

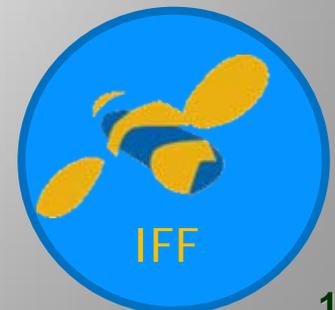
# Is Resilience Enough?

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International Futures Forum



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Glasgow Centre for Population Health  
The Lighthouse, Glasgow



# Why is Resilience Important?

## Topics

- The Real Challenge of Disruptive Change
- Who's Taking It Seriously?
- What Resilience Teaches Us
- The Lesser Risk *and* The Greater Risk
- Resilience Cuts Across Everything
- Grasping the Whole – the IFF World Model
- Engaging with the Whole – The IFF World Game
- Guiding Principles for Resilience 2.0

# The Real Challenge of Disruptive Change

## ■ Synchronous Failure

- "In coming years, our societies won't face one or two major challenges at once ....they'll face an alarming variety of problems all at the same time"

Thomas Homer-Dixon *The Upside of Down*

## ■ The Canyon

- "The job of the Transition Generation is to get humanity through the canyon with as little mayhem as possible into what we hope will be smoother water beyond."

James Martin *The Meaning of the 21<sup>st</sup> Century*

## ■ Beyond Control

- "The complexity of the world considerably outweighs human response capacity".

Professor Raoul Escpeco *Address at the UK Systems Society 2009*

# The Risks of a Brittle Society

- Disruption of highly interconnected infrastructure
- “just in time” becomes “right out of stuff”
- Emergency services become the biggest emergency
- People expect “the authorities” to fix the impossible
- Society rapidly runs out of options

# Who's Taking It Seriously?

## Civil Contingency Planning

### UK Civil Contingencies Act 2004:-

- Duty to assess, plan and advise
- Keeping of a risk register
- Help local businesses with continuity
- Manage role of media

# Who's Taking It Seriously?

## Grass Roots Movements

### ■ Transition Movement

- The idea behind transition towns is simple: if you have no faith that governments will take meaningful action on climate change and "peak oil", then you can come together as a community to do something about it.

### ■ Relocalisation

- Relocalisation is a complementary alternative to globalisation which provides us with the means to choose which aspects of our lives we will source locally and which parts we feel confident to trust to multi-national commerce. Relocalisation is both a protection from the fragility of globalisation and an opportunity to create robust and diverse local economies.

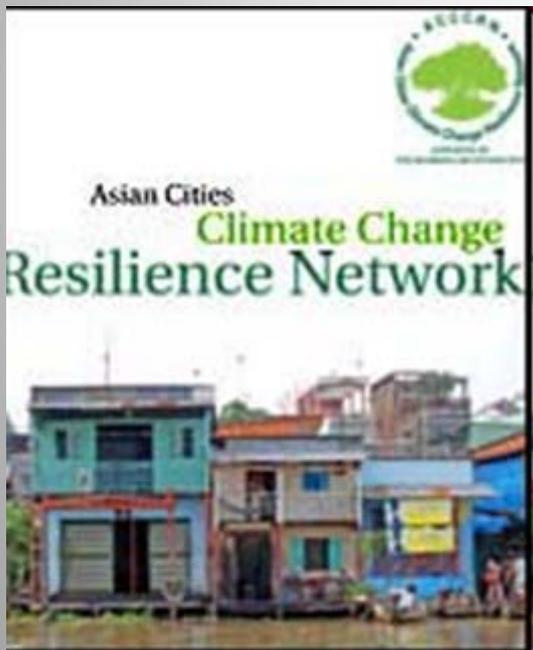
# Who's Taking It Seriously?

## The US Council on Competitiveness

- “It is undeniable that the world has gotten more risky. Businesses now function in a global economy characterized by increasing uncertainty, complexity, connectivity and speed.....- a challenge that demands resilience: the capability to survive, adapt, evolve and grow in the face of change.”

# Who's Taking It Seriously?

## The Asian Cities Climate Change Resilience Network

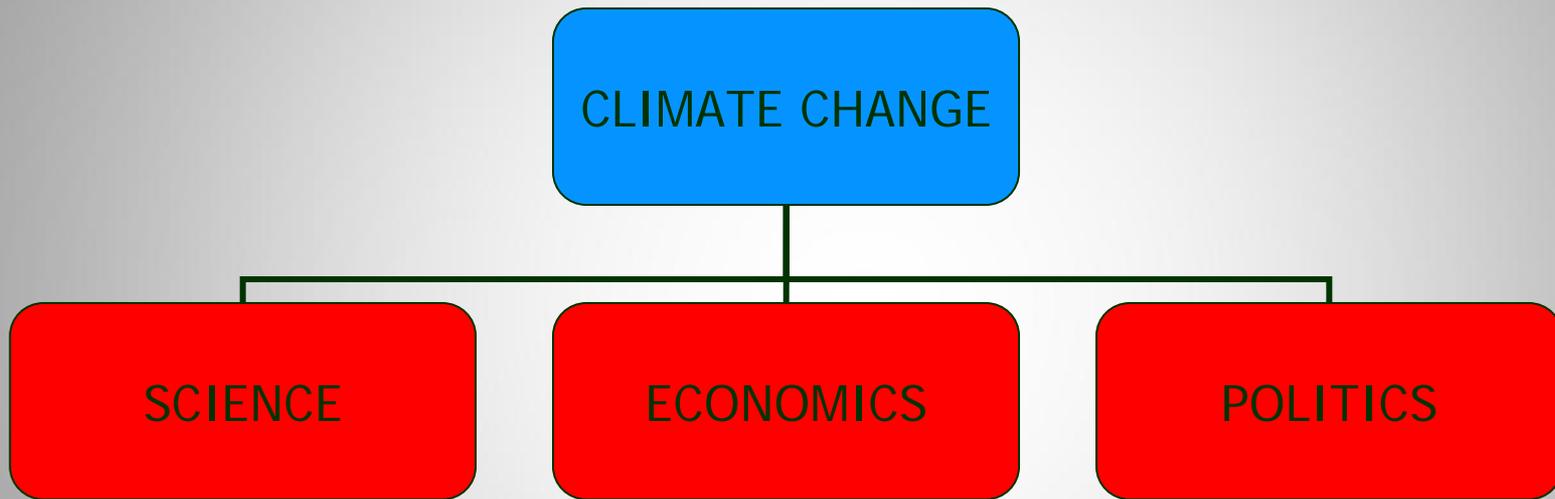


Aims to catalyze attention, funding, and action on building climate change resilience for poor and vulnerable people by creating robust models and methodologies for assessing and addressing risk through active engagement and analysis of various cities.

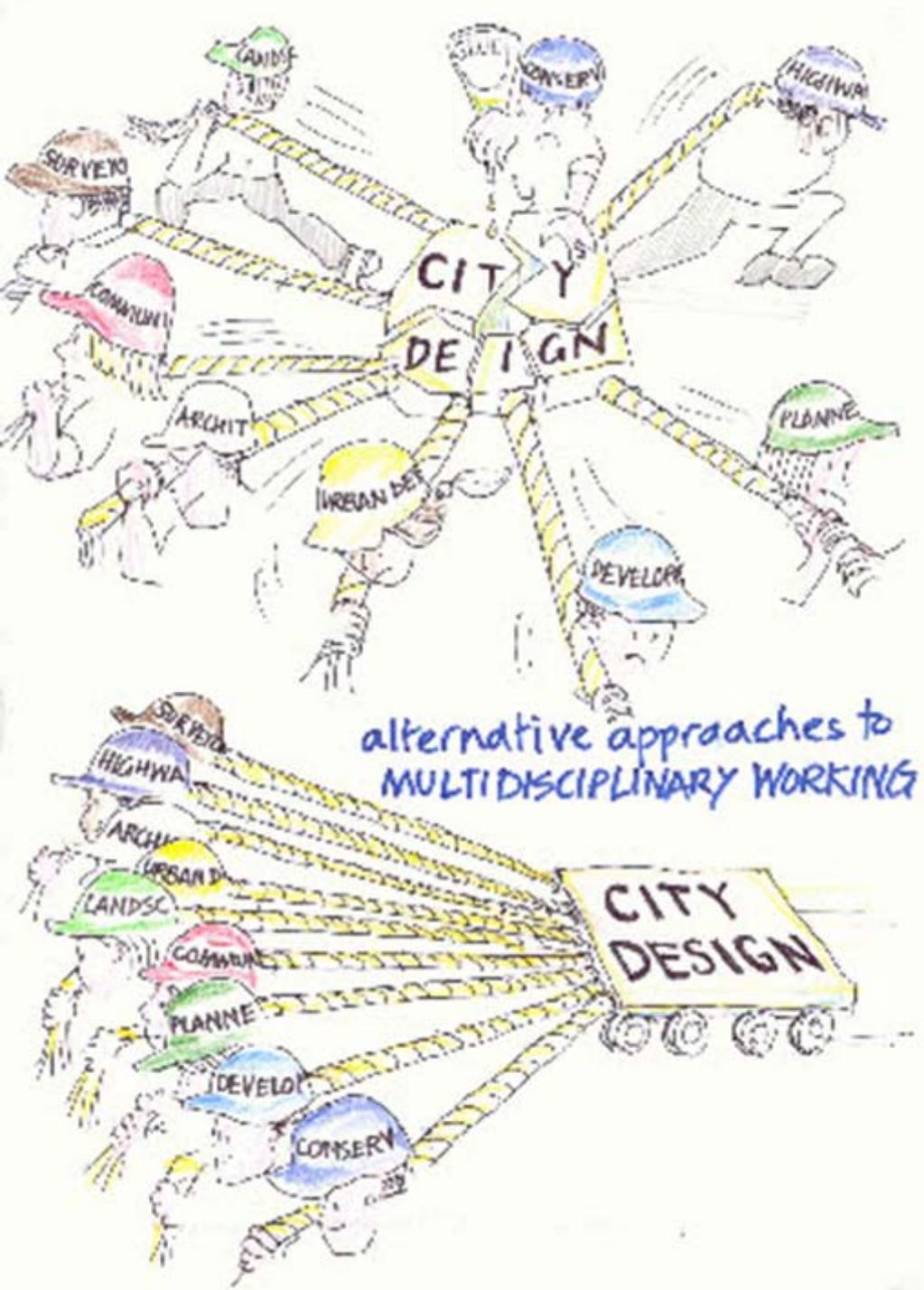
# Fundamental Problems

- Hierarchy and Silos
- Monocultures
- Brittle Economic Models
- Inappropriate Infrastructure
- Stuck in a Pattern

# Hierarchies and Silos



- Divide and conquer the brain
- The Lord in His wisdom did not divide the Universe into faculties



City  
planning as  
usual

City  
planning as  
desired

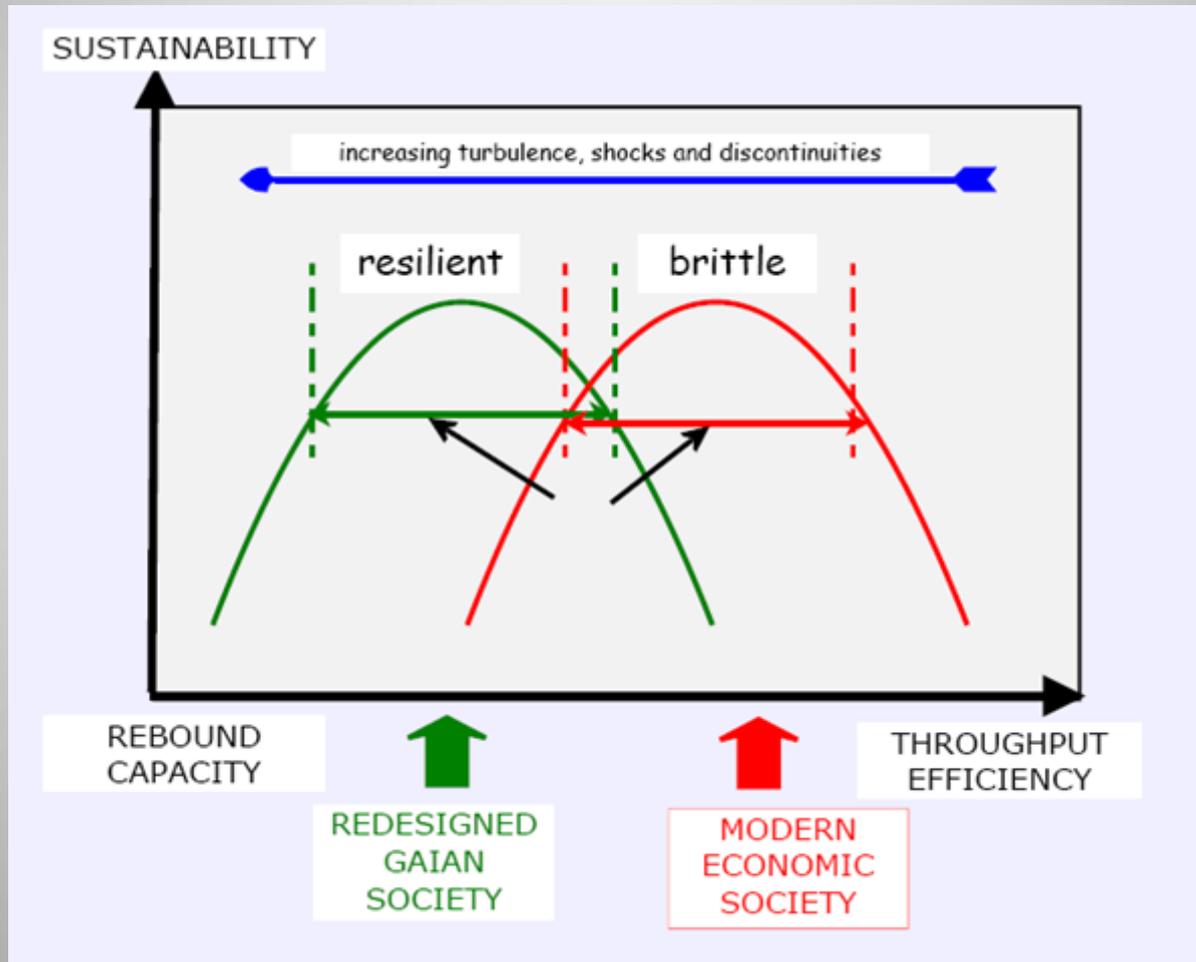
# Monocultures Destroy Resilience

- Remove diversity and variety
- Control and reduce variability
- Centralise and homogenise
- Get rid of redundancy
- Pursue economics of scale



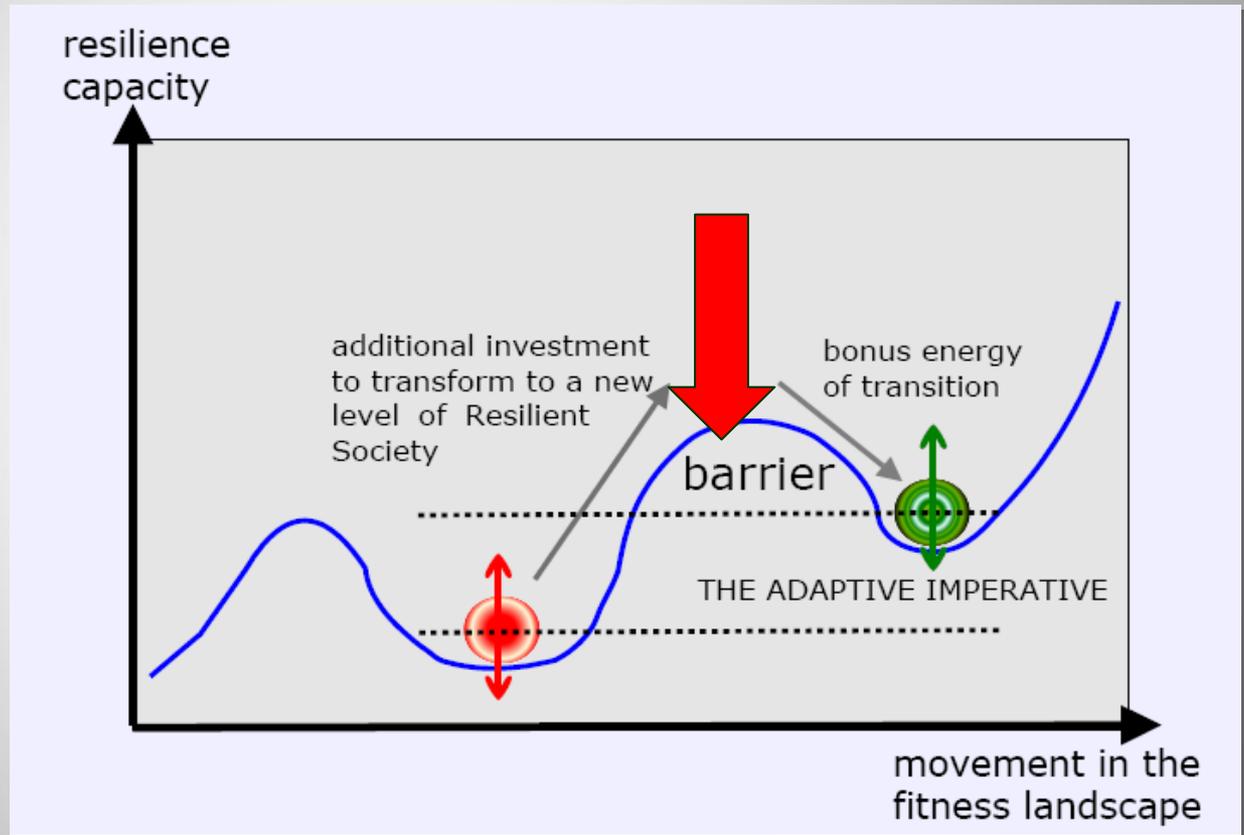
# Economics Destroys Rebound Capacity

(Bernard Lietar)



# The Problem of Stuckness

- Recover
- Adapt
- Transform



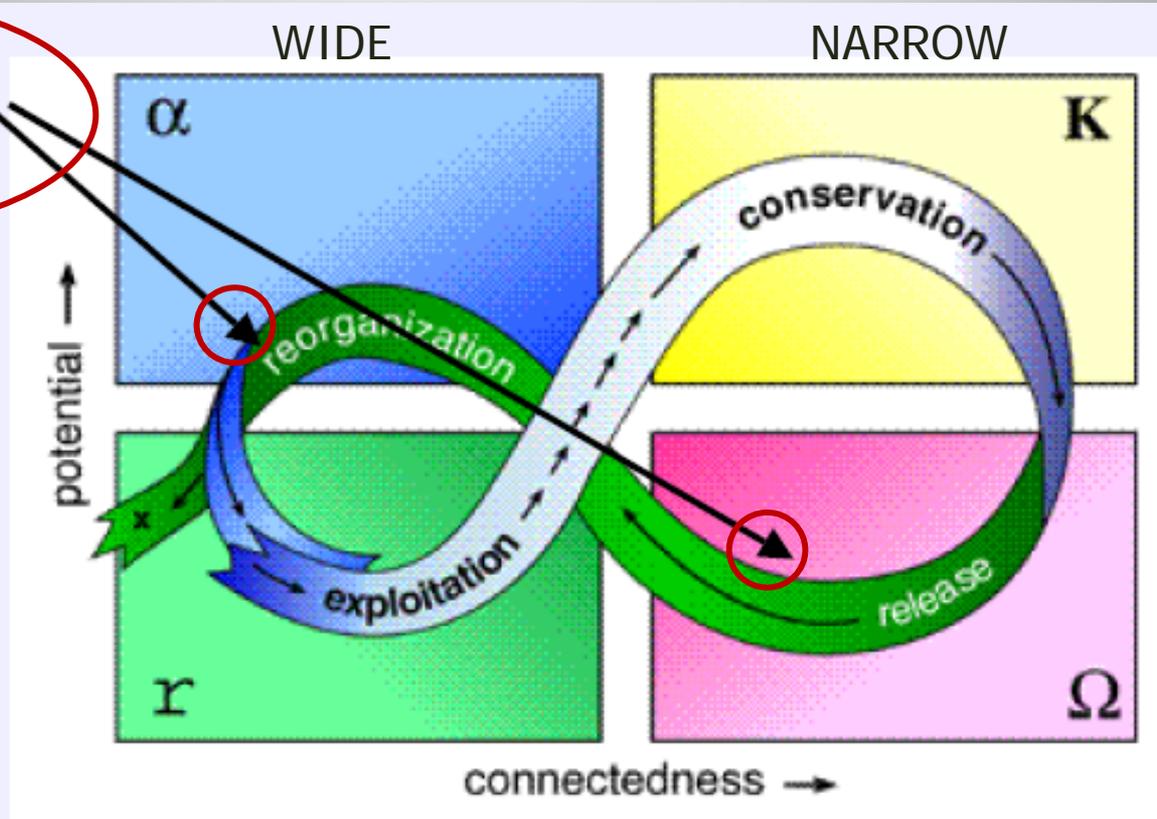
# Introducing Resilience Thinking

(Walker and Salt)

- Whole systems perspective
- Attention to dynamic feedback loops
- Sustaining requisite variety (diversity)
- Ecological wisdom – one planet living
- Social capital – it's people not institutions
- Appreciation of critical slow variables

# What Resilience Thinking Teaches Us

opportunity  
for redesign



## Crisis is Opportunity

Panarchy - Buzz Holling

# The Lesser Risk

In the face of disruption we are trying to get back to normal but we can't because:

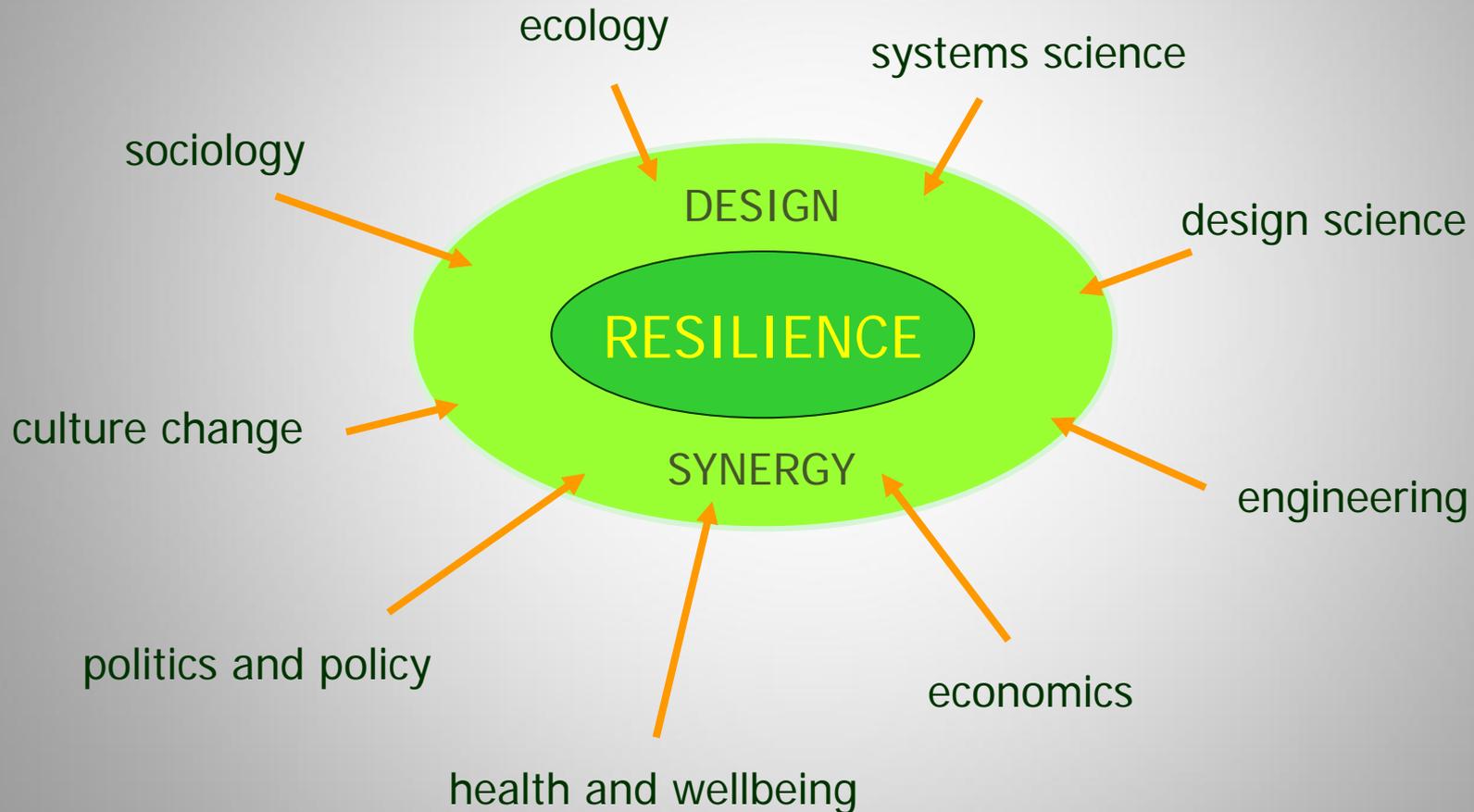
- Continued domination of the economics of 'brittleness'
- Civil contingencies can't cope – they also suffer
- Dominant control hierarchy imposes police state which continues to fail – impossible to deliver
- Failure of systems which are deeply interlocked and interdependent – push back

# The Greater Risk

We get temporarily succeed in getting back to normal only to find it quickly fails and leaves us worse off:

- Runaway positive feedback loops dominate
- Climate change discontinuities
- Economic collapse
- Resource scarcity – peak everything
- Psychological and health instability
- Selfish brutality trumps co-operative kindness

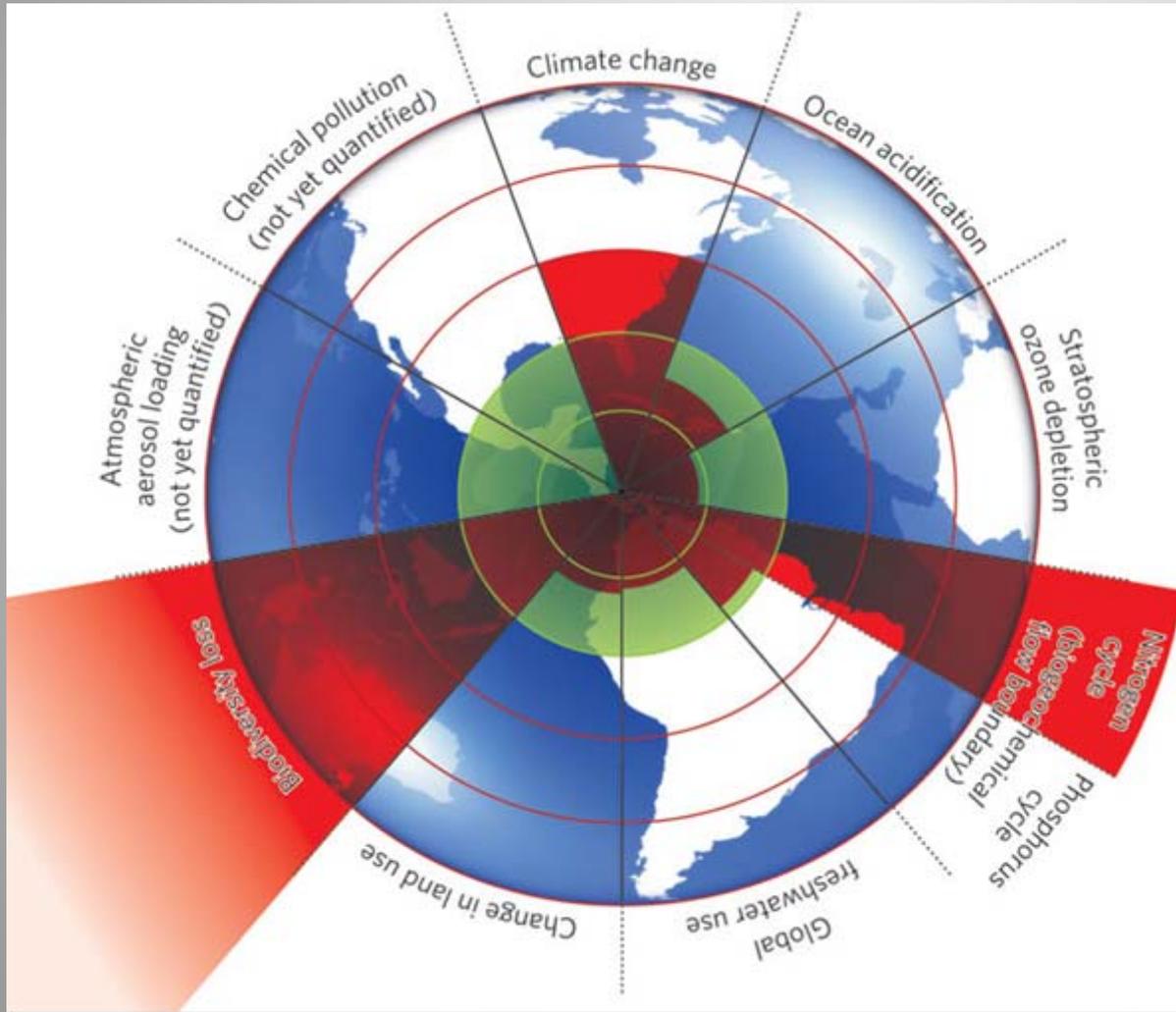
# Resilience Cuts Across Everything



# Can we Design for Transformational Resilience?

- We need a design revolution
- “Only integrity going to count”
- Synergy takes over the lead from analysis
- Continuous learning as the foundation of strategy and policy
- Operating within the Gaian System becomes the new ethical imperative

# The Illustration of Planetary Boundaries



Can we design everything within these limits?

[A safe operating space for humanity](#)

Johan Rockström, et al  
Nature 461, 472-475(24  
September 2009) 21

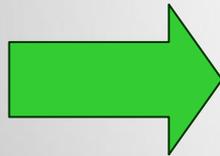
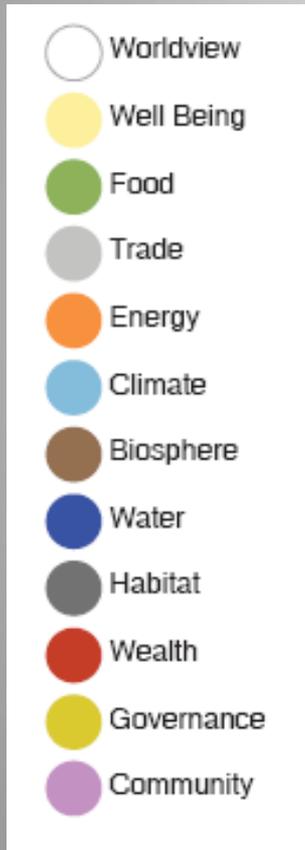
# The Illustration of human capacity limits



Can we navigate through this complexity?

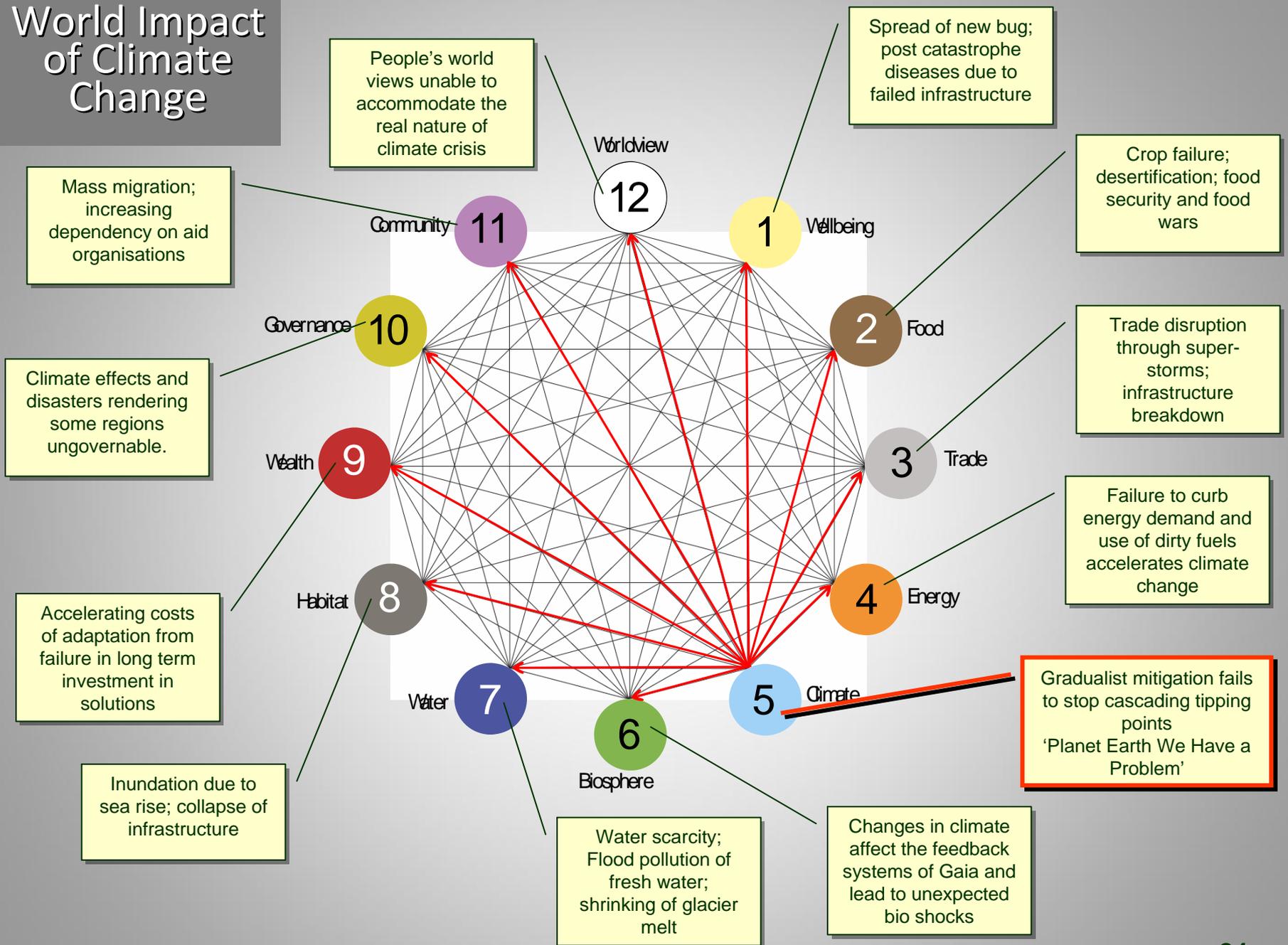
# Grasping the Whole - The IFF World Model

12  
Dimensions

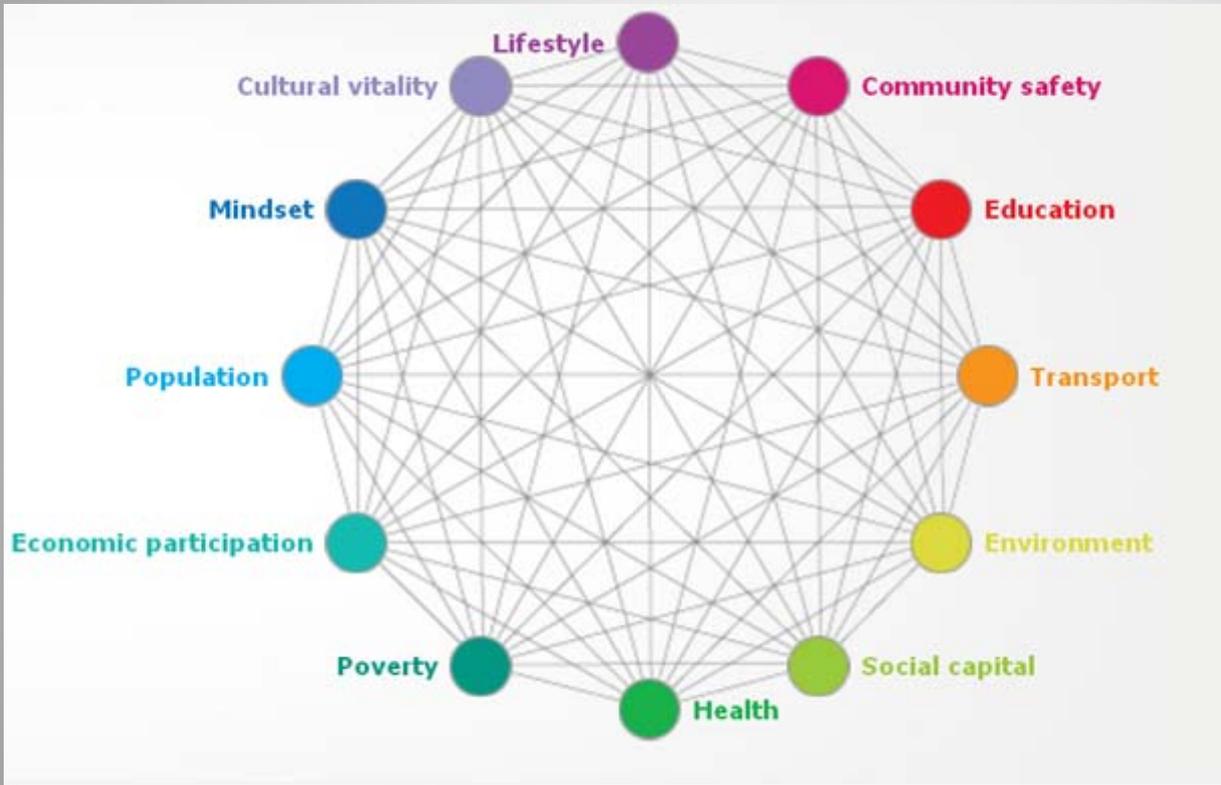


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LINKS

# World Impact of Climate Change



# Understanding Glasgow



Can we monitor indicators that truly tell us whether we are making it?

# An Example of Process – The IFF World Game

- Act 1 – The World of Concerns
  - In which we explore the 12 crucial areas for a resilient society
- Act 2 – The Possible Futures
  - In which we anticipate challenges and opportunities arising from interconnection
- Act 3 – The Wisdom Council Speaks
  - In which we tune into our collective intelligence to a shared motivating vision

# A 'Saving the Cities' Game



- Future impacts on European cities
- 'Ricochet' scenarios of synchronous failures
- Wisdom Council advising Mayors on farsighted priorities

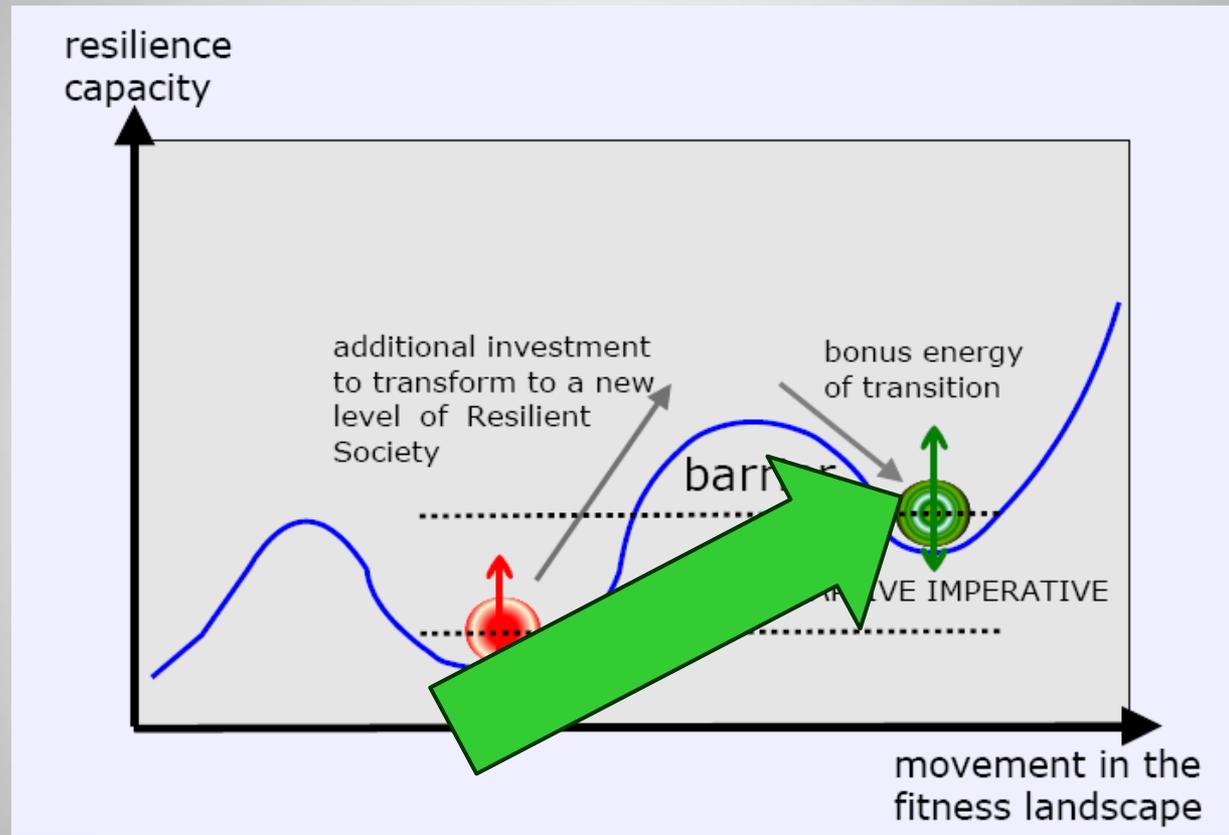
# Principles of Resilience Design from Cybernetics and Systems Thinking

- Keep the whole in view
- Encourage self-organisation
- Design with multiple levels in mind
- Connectedness – not too little and not too much
- Allow for emergent properties
- The designer is inseparable from the design
- Ethical integrity is inseparable from the designer

# Implications for Social Health

- We have created a brittle society with massive large scale unhealthy interdependence
- It is increasingly vulnerable to synchronous failure
- Making things safer in the old paradigm generally makes them increasingly unsafe
- Our “short term keep it safe, simple and cheap” mentality inhibits transformational vision
- This is false ‘cheapness’ that steals the resilience premium as profit and so destroys a viable future
- Designing for transformational resilience **within** planetary and human limits is our best risk reduction policy and least costly for future generations

# Bounce Back or Bounce Beyond?



From Resilience 1.0 to Resilience 2.0

We need not just resilience  
but  
transformative  
resilience!

# Thank You

[www.decisionintegrity.co.uk](http://www.decisionintegrity.co.uk)

[www.internationalafuturesforum.com](http://www.internationalafuturesforum.com)

