



OR/MS in strategy development & public policy?

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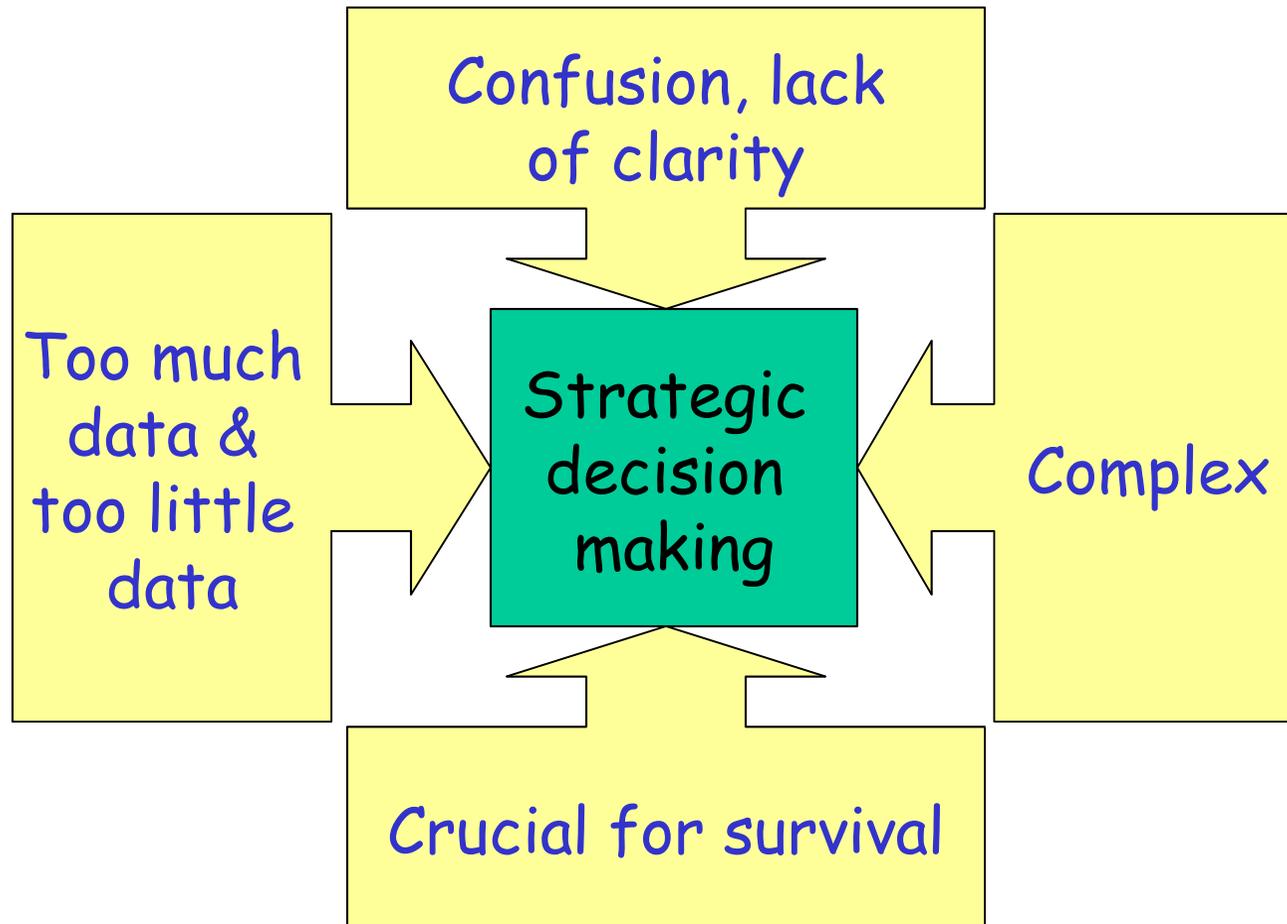
Advanced Institute of Management Research



An overview

- Characteristics of policy and strategy
- Dealing with people as they are
- Ackoff's 1970s proposals
- Learning, not control
- What about OR?
 - Sagasti: OR for the 21st century
 - Modelling in OR
 - Soft OR
 - Role of metaphors and worldviews
- OR in policy & strategy?
- Possible roles for OR

Making strategy & policy



Characteristics of strategy development & policy making

- Policy making = Strategising (for now) = working towards a desirable future
- Mintzberg's 5 Ps of strategy as ...
 - **Plan**: a guide for intended future action
 - **Pattern**: consistent behaviour over time, may be deliberate, unrealised, emergent
 - **Position**: particular products & markets
 - **Perspective**: how we do things
 - **Ploy**: scheming to outwit an opponent

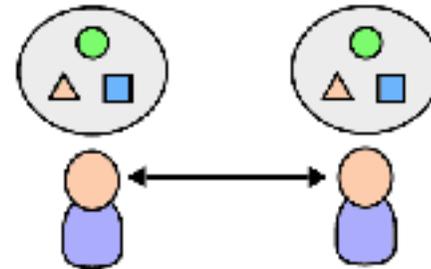
Clearly, these are inter-related

Main strategy schools



Design school

- Porter, Ansoff ..etc..
- Top-down
- Deliberate choice of position, product etc..
- The plan (design) matters



Emergent strategising

- Mintzberg et al
- Planning fundamental to any managerial job
- Planners should support, not lead
- A mix of rationality and intuition

A false polarisation?

Wicked problems/messes?

Rittel HWJ and Webber MM (1973). Dilemmas in a general theory of planning. Policy Sci 4: 155-69

Ackoff R.L. Various papers & books

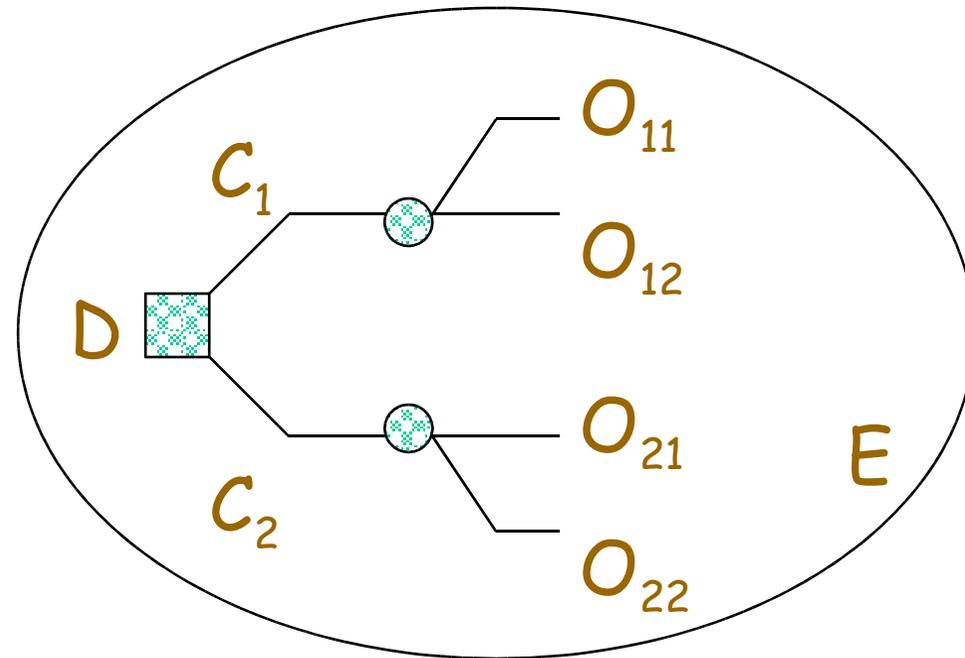
	Puzzles	Problems	Wicked Problems/messes
Formulation	Agreed	Agreed	Arguable
Solution	Agreed	Arguable	Arguable

Unlike tame problems, are not solved, they are handled and we might make progress with them.

Simon on rationality

SUBSTANTIVE RATIONALITY

- A complete set of known alternatives
- Ability to predict the consequences of each alternative
- A preference criterion
- Select best alternative using the preference criterion.



RATIONAL CHOICE

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RATIONAL CHOICE

PROCEDURAL RATIONALITY

- Design of processes to support
 - Discovery of alternatives
 - Acceptable solutions when there is conflict
 - Systematic information gathering and analysis
- Bounded rationality
 - We can't have perfect information
 - Information/option search has a cost
 - Preferences may change over time

RATIONAL CHOOSING

What are people like & how do they (we) work?

Mintzberg H. (1973) The nature of managerial work. Harper Collins,



Long hours at an unrelenting pace

Often in meetings
& groups



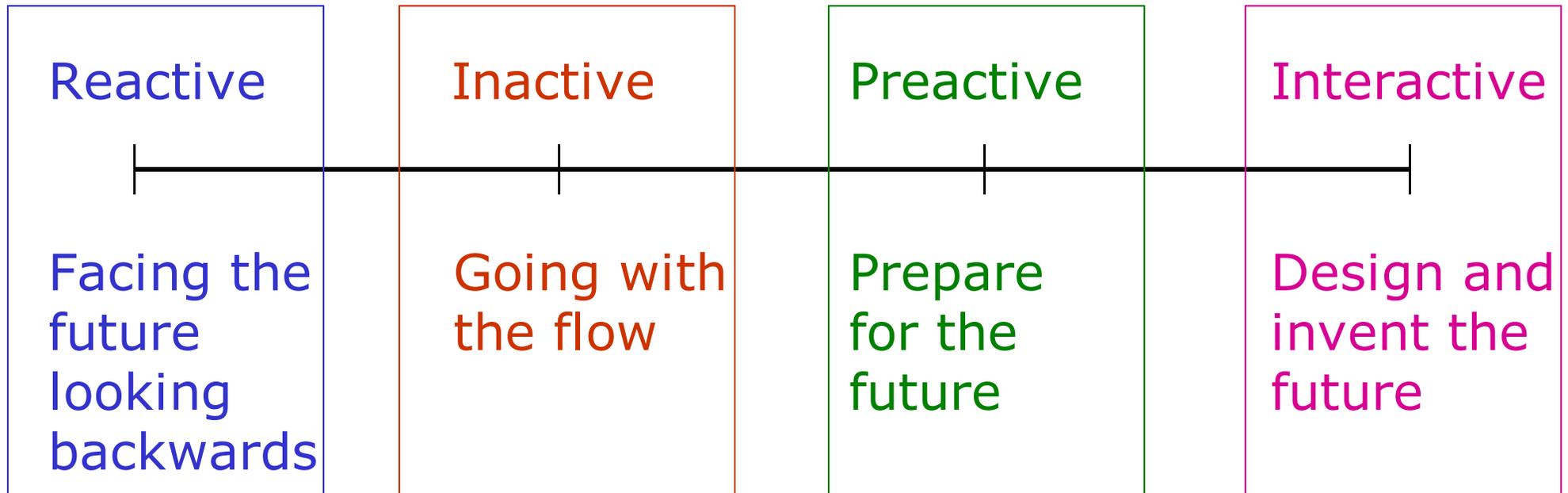
Prefer personal, soft
data

Prefer to be active, activities brief



Does this sound familiar?

Ackoff on planning: back to the future

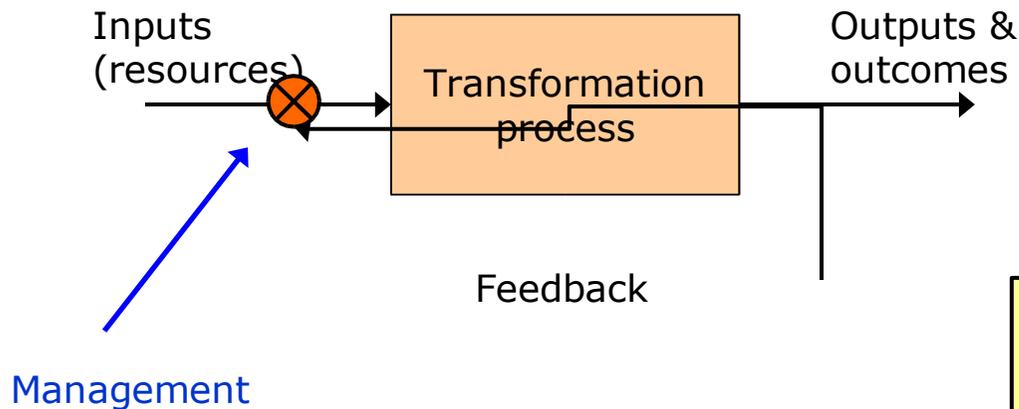


Ackoff's critical view of much OR

Ackoff's proposals for effective strategic OR

- Move to a 'design and invent' paradigm
- Embrace pro-active planning
 - participative: planning with people not for people
 - continuous: planning rather than plans (cf Mintzberg)
 - holistic: all units on all levels planning simultaneously and interdependently (cf Cummings)
- Change the nature of education programmes in OR

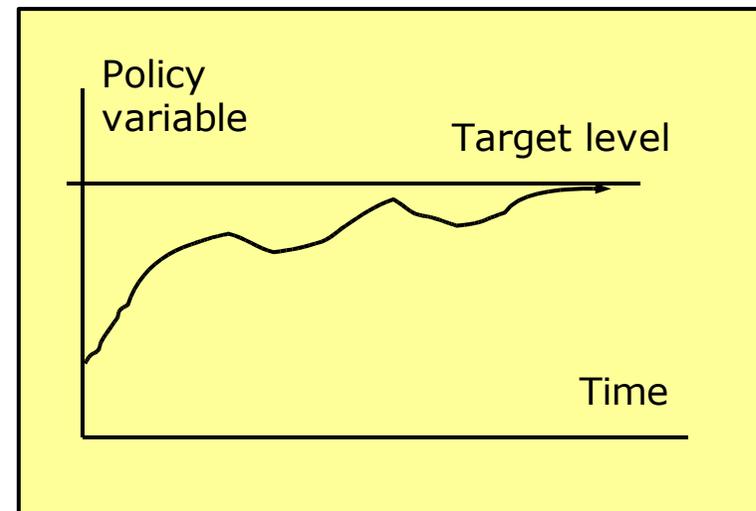
Planning as learning, not control



Cybernetic control

Implies

- Can measure i/p's & o/p's
- Compare with targets
- Have feedback mechanisms
- Can & will take appropriate action
- Response is due to the action



Basic assumption

Hofstede (1981) on control

NATURE OF THE ACTIVITY

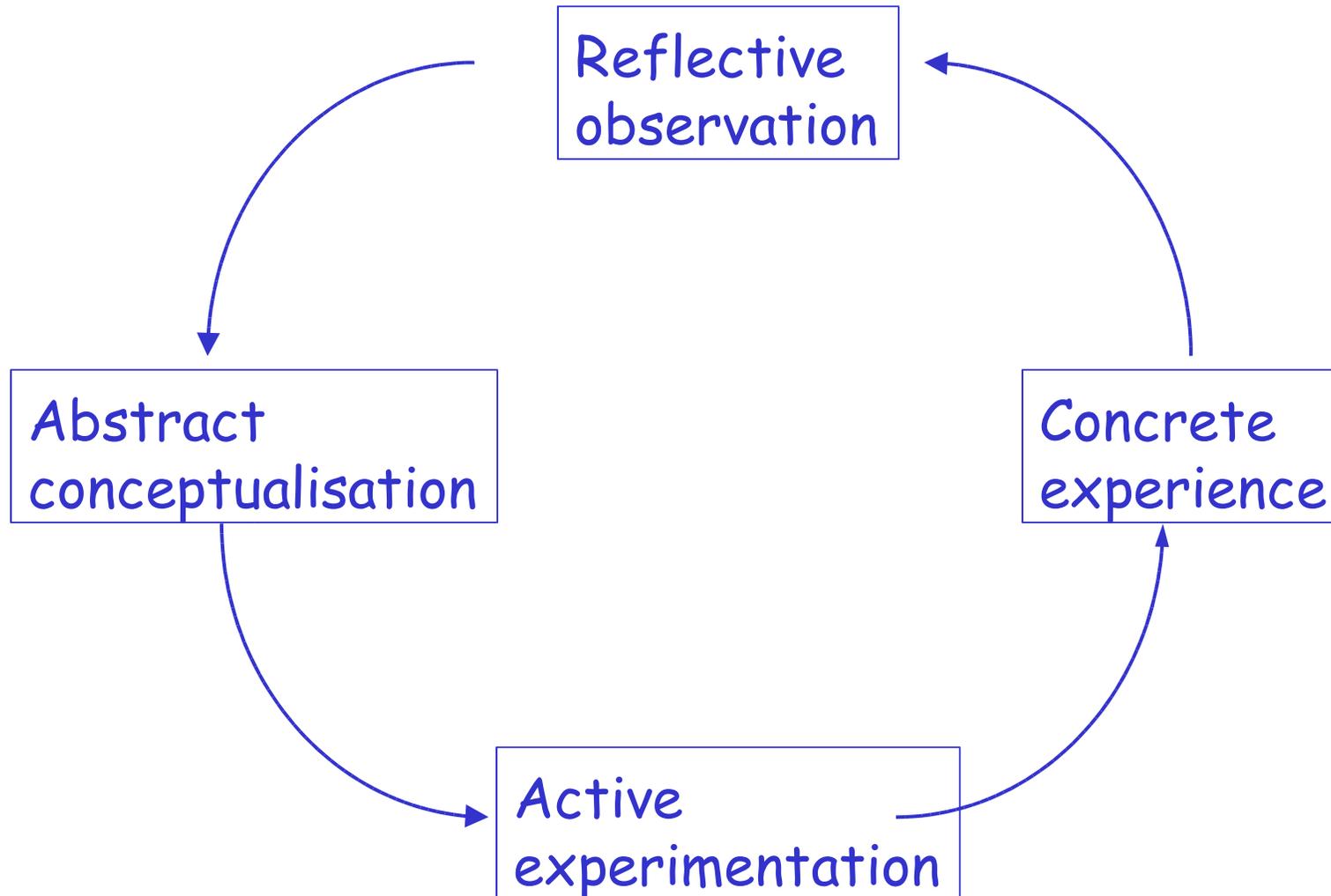
Unambiguous?	Measurable?	Effects known?	Repetitive?	TYPE OF CONTROL
Yes	Yes	Yes	Yes	Routine
Yes	Yes	Yes	No	Expert
Yes	Yes	No	Yes	Trial and error
Yes	Yes	No	No	Intuitive
Yes	No			Judgemental
No				Political

Hofstede (1981) on control

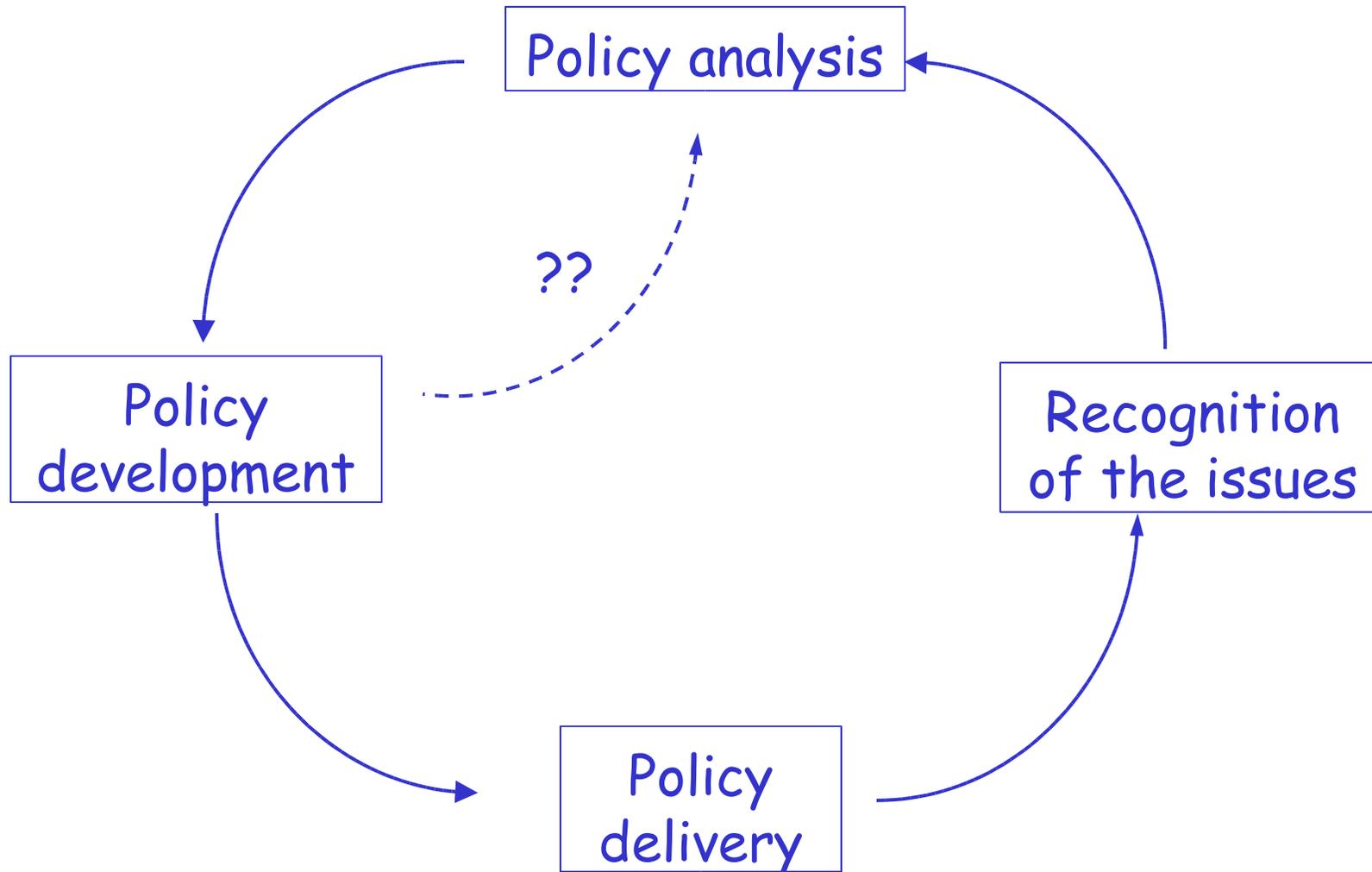
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Learning cycles: Kolb



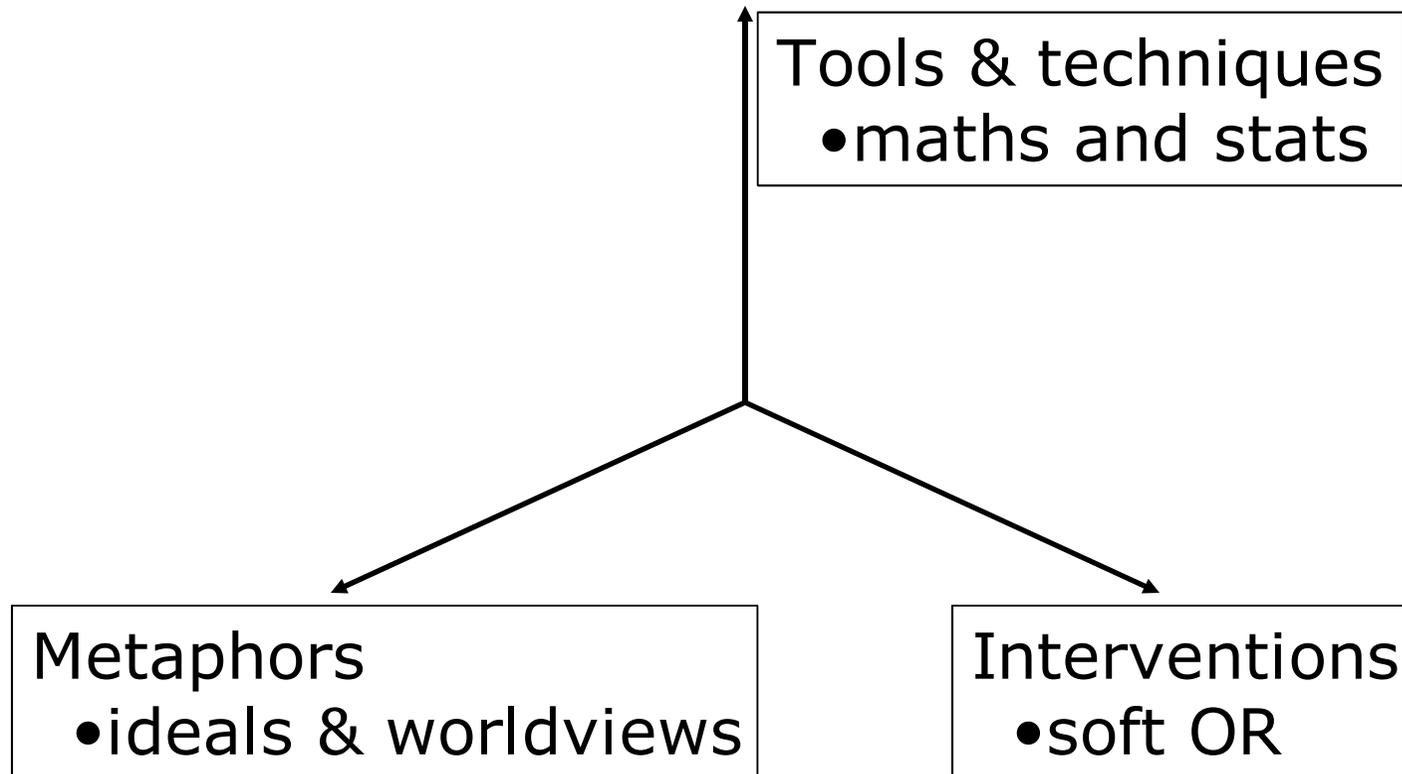
Public policy development as learning



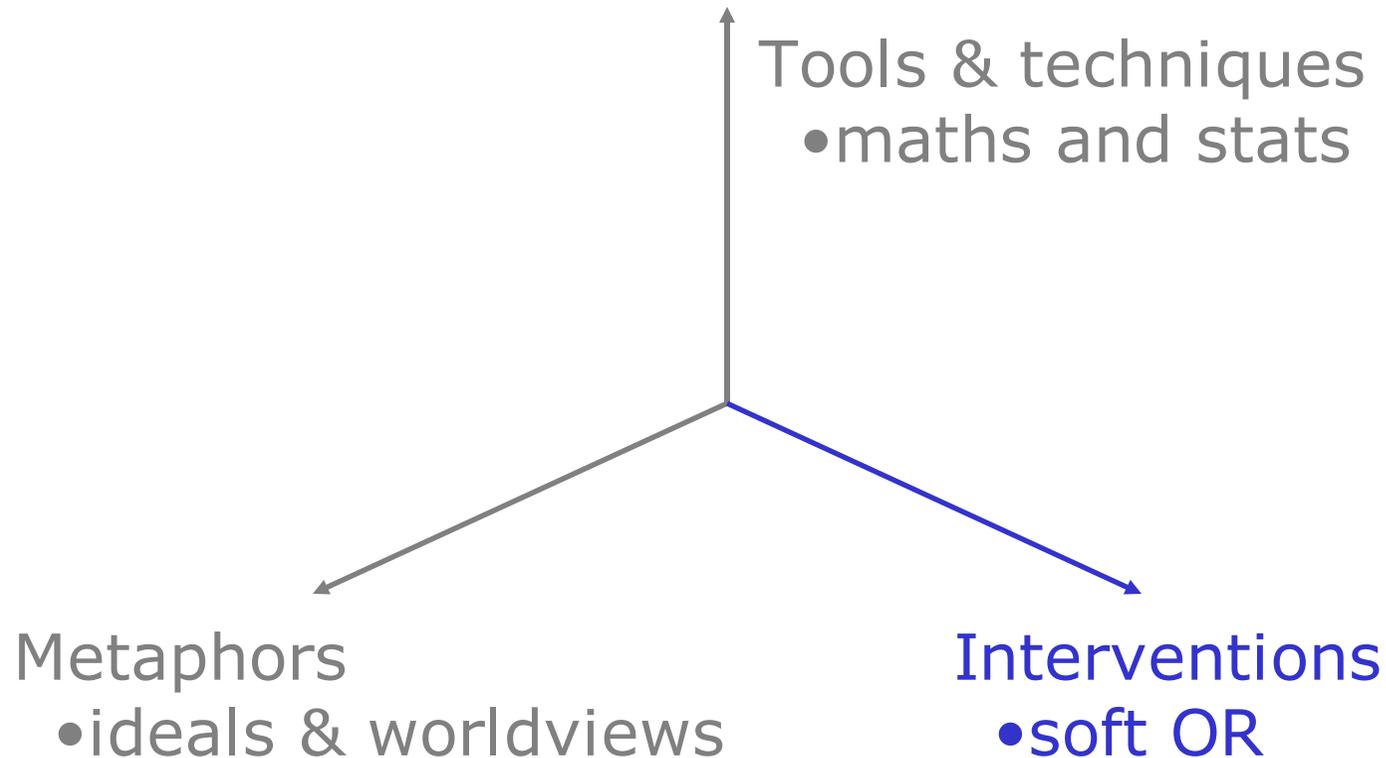
Bringing this all together

- Messes/wicked problems characterise strategy & policy development
 - need careful handling
 - negotiated, not given
- Procedural rationality is important
- People are intuitive as well as rational
- Planning is more than preparation
 - The future is something we can influence
- Strategy development and planning best regarded as a cyclic learning process

Sagasti on OR in 21st Century



Sagasti on OR in 21st Century



Soft OR as intervention

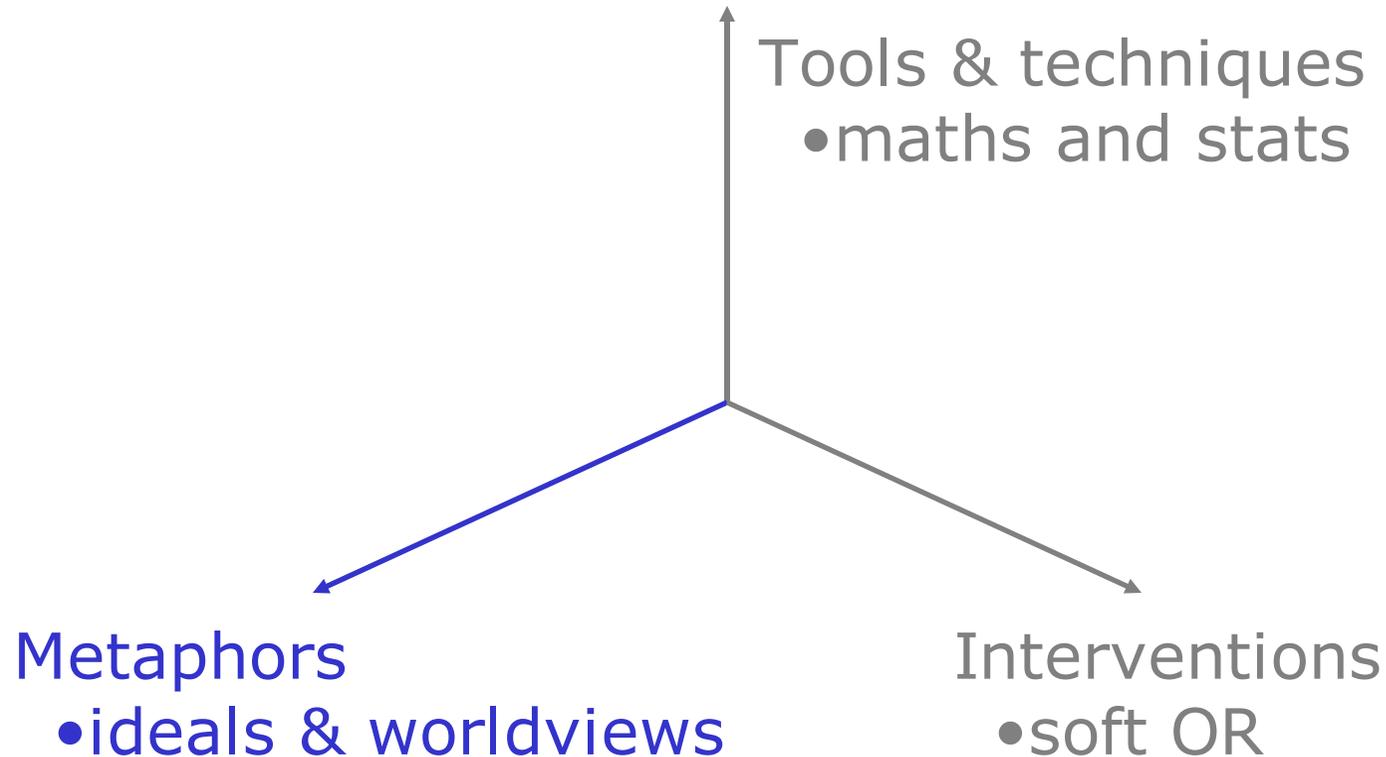
E.g. SODA/Journey Making, Strategic Choice, but probably not SSM

- Supporting procedural rationality
- Outcome = process x content
- Stress facilitation and intervention
- Organisationally sophisticated
 - Recognise importance of conflict & disagreement
 - Make no assumptions about unified objectives
 - No search for 'underlying reality'
- Cyclic or multi-pass approach
 - Learning to learn
- But there's more to soft OR than this

SSM: soft OR as exploration of worldviews

- Root definitions & PQR
- Do P, by Q, to help achieve R
 - R = why? (your overall aim)
 - P = what? (what you'd like to achieve)
 - Q = how? (how you will do this)
- E.g., gaining a degree, final year course choice
 - Q: take MSCI 354
 - P: choose enough final year courses
 - R: to gain an appropriate degree
- Different R's will lead to different P's & Q's
- Need to explore people's rationale

Sagasti on OR in 21st Century



Metaphors, ideals and worldviews

- The basis of our conceptualisation
 - Some current civil service examples
 - 'Delivery' – Babies? Groceries? Rather a one-way notion
 - 'Benchmarks' - Has a permanent feel about it
 - 'Performance' – Athletes, actors? Real or pretence?
 - 'Frontline' – Who is the enemy?
- Controlling the language often controls the thinking
 - Encourage people to employ other metaphors
- Checkland on Weltanschauungen in SSM
 - Making worldviews/ideology rationally visible
- Fundamental in policy debate

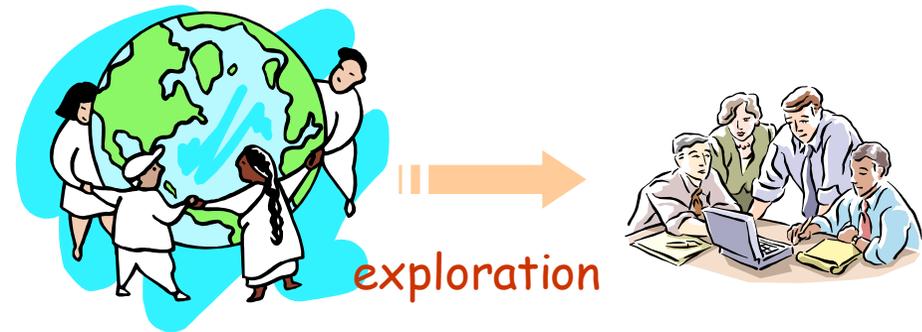
Models in OR as ...

Would-be representations
of the real world



- used to investigate options
- supports rational choice
- supports exploration
- validation important

Devices to support
debate



- used as ideal types
- procedural rationality
- supports exploration
- validation problematic

OR in strategy & policy?

- Policy analysis, development & delivery
 - Not just HOW, but WHAT and WHY
 - Role of intervention and metaphor
 - PLUS quantitative analysis
 - Complementarity?
 - Hard and soft together
- Possible roles?
 - Procedural support for policy debate
 - Making sense of strategy & policy (e.g. Andrew Dilnot's Blackett Lecture, 2001)
- Modelling and measurement