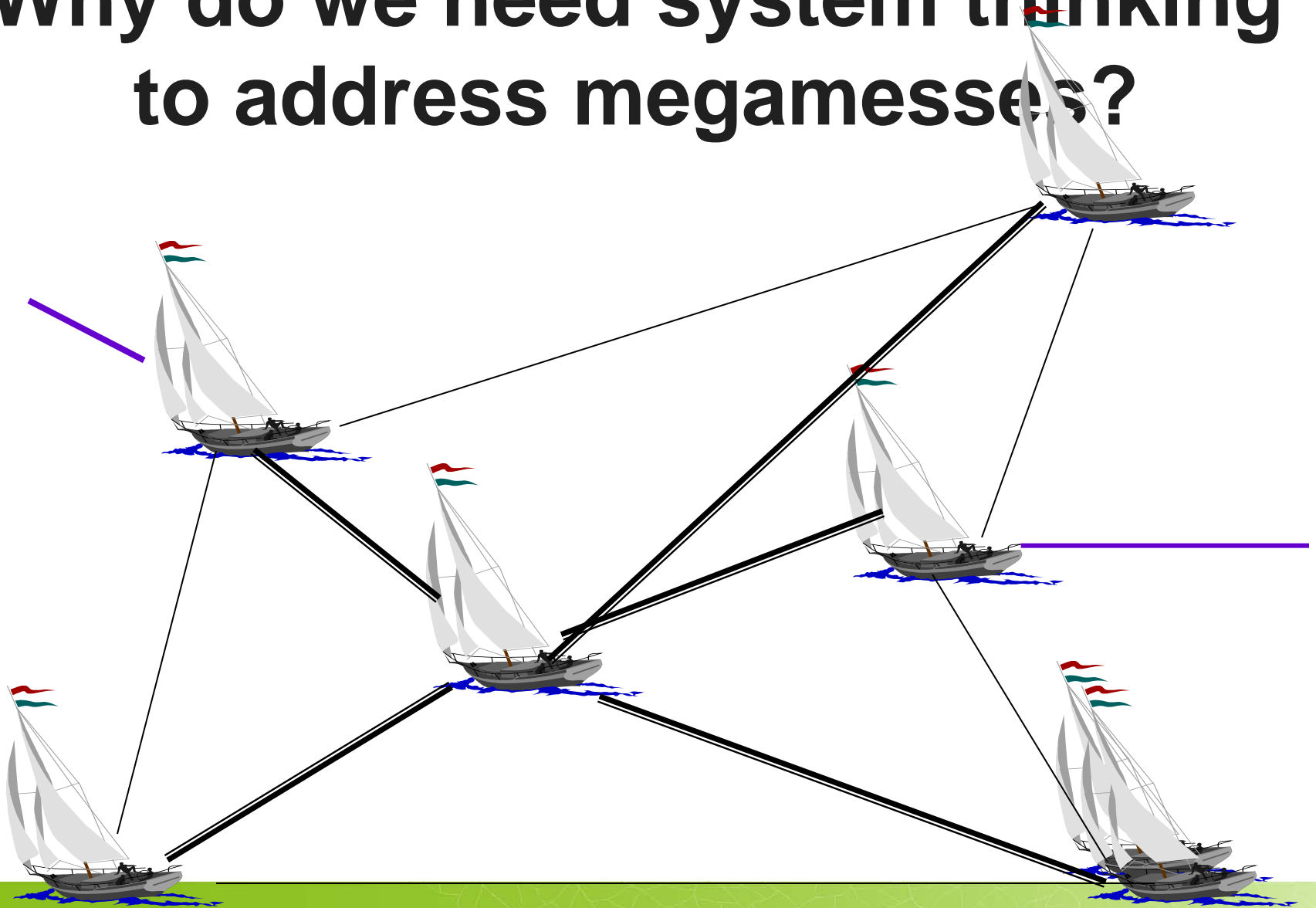


## Mega-Crises and Mega-Messes





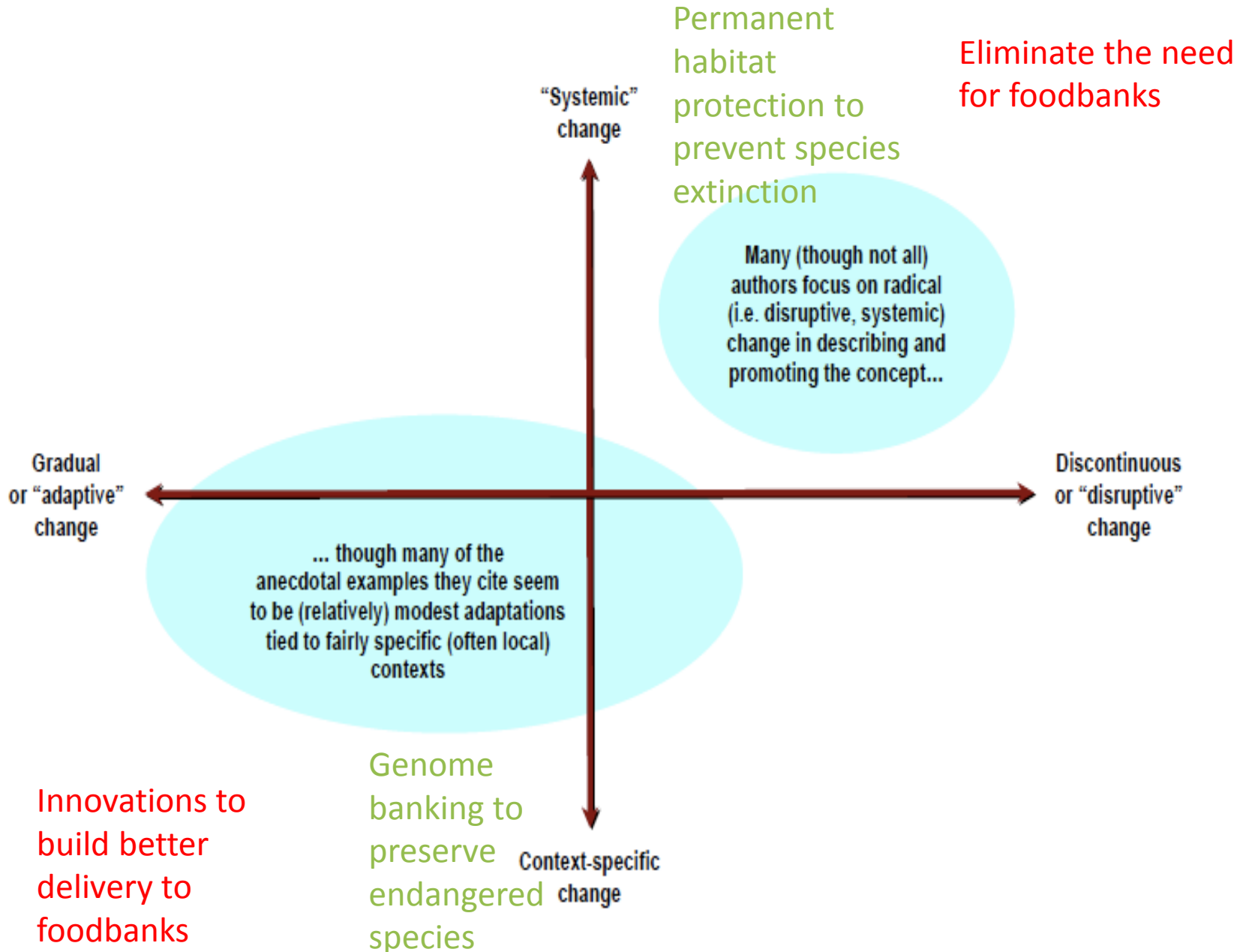
# Why do we need system thinking to address megamesses?



# *Changing the system dynamics that created the problem in the first place*

**A social innovation** is any initiative, product, process, program or design that challenges and, over time, changes, the defining *routines, resource and authority flows or beliefs* of the broader social system in which it is introduced. Successful social innovations have durability, scale and transformative impact.

# What constitutes a social “innovation”?



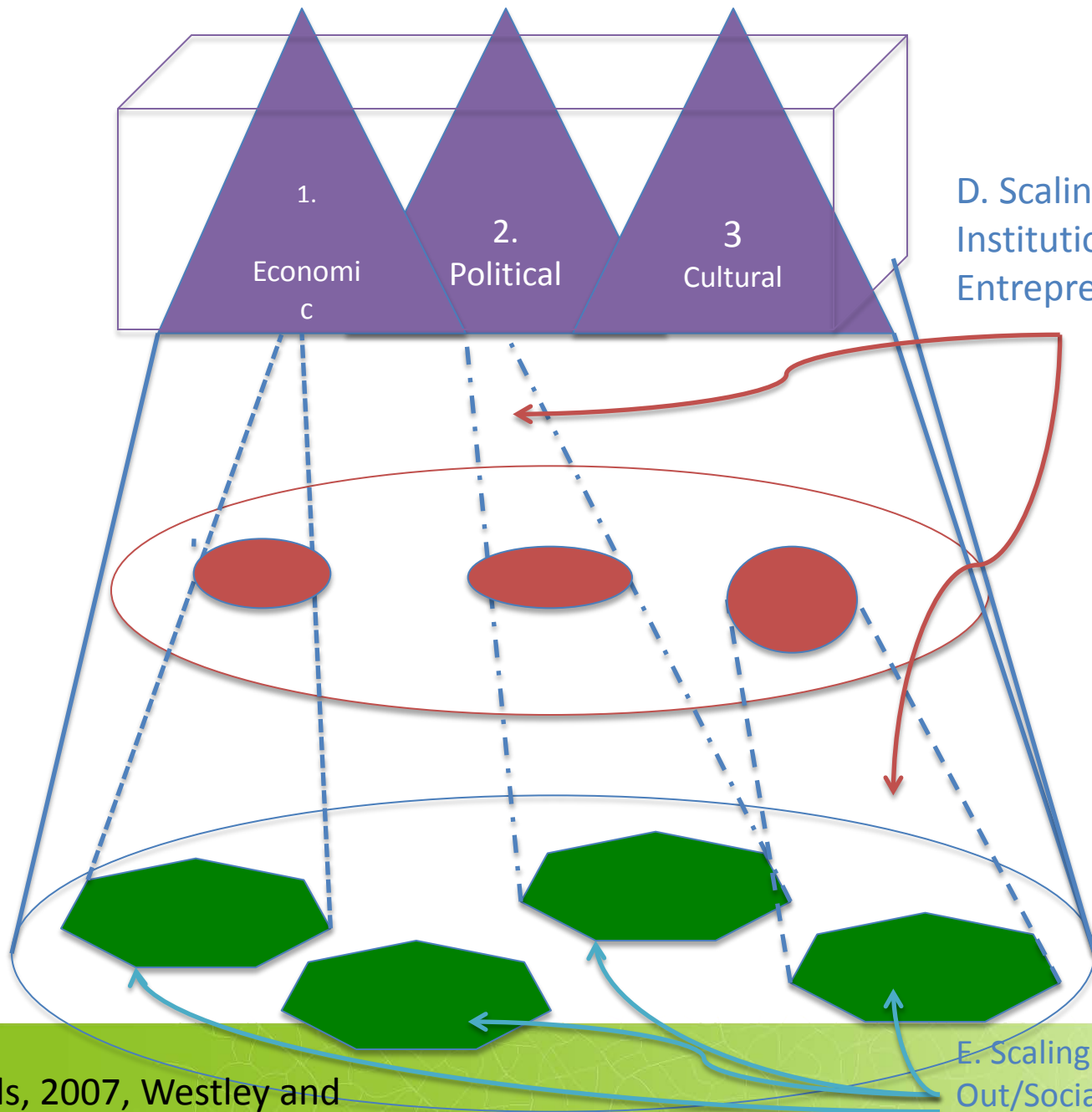
A. Institutional landscape

B. Problem domain/regime

C. Innovation niche/regime

D. Scaling Up - Institutional Entrepreneurs

E. Scaling Out/Social entrepreneurs



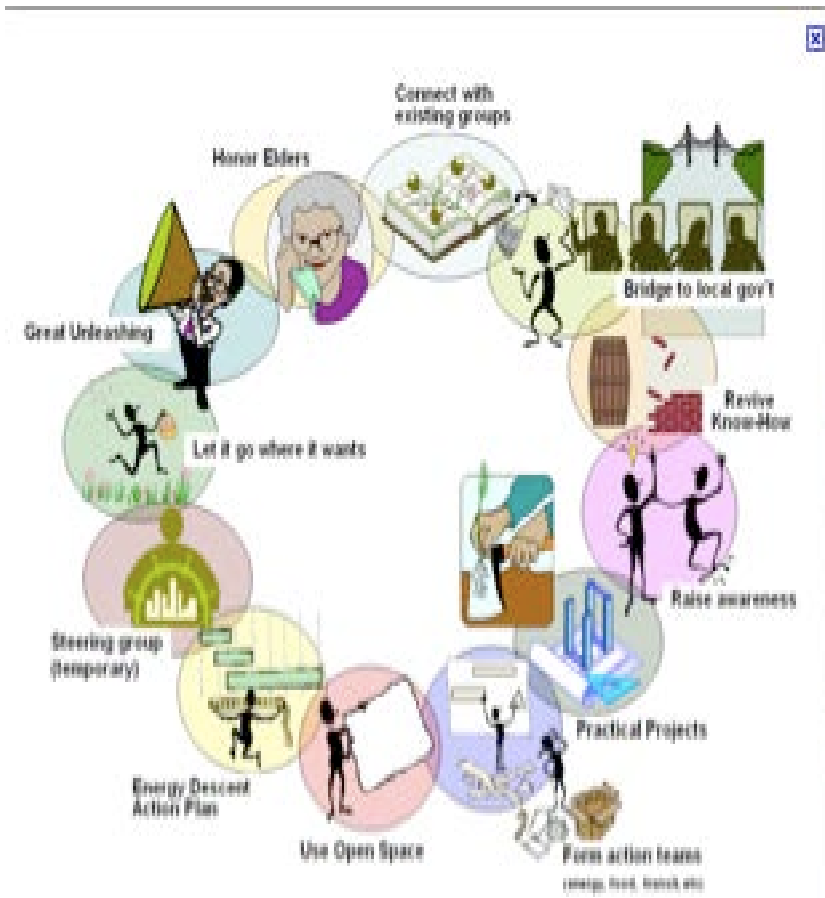
Giddens, 1976; Geels, 2007, Westley and Antadze, 2011; Olsson et al. 2006; North 1990

# Risk of taking only a top-down policy solution perspective



Lambin E.F. and P. Meyfroidt. 2011.

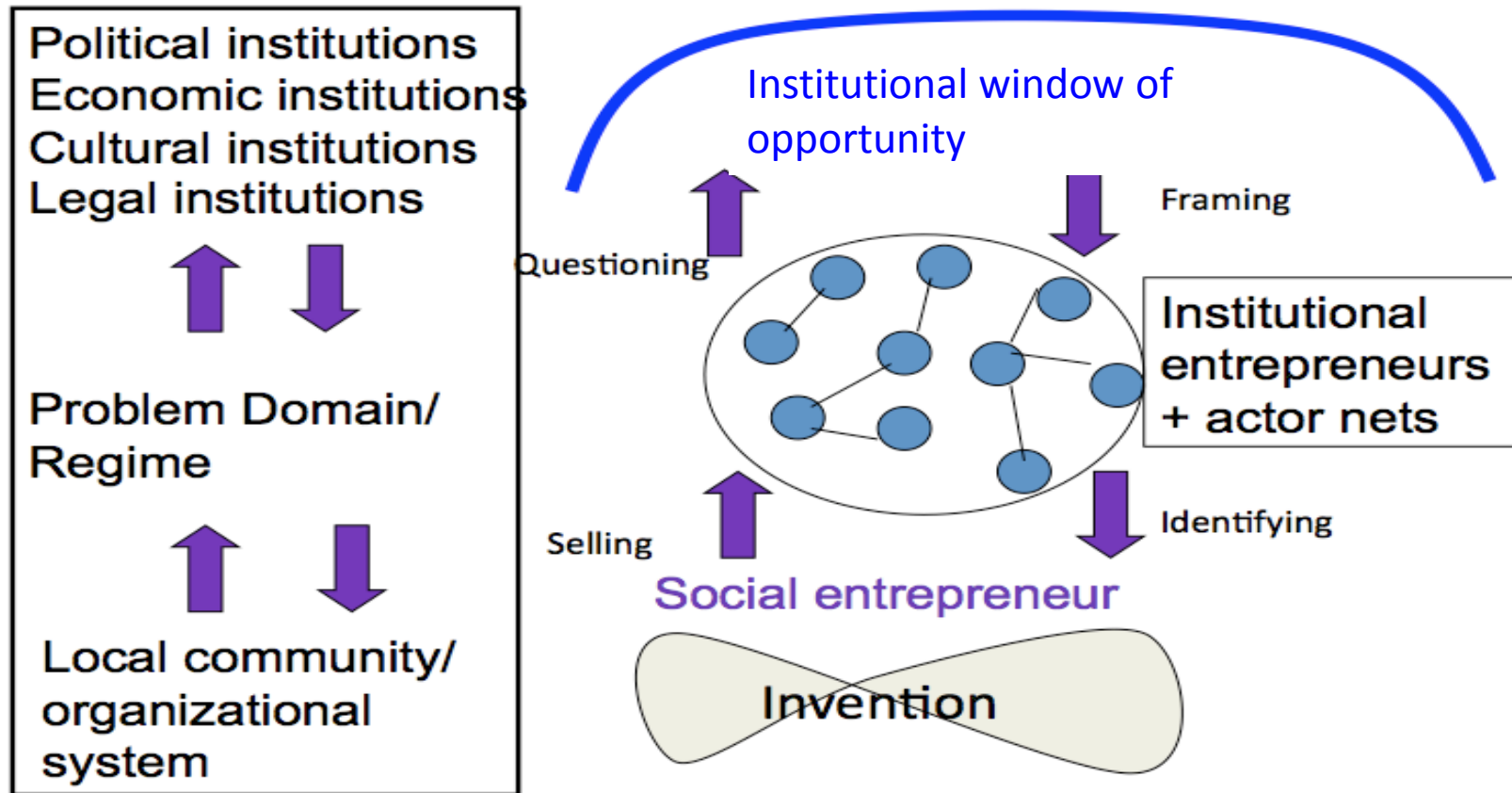
# Risk of counting on bottom up emergence alone: the Transition Town Movement



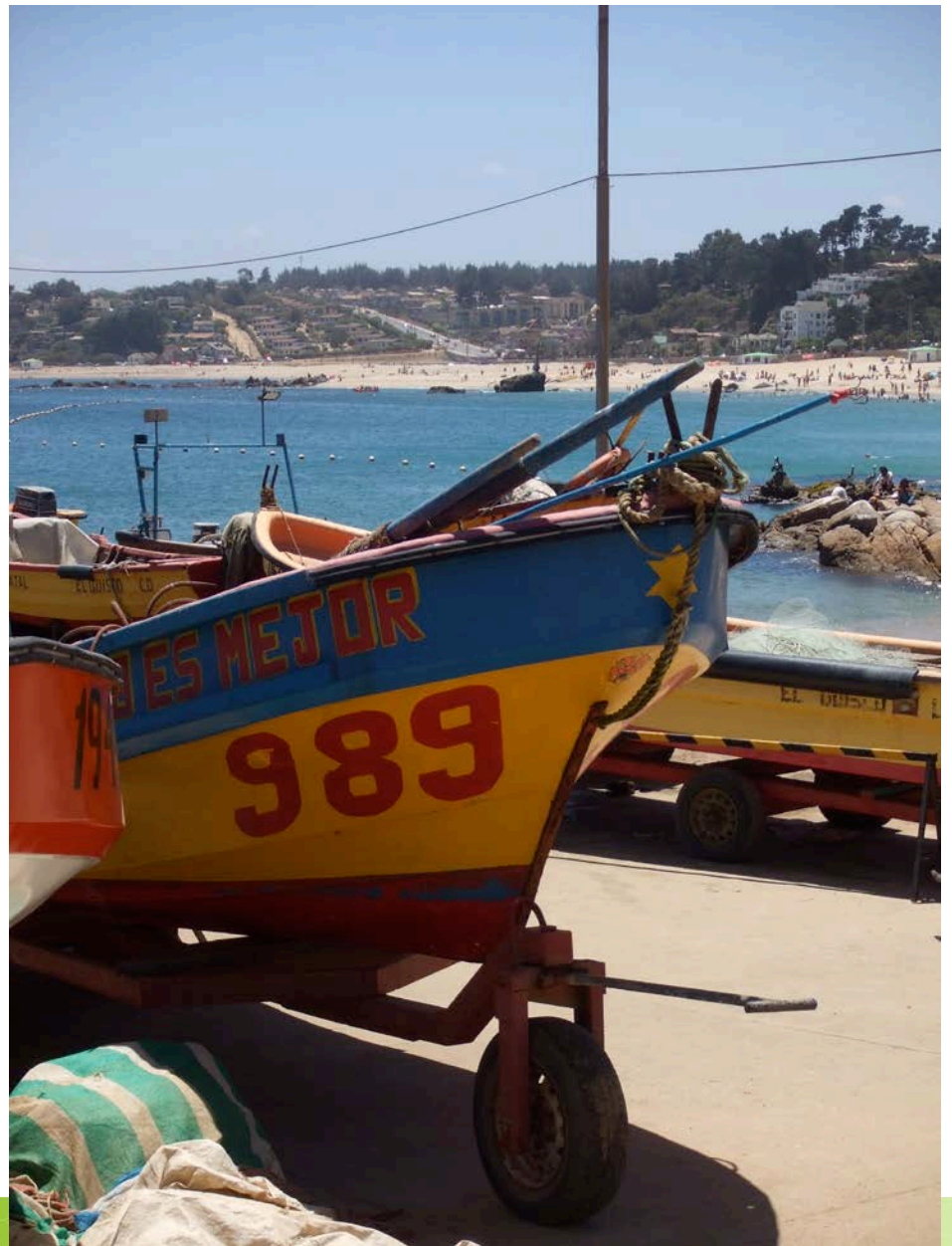


# **CONNECTING THE TWO: INNOVATION AS AN UP-DOWN PROCESS**

# The central role of opportunity and of agency









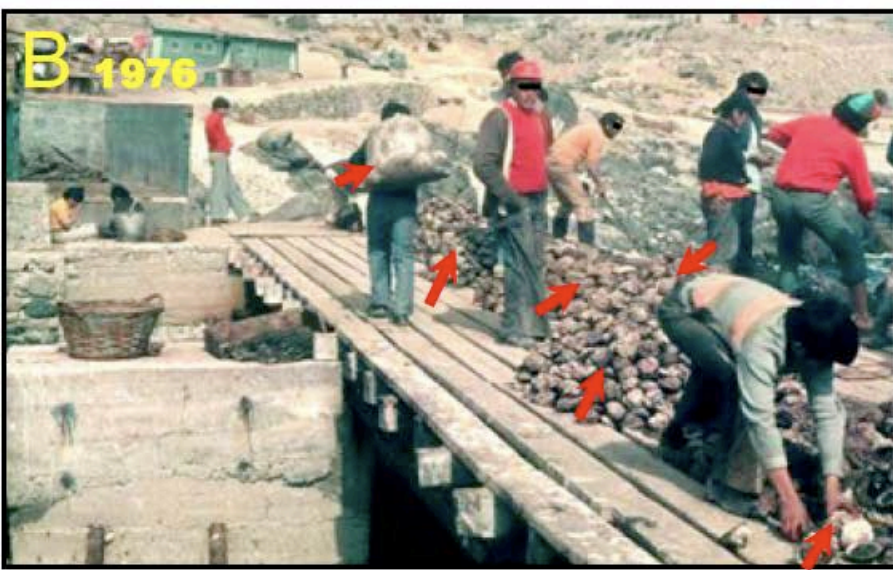
**A 1981**



**C 2009**



**B 1976**



**D 2003**

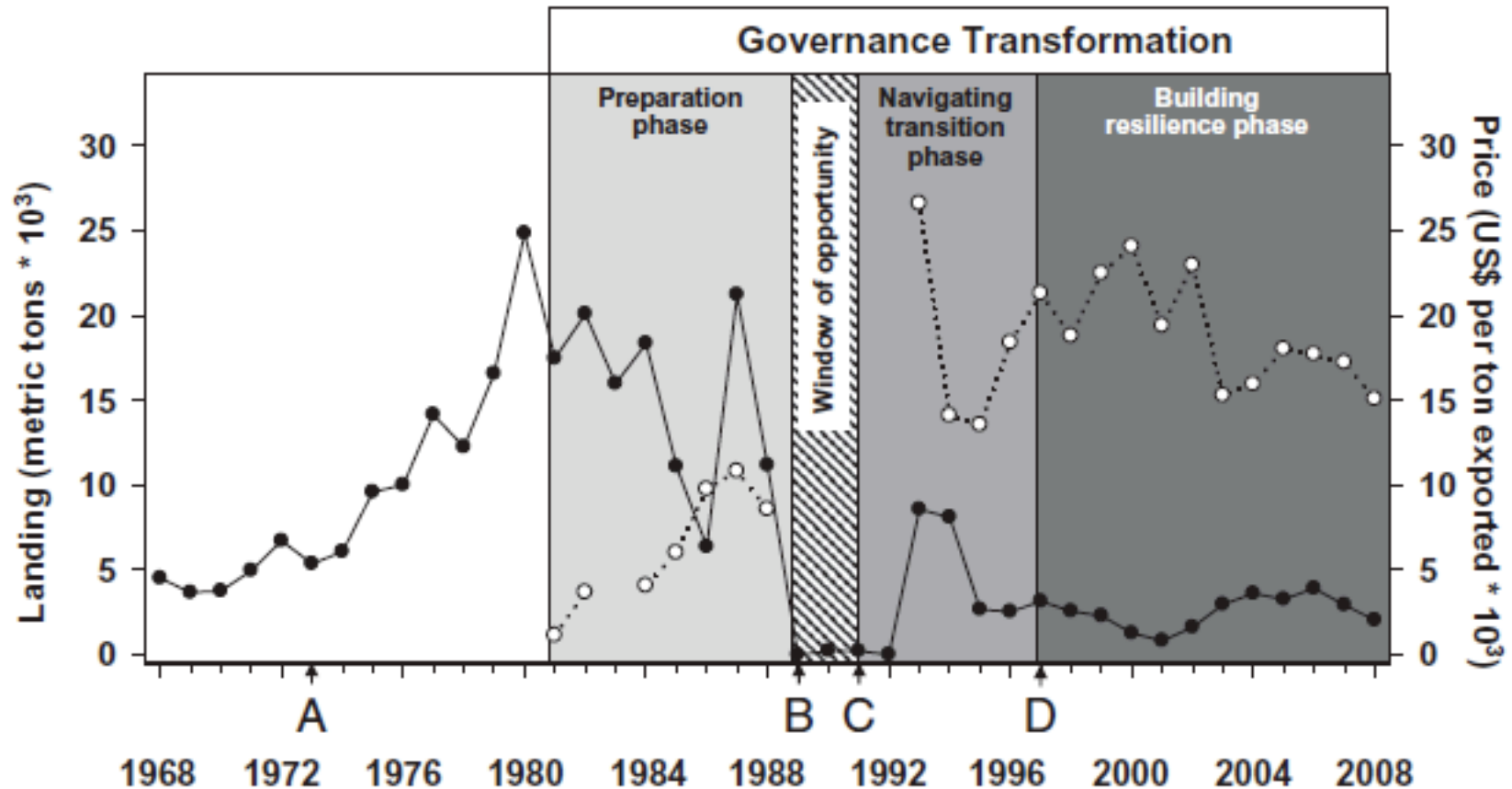


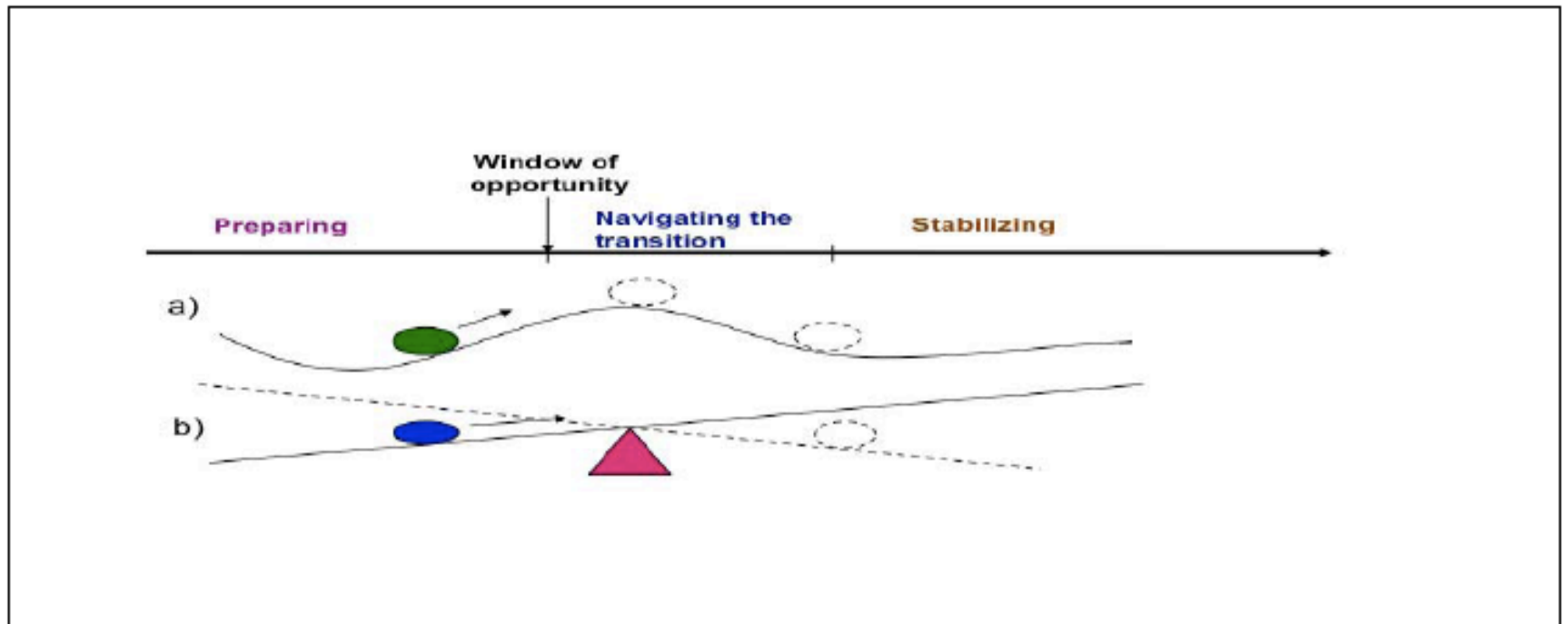
**Less desirable social-ecological system**

**More desirable social-ecological system**

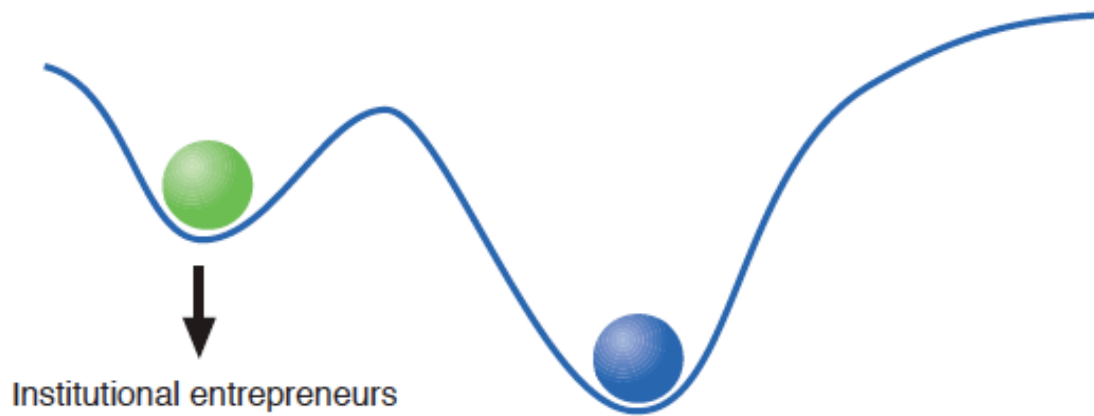


# Navigating transformations in governance of Chilean marine coastal resources



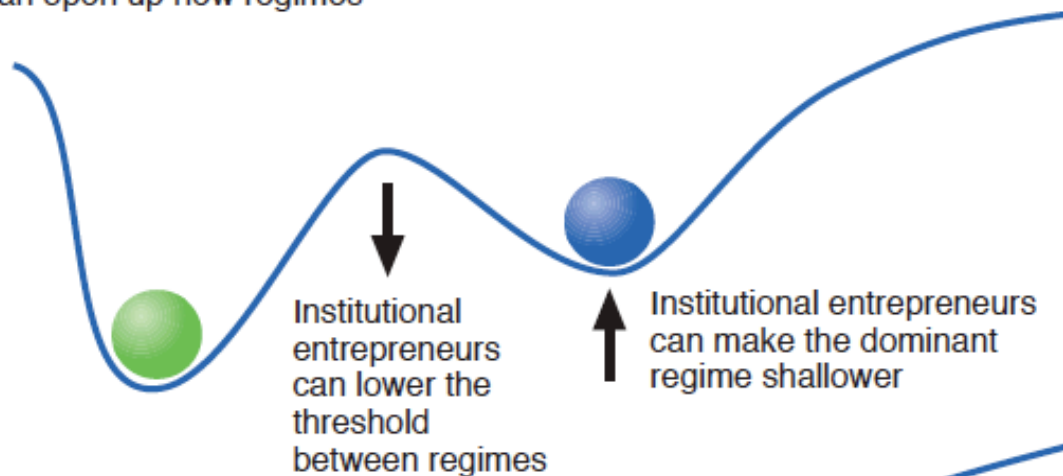


*Figure 5: Three identified phases of a social-ecological transformation – preparing for transformation, navigating the transition, and building resilience of the new direction. A window of opportunity links the first and second phases. The transformation is illustrated in two ways: a) as a regime shift between multiple stable states, passing a threshold or b) as a tipping point (adapted from Olsson et al 2010).*



Institutional entrepreneurs can open up new regimes

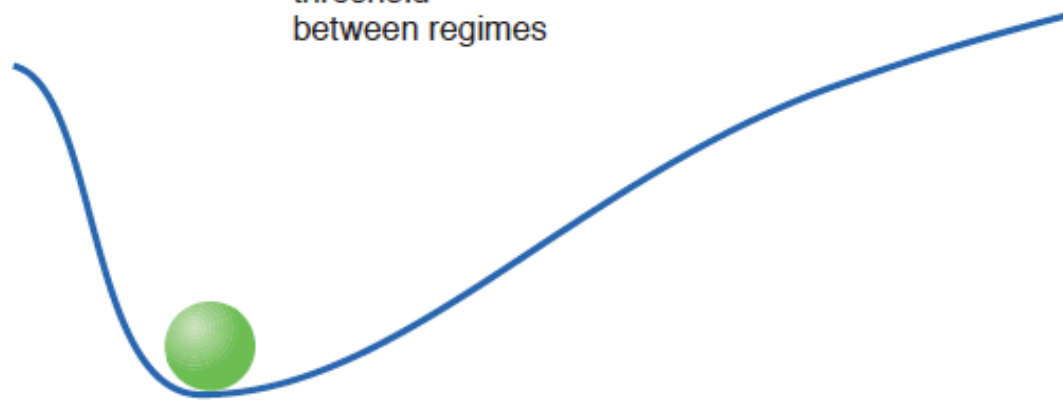
TIME 1 – Innovation regime (left) is shallow and unstable, dominant regime (right) is deep and stable.



Institutional entrepreneurs can lower the threshold between regimes

Institutional entrepreneurs can make the dominant regime shallower

TIME 2 – Innovation regime's basin of attraction is deeper and more stable, dominant regime's basin becoming shallower and less stable



TIME 3 – Innovation regime's basin of attraction is deep and stable; resources of previous dominant regime now drawn into innovation regime to create a transformed system

# Example . Plan Canada and the RDSP

- *“Every innovation has two parts: the first is the invention of the thing itself; the second is the preparation of expectations so that when the invention arrives it seems both surprising and familiar -something long awaited” Edwin Land*
- The social innovators +
- The institutional entrepreneurs



## Registered Disability Savings Plan

*everything you wanted to know about the RDSP...*

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## Impact, Durability and Scale

- How can the processes and values of PLAN become part of the 'water supply'?



- How can alterations of culture, practice, policy and funding contribute to structural change?



# RDSP

Registered Disability Savings Plan

[Get updates on the RDSP Blog](#) | [Signup for PLAN's free telephone seminar on the RDSP](#)

## RDSP

Registered Disability Savings Plan

## SECURING THE FUTURE

[HOME](#) | [WHAT IS IT?](#) | [HOW DO I QUALIFY?](#) | [WHERE DO I GET IT?](#)

[RDSP CALCULATOR](#) [DOWNLOAD v1.0](#)

The Registered Disability Savings Plan is a savings plan designed specifically for people with disabilities in Canada. The first of its kind in the world, this new tax-deferred savings vehicle will assist families in planning for the long - term financial security of their relatives with disabilities.

### WHAT IS IT?

Find out everything you need to know about the new Registered Disability Savings Plan.

### HOW DO I QUALIFY?

Find out how to qualify and set up a Registered Disability Savings Plan.

### WHERE DO I GET IT?

Find out where to get a Registered Disability Savings Plan and how it affects your Federal and Provincial Disability Benefits.

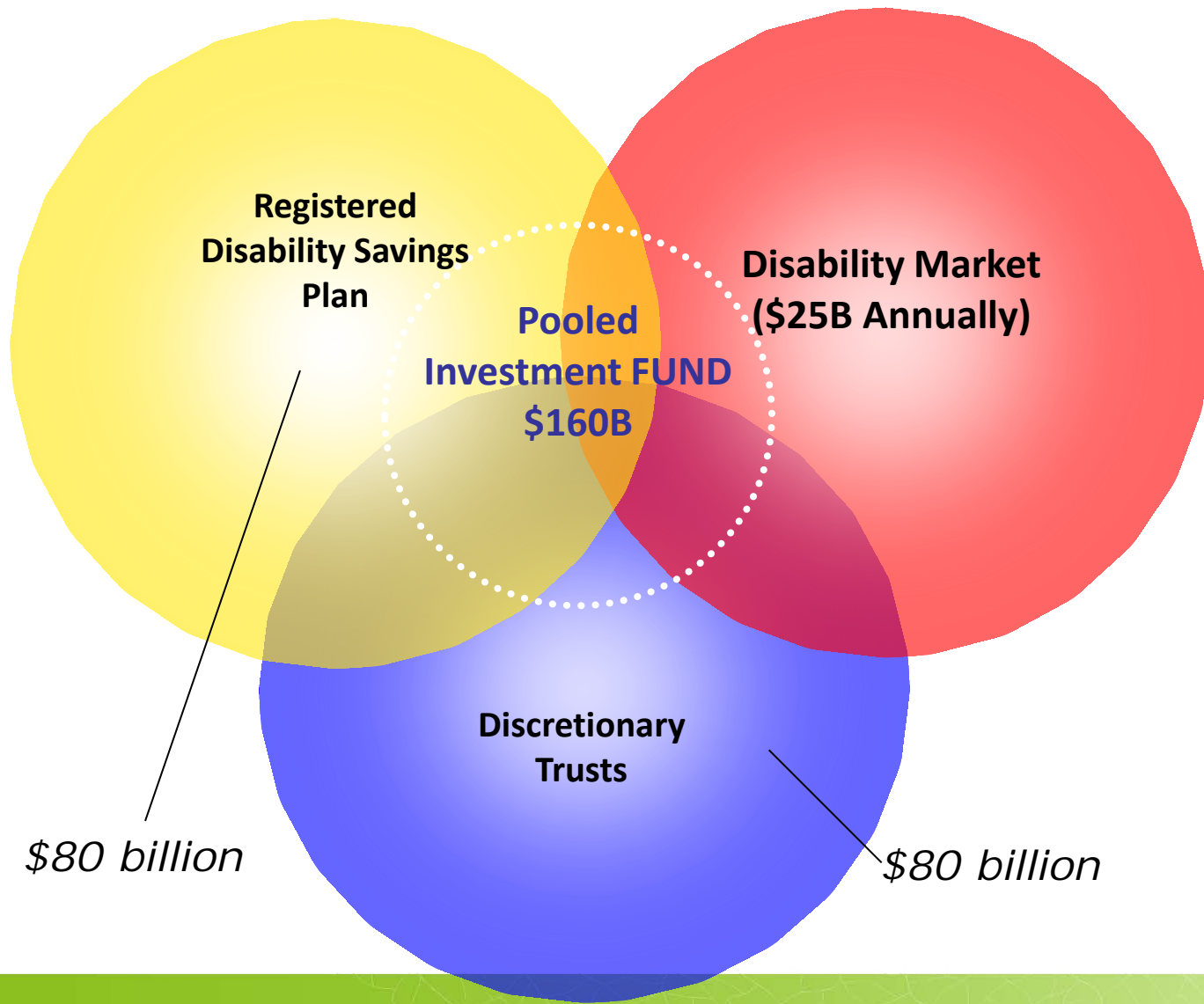
TO GET UPDATED  
RDSP INFORMATION

**JOIN PLAN  
FOR FREE**



## Registered Disability Savings Plan

- Impact: 800,000 individuals and families
- \$200,000 lifetime contribution limit
- Matching Disability Savings Grant
- Disability Savings Bond for low income
- Disability Benefits implications:
  - Raise asset limit
  - Eliminate claw back
- Opens space for new set of innovations



**Registered  
Disability Savings  
Plan**

**Disability Market  
(\$25B Annually)**

**Pooled  
Investment FUND  
\$160B**

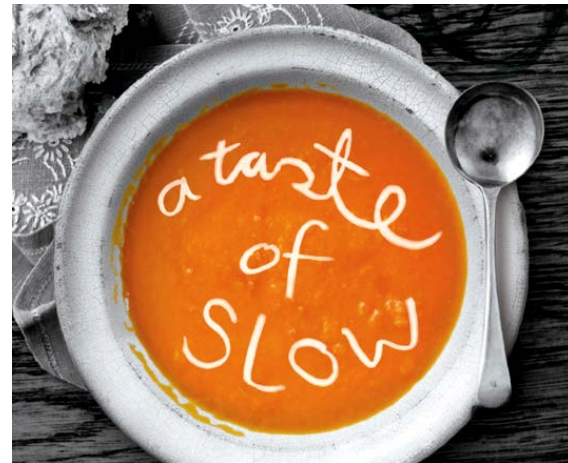
**Discretionary  
Trusts**

*\$80 billion*

*\$80 billion*

# Thinking and Acting Like a Movement

- Multiple actions, time frames, scales and levels of engagement
- Commitment to multi-sectoral collaboration
- Self-organizing



# Framing

- Creative framing and sharing of ideas, processes, people and resources
- Codifying - systematizing
- Making it easy to do the right thing



# Utilizing Market Forces

- Understand economic and social assets of constituency
- Influence the operational practice of business
- Access new sources of capital



# In sum: social innovation

- Is more than the viability and survival of an innovation, organization or coalition
- Means being intentional about:
  - Structural, institutional, systemic and legislative change
  - Cultural and attitudinal shifts

# Building Capacity for “Scaling Up”

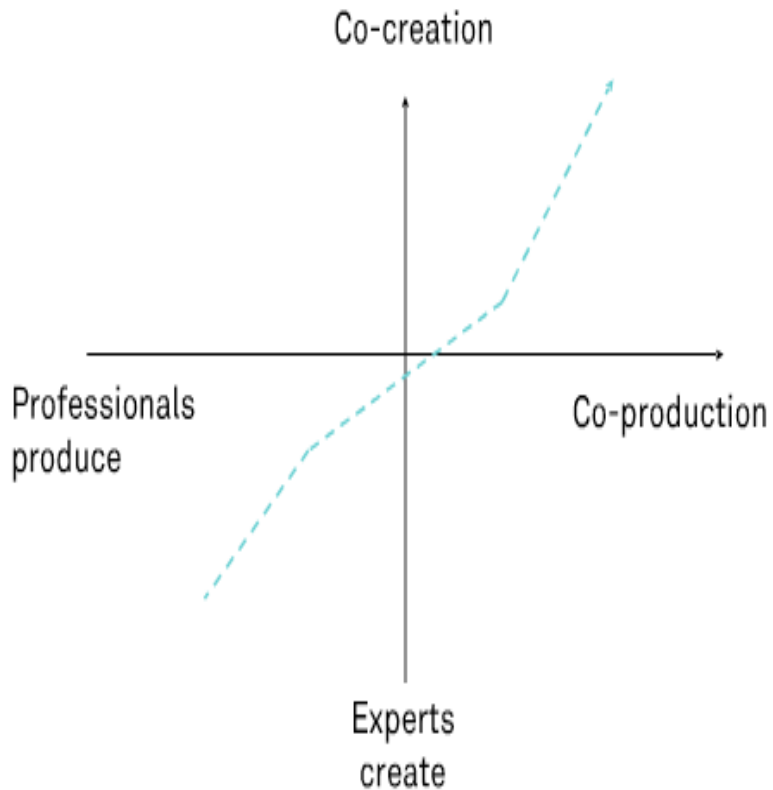
- Continuous refinement of system understanding and identification of leverage points
- Building partnerships with those with system change experience
- Finding and creating resources for escalating change
- Building a movement for change: changing and refining definitions and motivations
- Strategic conversations to bring elements together at higher institutional levels, while concentrating the essence
- Identifying opportunities to leapfrog, taking advantage of the emergence of tipping points and opportunities



$$E.D. = Q \times A$$

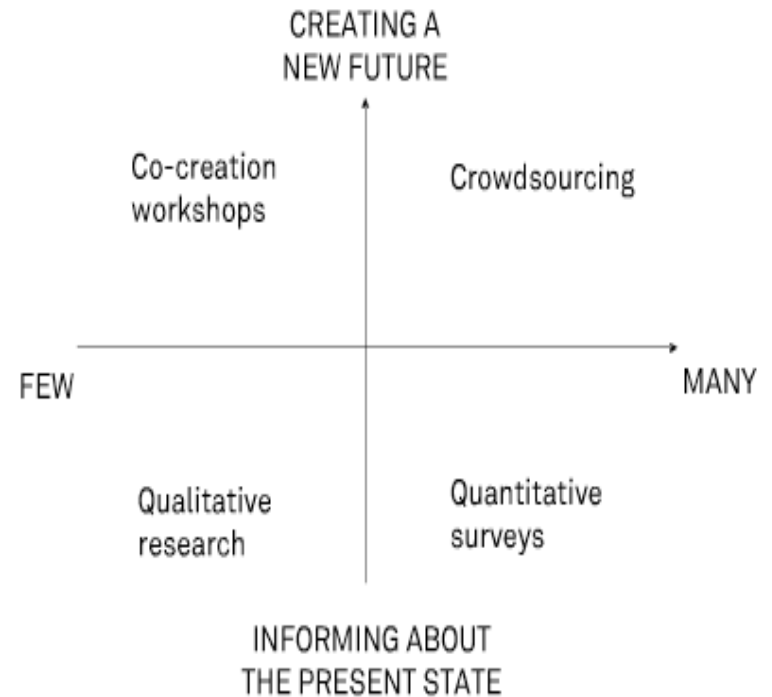
MIND  
LAB

Co-creation can enable co-production



MIND  
LAB

Forms of citizen involvement





Precise



Bold



Elitist

Olafur Eliasson; The Weather Project

*We are scientific and technological revolutionaries and institutional and political conservatives*

- Charles Leadbeater