Overseeing relations between analyst, practitioner and policy-maker: a meta-view of planning and designing for agility in a complex world

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Our motivations for thinking and for working more relationally

• MOD CIBM Research Programme
  – Task 8 Planning: Action Research
  – Task 10 C2 Agility (Forms of time; Orders of agility)
• DHCSTC TIN 3.011 Stabilisation Modelling
  – Conditions for stability: changing relationships
• Systems Thinking in Practice courses at DefAc
  – Focus of own problems is on relationships
Contents

1. Where are people, relationally speaking?
   - Analysts
   - Policy-makers
   - Practitioners

2. Important Flavours of Complexity
   - Social complexity
   - Organisational complexity

3. Orders of Agility
   - What is agility with respect to people and their decisions?
   - Changing relationships

4. Summary question:
   - What does all this mean for operational research analysts?
Where are people relationally speaking?

- **Analyst**
  - OA tools and techniques
  - Interviews
  - Question Understanding
  - Deliverables
  - 'View'
  - Problem/answer
  - Solution/answer
  - Recommendation
  - Policy decision

- **Director Policy-maker**
  - OA products and contracts
  - Deliverables
  - 'View'

- **Practitioner**
  - OA tools and techniques
  - Deliverables
  - 'View'

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College of Management and Technology

[A Alston]
Cross-coupled pairs: differentiation and between-ness

[John Isaacs]
Increasing number of 'nodes'

Statistics and dynamics relating to very large numbers of well defined nodes and interactions.

Decoupled or very well defined couplings between relatively few nodes.

Peopled nodes that have 'adaptive', non-trivial, intricate relational couplings.

Increasing intricacy of the 'couplings'

[Alston]
Example Systems

- Gas in a container
- Weather
- Climate
- Society
- Military Capability
- Organisations
- Termite hill
- Flock of birds
- Space shuttle
- Aircraft
- Car
- Teams

Increasing number of ‘nodes’

Increasing intricacy of the ‘couplings’
Coping strategies

- Increasing number of "nodes"
- Increasing intricacy of the "couplings"
- Tendency to treat 'complex' systems within 'comfort zones'
- Tendency to try to inappropriately extend 'comfort zone' techniques
Might it help to think about agility?
What is agility?

Basically it is about:
• responding
• changing
• adapting
• changing the way we might change…. 

… and changing the way we might respond, adapt, re-organise, transform, ….

How might it help to address questions of change…..?
Forms of time leading to orders of agility

CHRONOS
Institutional shaping

KAIROS
Openly Anticipating
Reacting
Changing Options

Institutional shaping

[G Markham]
Analysis, planning and metaphors

- Machine
- Organism
- Brain
- Culture
- Flux and Transformation
  - Political; Psychic Prison
  - Instrument of domination

[G Morgan]
What might this all mean for OR?
Do we have relational ‘models’?
Do we need to change relationships?

• Questions?
• Comments?
• Ideas?
Principles for shared problem understanding?

“One of the principles evolved by the British was that OR groups should be formed on the request of the commander to assist him in solving his problems, functioning as integral parts of his command and working closely with his military staff and subordinate commanders. Projects were initiated either on request from the commander or, more commonly, by the OR section itself. The OR section chiefs reported directly and only to the commander and normally sat in on staff meetings and conferences. By working in close proximity to the uniformed elements of the command, the OR units gained access to all types of operational information and shared in the informal communications networks.”

History of Operations Research in the United States Army by Charles R. Shrader
References

DHCSTC TIN 3.011 Final Report (to be published Sept 2014)


