Strategic thinking for sustainability (ST4S) through Strategic Environmental Assessment (SEA)

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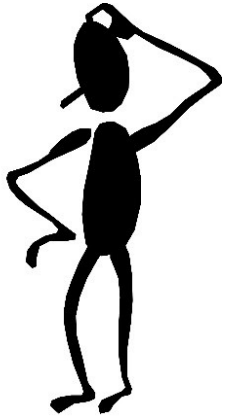
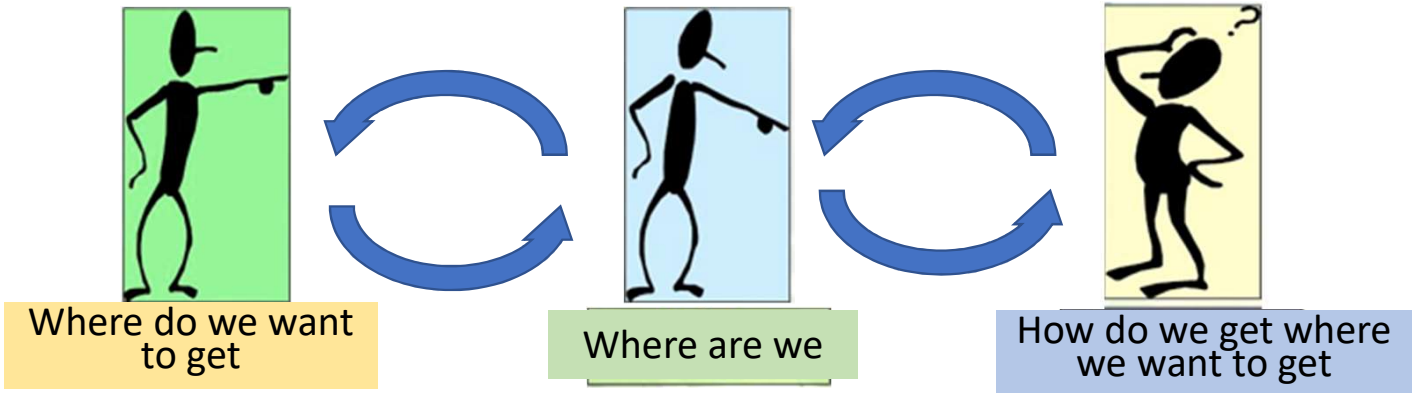
Experimenting strategic thinking for sustainability in SEA (ST4S)



What is SEA

Strategic Environmental Assessment (SEA)

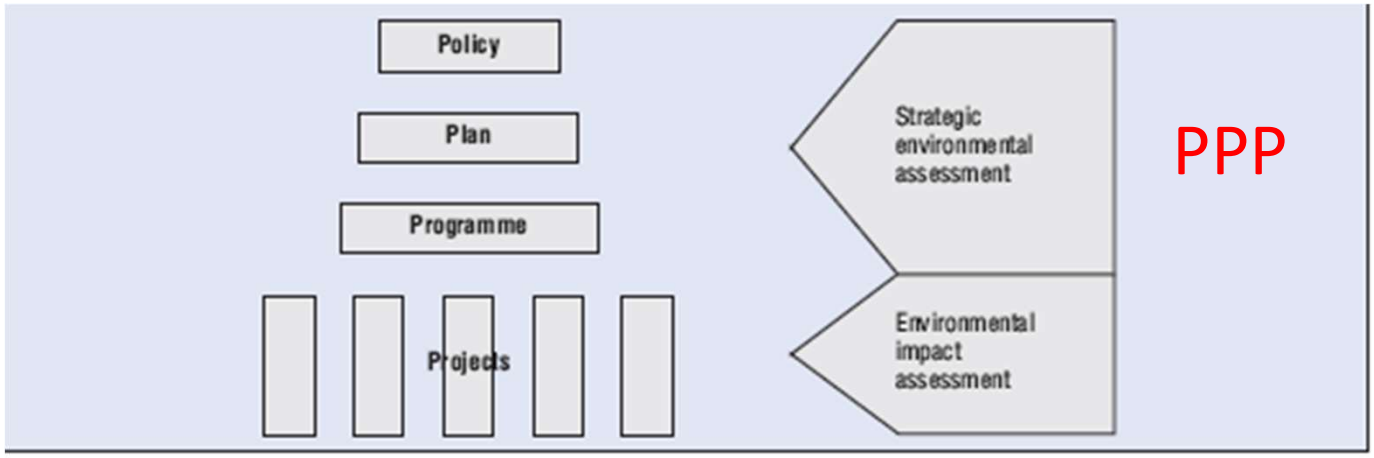
A strategic decision support instrument about how to get where we want to get with the best results for the environment and for sustainability

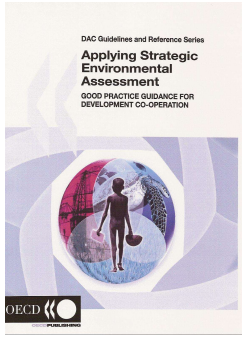


Strategic Environmental Assessment (SEA)

Most common understanding: traditional SEA

Roots on Environmental Impact Assessment (EIA)





OECD-DAC, 2006

Traditional SEA or EIA-based SEA

…at least 106 definitions of SEA

(Silva, Selig, Lerípio and Viegas, 2014)

"Strategic environmental assessment (SEA) is the term used to describe the **environmental assessment** process for **policies, plans and programmes** which are approved **earlier than the authorisation of individual projects**" (Lee and Walsh, 1992, p.126).

"**Environmental impact assessment** for policies, plans, and programs – also known as strategic environmental assessment (SEA) – (...)" (Therivel, 1998, p.39).

"The term "Strategic Environmental Assessment" (…) refers to a process that **integrates sustainability** considerations into the **formulation, assessment and implementation of policies, plans and programme** (PPPs)" (DEAT, 2007, p.1).

International systems on SEA

Effects
Impacts
EIA-type

Sustainability
Capacity
Strategy

SEA - From "big EIA" to strategic thinking

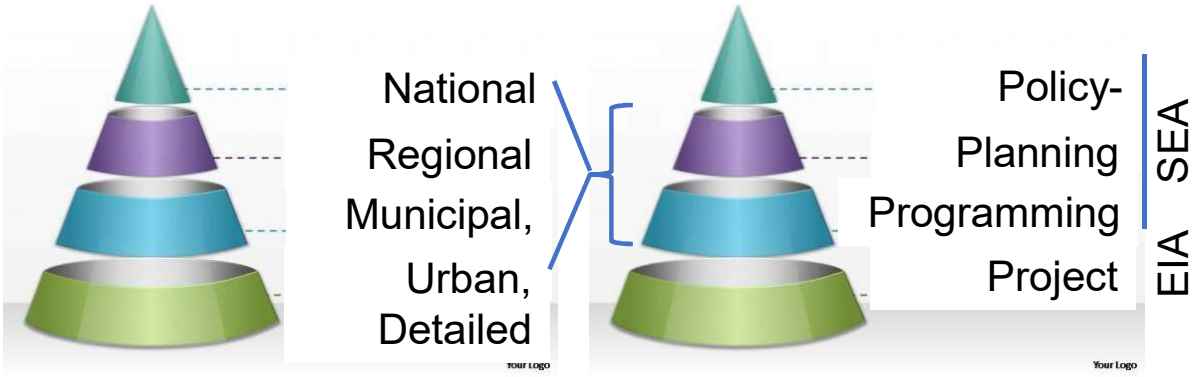
What works better depends on purpose and context

What do I want SEA for?

Permission to proceed?

How to get to where we want to go?

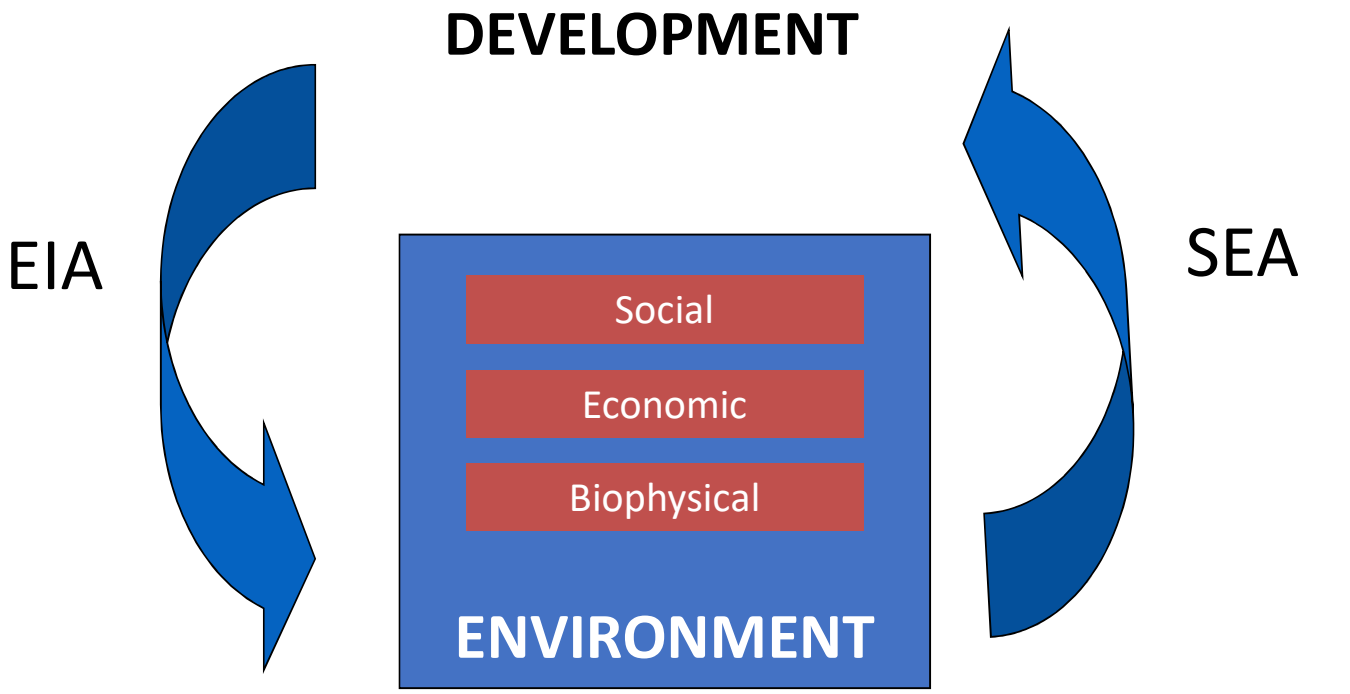
Decision pyramid



- **operational** plans and programmes – aimed at setting actions (action or site-driven)

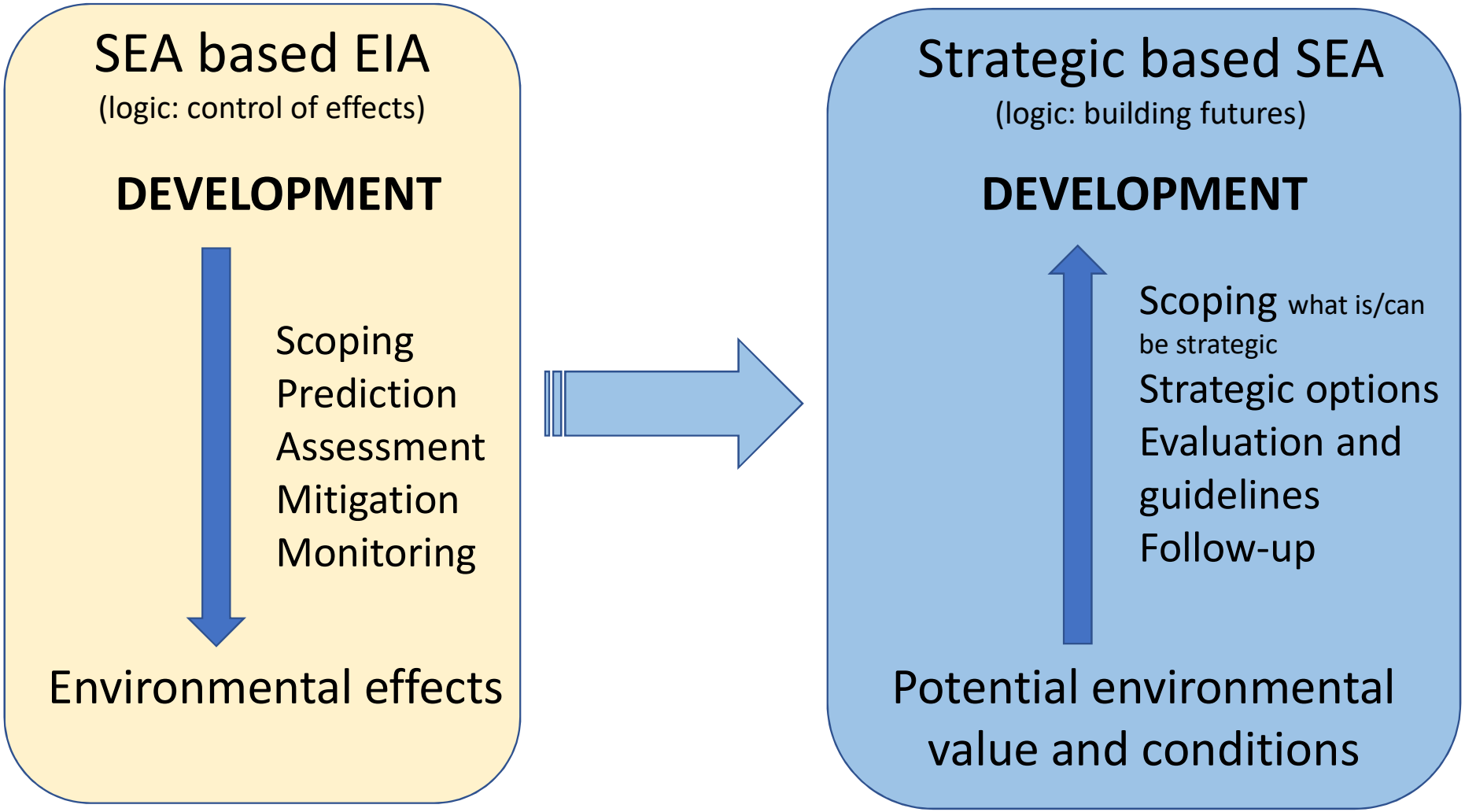
- **forward-looking** **(strategic) policies,** plans and programmes – aimed at setting directions (broader direction and long term-driven) for action

SEA can create contexts for development (Partidário, 2007, 2012)



Source: CSIR, 1996, 2007

Proposal for SEA using Strategic Thinking



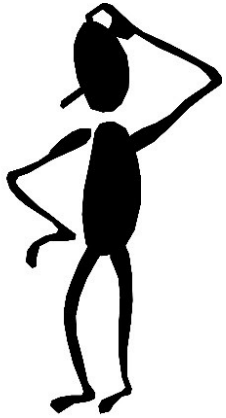
Key questions for strategic thinking (ST)
SEA and EIA-based SEA

ST SEA = GOOD STRATEGY

- What are your objectives?
- What are key drivers?
- What are your strategic options?
- What are key restrictions?
- What are major interests?
- What are the most important policies to be met?

EIA = GOOD DESIGN

- What are the main characteristics of the PP?
- Where is it located?
- What are PP alternatives?
- What are its main physical, social, economic effects?
- What are its major effects/impacts?
- What are the mitigation measures?



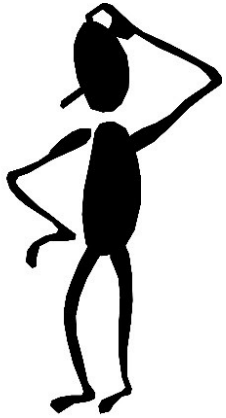
Link between SEA and SA

SEA and SA – defining and relating

Impact Assessment (IA) – the process of identifying the future consequences of a current or proposed action (IAIA)

Strategic Environmental Assessment (SEA) - the environmental assessment for policies, plans and programmes, as opposed to projects (Very simply defined – there are multiple definitions)

Sustainability assessment (SA) – any process that directs decision making towards sustainability (Bond and Morrison-Saunders, 2011, after Hacking and Guthrie, 2008)



Why strategic thinking in SEA/SA

STRATEGIC APPROACHES

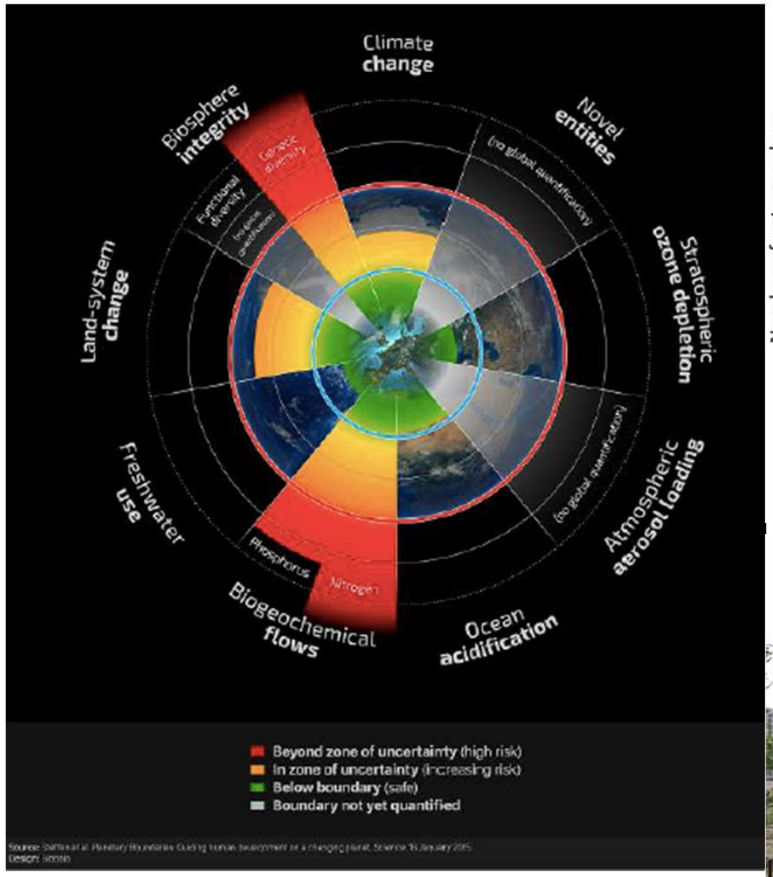
The art (and craft) of strategic thinking

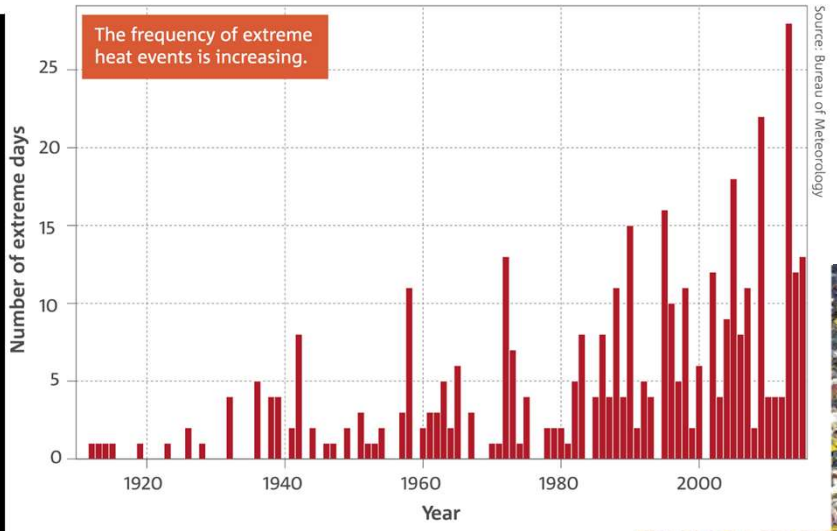
Thinking strategically is about the art of connecting long-term vision and short-term actions, and of adjusting and adapting to evolving situations.

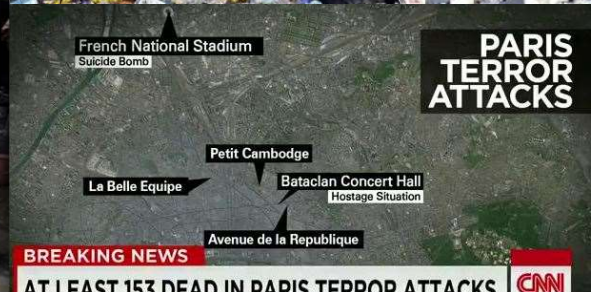
Strategic thinking can help address the imperatives of sustainability

Global changes are complex and call for new attitudes and actions

Planetary boundaries







We need to start doing
things differently
and
Risk out of comfort zone

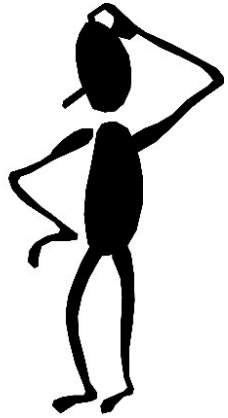
https://www.youtube.com/watch?v=K2SqP-sAns4

Why do we fear change?

Strategic thinking for sustainability (ST4S)

Create contexts for sustainable development

Aims at the integration of environmental and social issu formation of strategies and assist the formulation of pathways for sustainability, rather than looking at the effects of policies, plans and programmes (Partidário, 2007)



Theories behind strategic thinking

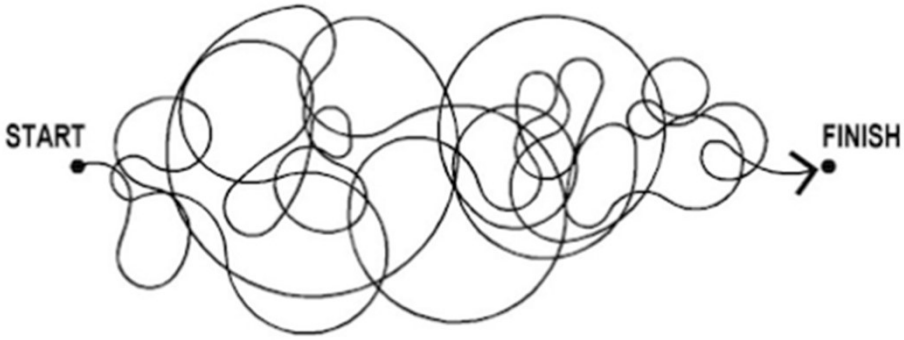
Complexity

Systems thinking

Strategy

From Newtonion mechanics to complexity science

Newtonian perspective: the world as predictable and controlable machines



The world composed mainly of complex systems

- emergence,
- self-organization,
- inter-dependencies,
- unpredictability and
- nonlinearity

https://homerdixon.com/wp-content/uploads/2017/05/Homer-Dixon-Oxford-Leadership-Journal-Manion-lecture.pdf

COMPLEXITY

Planning

SIMPLE

Right recipe is essential
Does not need experts
Results are predictable

COMPLICATED

Formulae are critical
Depend on high levels of expertise
High probability of predictability

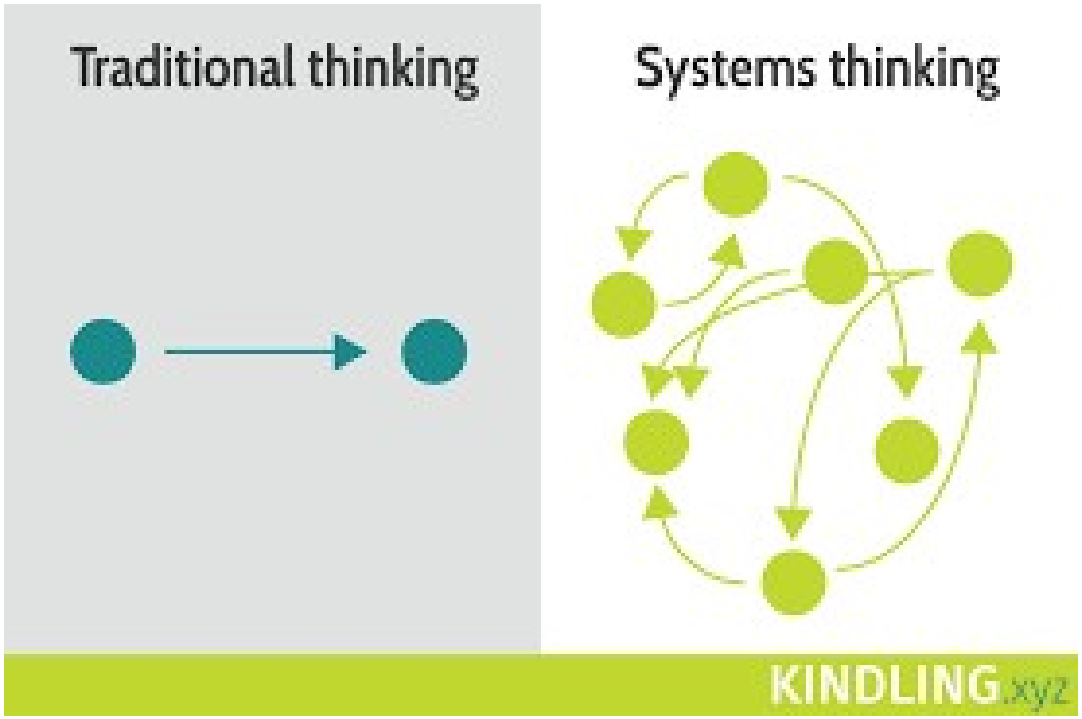
COMPLEX

Formulae have little application
The experince does not ensure future success
Expertise is not necessary or sufficient to ensure success
Results are unpredictable

Source: Zimmerman, SIG, 2013

https://www.ted.com/talks/eric_berlow_how_complexity_leads_to_simplicity

Acknowledge complexity and systems thinking



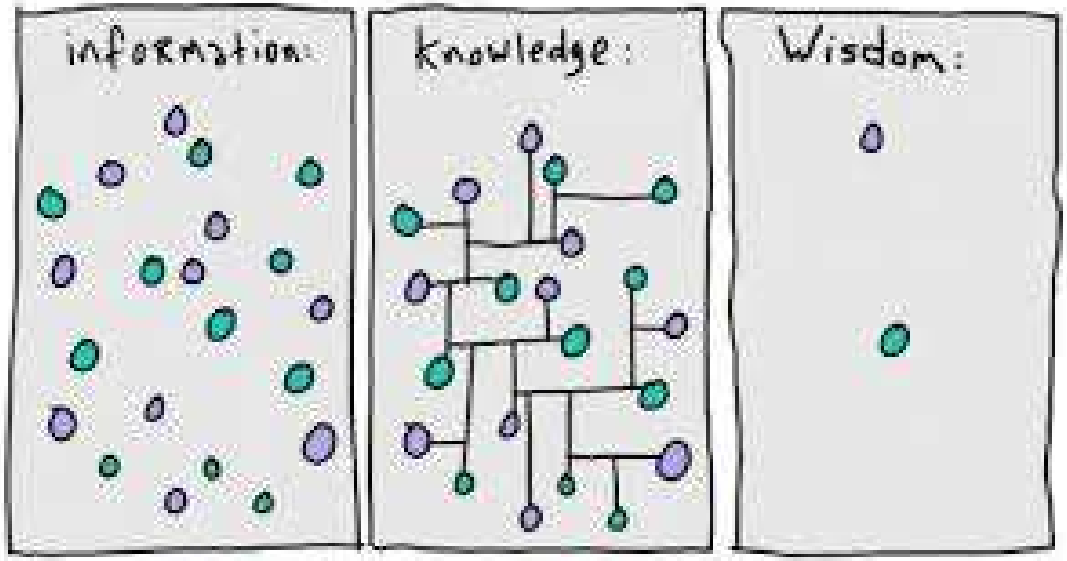
Fragmentation of knowledge vs systems thinking

One of the tragedies of the dominant thought in our society today is that we have eminent specialists of very compartmentalized thought

(Edgar Morin, 2010)

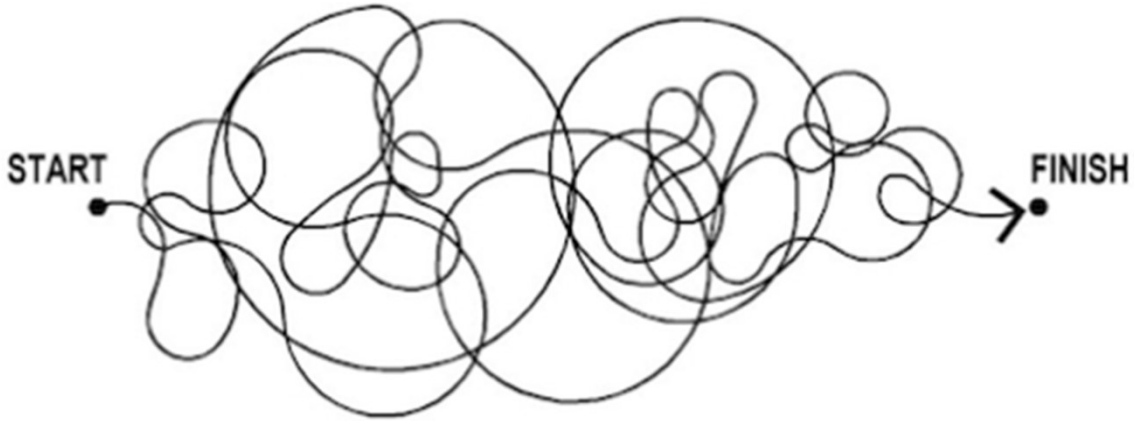
The compartmentalization of disciplines impedes or limits understanding complexity

A system is not a sum of the behavior of its parts, it's the product of their interactions



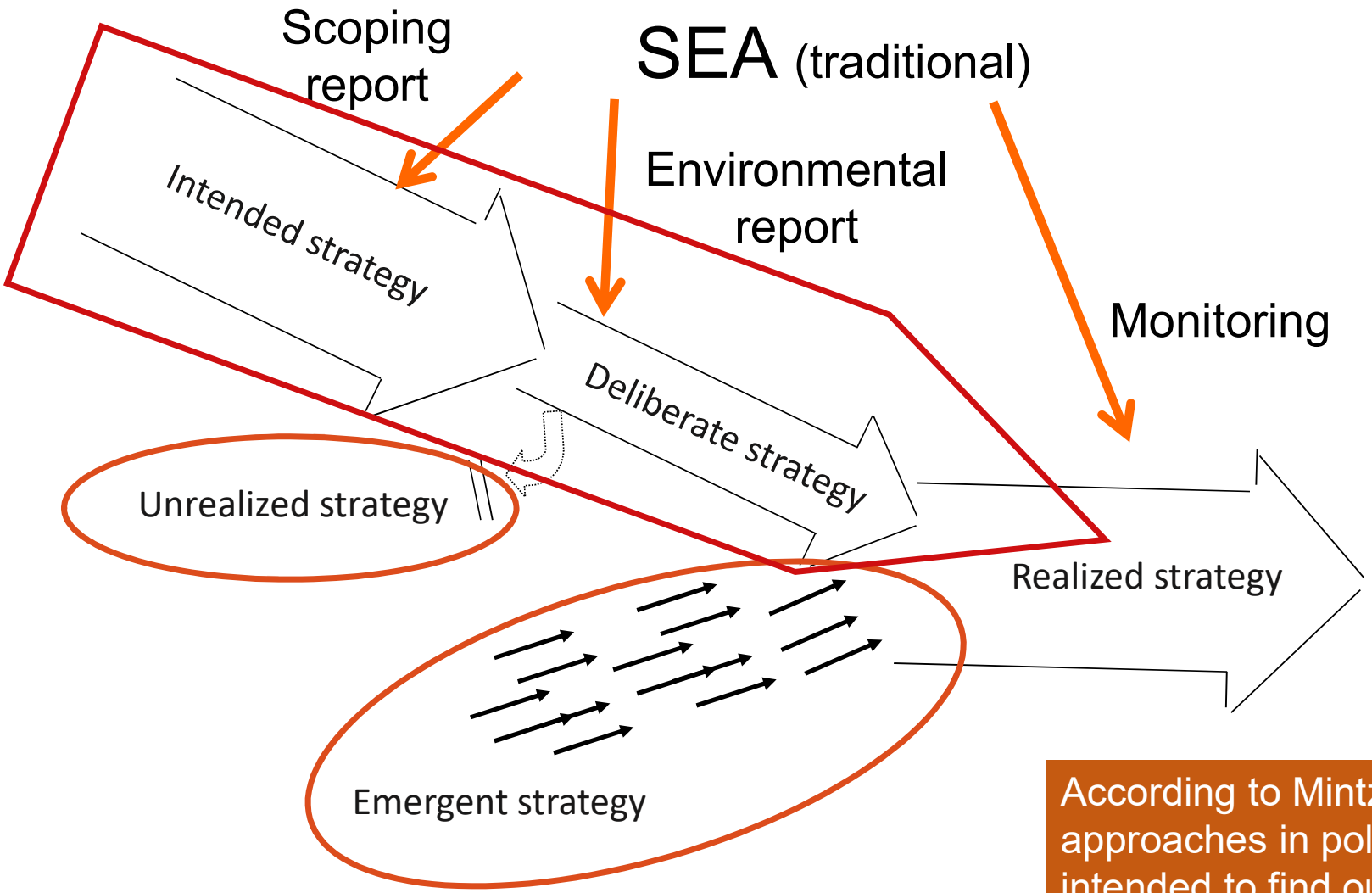
Russel Ackhoff wisdom theory, 1989

Strategy making involves **shaping future development trajectories** (Healey, 2009)



Strategic thinking is “a messy, back-and-forth process, with multiple layers of contestation and struggle” (Healey, 2007)

Strategy making is no simple activity which can be managed by procedural formulae - Demands **systemic thinking rather than analytic thinking**

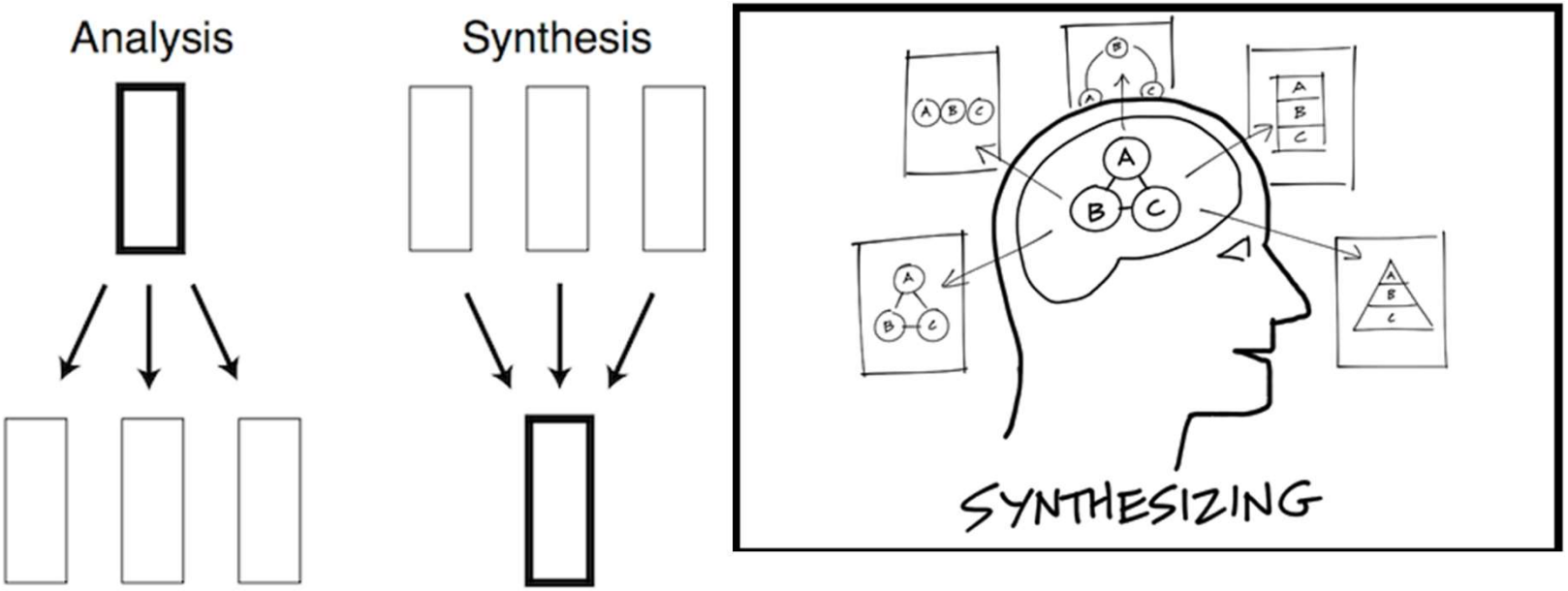


Based on Mintzberg, 1994

According to Mintzberg (1994) strategic approaches in policy and planning are not intended to find out what can happen in the future but instead to guide actions that can perform pathways for a desirable future.

Analysis vs synthesis

Planning is analysis, strategy is synthesis Mintzberg (1994)



Bureaucratic processes

X

Added value

?