



#### Staged Appreciation looking out and in for black swans

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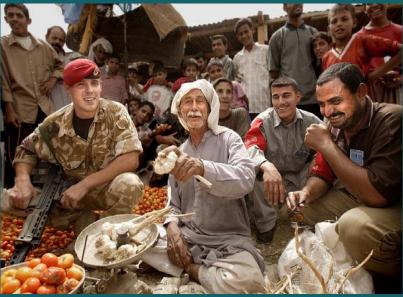
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### **General assumption**

The problems facing us in contemporary operations are socially complex as well as being open-ended.

#### **Research question**

How might we use an open multi-perspective approach to help us more openly understand how to support decision-making in socially complex situations?



First we need to introduce some concepts and do some re-orientation.

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# **Environmental and Social complexity**

Consider complexity in terms of:

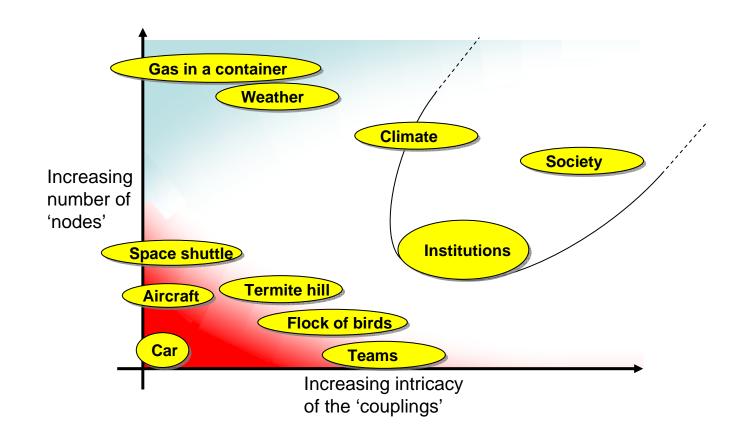
•Environmental complexity, which demands that sense-making and response actions need to consider unexpected extents of interactions and unanticipated effects of actions;

> what *can* happen rather than what *will* happen.

•Social complexity, which asks for attention to be widened and points of view to be broadened to take in relationships (actual and achievable) in order to see the potential for possible options, interdependencies and re-configurations;

> what could happen rather than what should happen.

## **Example Systems**



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## Character of decision and analysis

Single common goal	Nested goals Common purpose	Multiple conflicting goals
<ul><li>≻agreed anarchy</li><li>≻power-to-the-edge</li></ul>	<ul> <li>mission command</li> <li>consensus-seeking</li> <li>act-sense-adapt</li> </ul>	<ul> <li>binary decisions</li> <li>freedom of action</li> <li>new approaches</li> </ul>
GARBAGE-CAN	POLITICAL Compatible	'wicked' problems Conflicting
<ul> <li>quantitative methods</li> <li>operational analysis</li> <li>scenario-based study</li> <li>kill-chains</li> </ul>	<ul><li>multi-criteria analysis</li><li>multi-attribute utility</li></ul>	<ul> <li>perfect market</li> <li>hand-over control</li> <li>(e.g. air traffic control)</li> </ul>
PROCESS	RATIONAL	

social complexity

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# Meeting the challenges through open inquiry

Many practitioners who have experienced contemporary operations might agree that they are characterised by four things in particular: complexity, ambiguity, uncertainty and volatility and by the fact that they all tend to be 'wicked problems' – problems that are intractable and circular with complex interdependencies – where solving one problem can create further problems or make the whole problem greater.

Kiszely, J. (2008). 'Coalition Command in Contemporary Operations`, in Williamson M (ed) Democracies in Partnership: 400 Years of Transatlantic Engagement.

#### Open approach: going...

#### ...away from solely:

#### ....towards:

- objective and normative analyses
- single viewpoint
- fixed frames
- probability
- trend prediction
- advocacy

- subjectively sensed appreciations
- multiple viewpoints
- adaptive framing
- possibility
- open imagination
- balance with inquiry

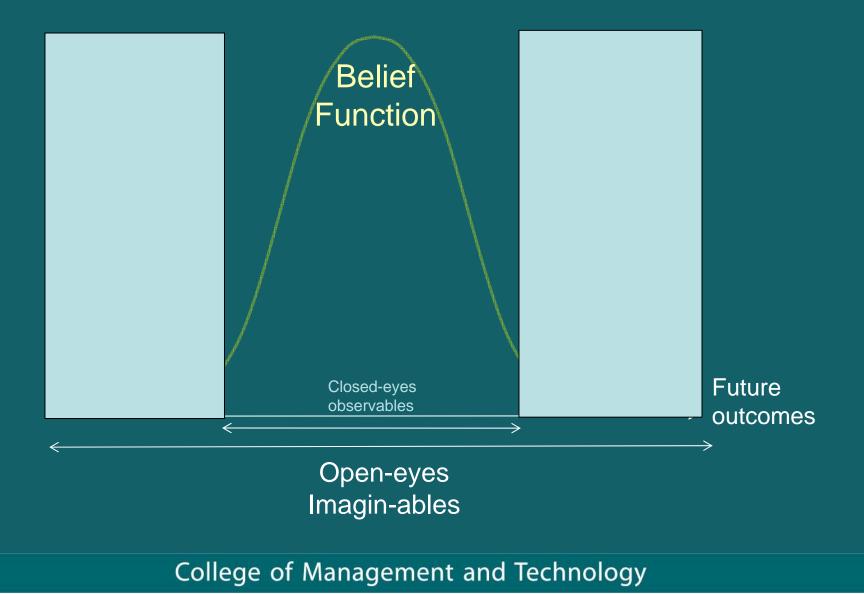
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## **Belief and surprise**

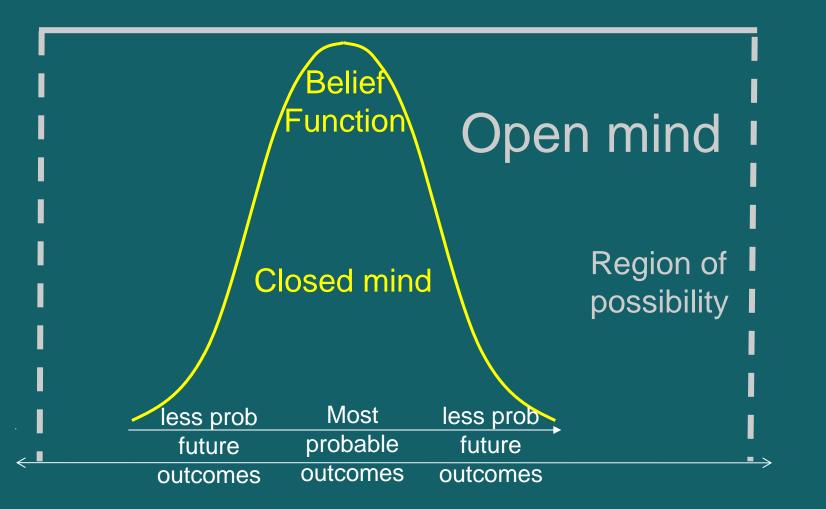
**Belief Surprise** maximum Belief Function zel Future surprise outcome

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## Closed-eyes / open-eyes Institutional or individual 'blinds'



## Closed-mind / open-mind Probabilistic models / possible futures



### Closed-open matrix: some illustrations

	A very scary place to be!	Let us see
pen nind	We know it's there but we can't see it	What might be deemed possible if we adopt different viewpoints and widen scope of view?
osed nind	We see only what our models predict via our set of indicators So this is what will happen next	Able to see 'out of model' events but can only respond to what is known Just deal with it as if it's a white swan
	Closed	Open
	- eyes	- eyes

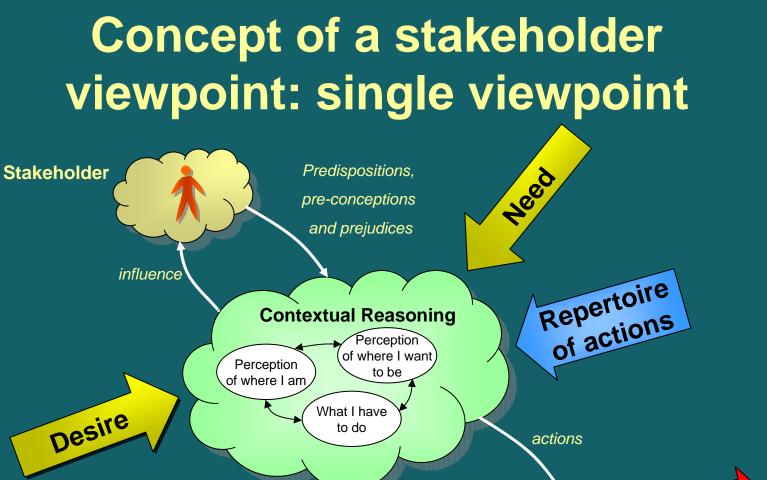
## **Option-making**

- Comfort of closed eyes and minds relates to a restricted set of options, which may be due to:
- institutional pressures to conform (e.g. blame culture);
- lack of confidence in people to allow discretionary trust, etc.
- Understand where people are in terms of their ranges of options.
- What might be the implications of painting others or yourself into a corner?
- Encourage use of narrative and imagination in order to create new options (e.g. creating 'hedging' options to deal with ambiguity).
- Opening options will then naturally extend sense-making.
- Understanding and avoiding pacific shrimp syndrome.

# **'Staged' Appreciation**

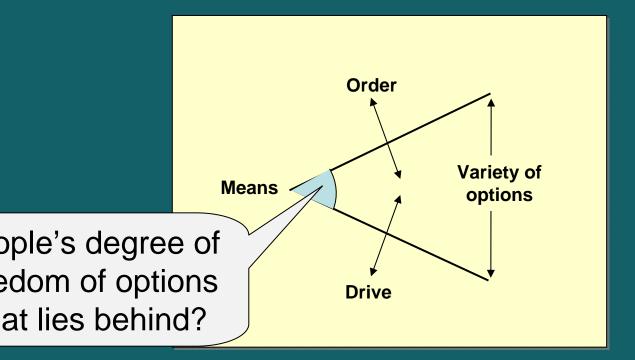
- Where people are
- Sense-making: open-eyes/open-mind
- Belief / surprise
- Choice-making
- Focus function and preference
- Stakeholder viewpoints and multi-perspectives

e written paper for more detail of the appreciation of the situation as a whole.



Perception of where I am What I have to do where I am What I have to do observables 'World of actions and observables' Problem context

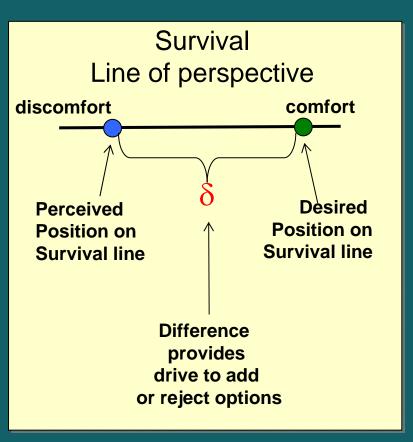
## **Clausewitz meets Turing**



# **Different people's perspectives**

/ith respect to any socially ocused future option:

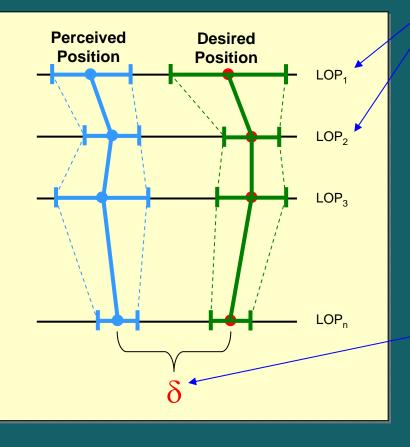
low might it affect people a terms of what they eally care about? rom a perspective of: eay-to-day survival ducational inancial



. . .

#### Drive to add or reject options

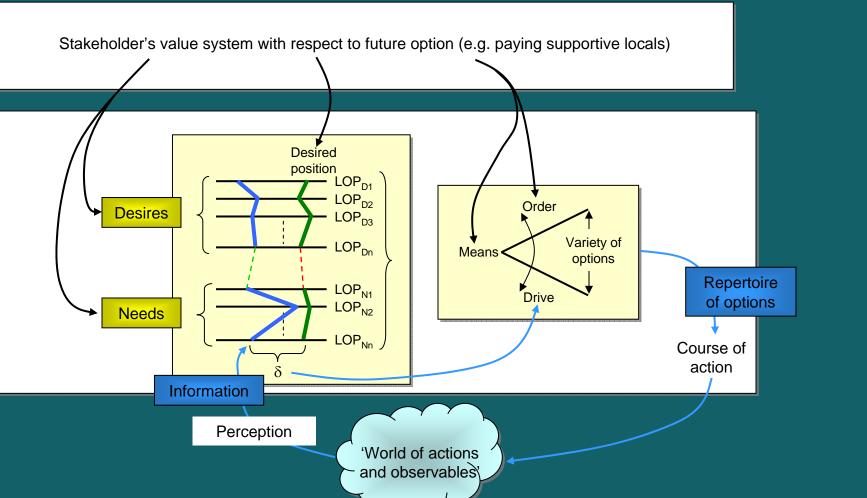
Lines of Perspective: What people care a<u>bout.</u>

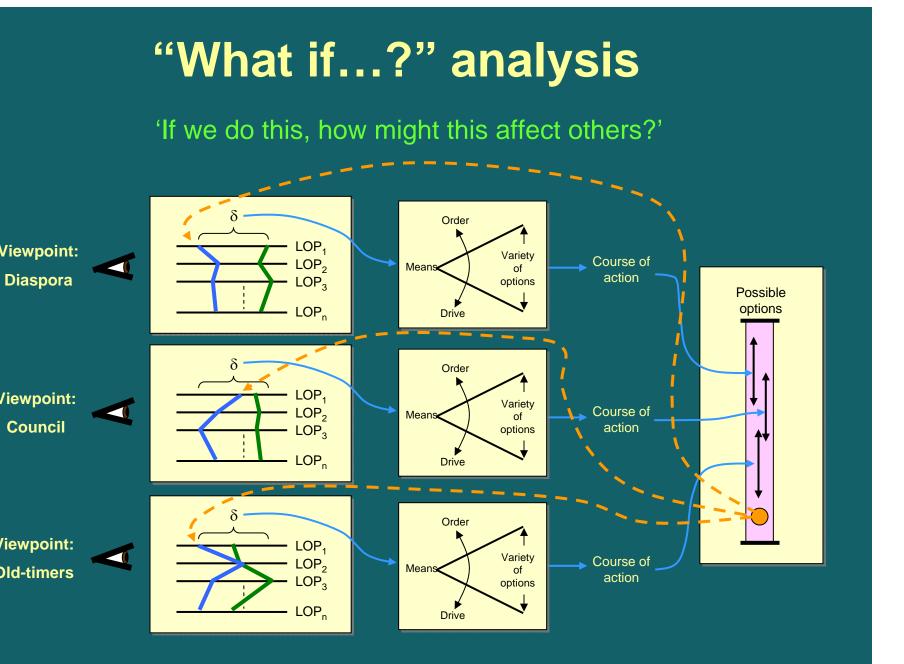


Lines of perspective such as survival, social, educational, financial, etc

Stakeholder's drive for action

#### An analytical framework: single stakeholder







- Think about how to visualise a social landscape for where people are.
- Where there's a way there's a will what lies behind behaviours?
- Black swans signify need for internal adaptation subjective surprise.
- Open inquiry is about supporting collaboration by enabling us to put on someone else's shoes\*.

\*helps us to take our own off first!





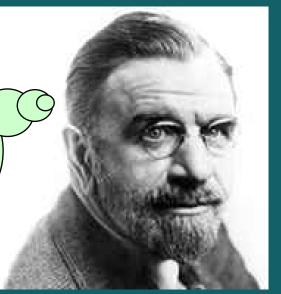
#### Questions?

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*If everybody is thinking alike, then somebody isn't thinking.* 

General Jan Smuts one-time terrorist





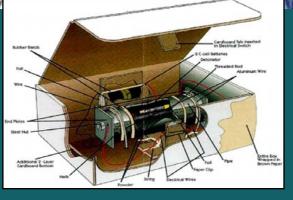
#### strative Example: Counter-IED

#### otions for action





Improvised Explosive Device



# **Candidate questions**

- Candidate forward-looking "What if?" question:
  - Is it deemed reasonable to pay for IEDs to be handed-in? If so, how much?
- Candidate backward-looking "Why?" question:
  - Why did the number of IED incidents not decrease during poppy harvest in 2007?
- Within our adaptive analytical framework, "why?" questions are very challenging due to the multiplicity of frameworks required.

# Potential Stakeholders for C-IED in Afghanistan

- Coalition Command
- Ordinary Solider
- ATOs (ie IEDD operators)
- Local population (Collateral)
- Local population (Protection)
- Bomb operatives (inc. finance & training)
- Afghan forces (inc. police)
- UK Public
- UK Government
- Tribal Elders (inc. District Councillors)
- **Taleban**

- Businessmen (Legitimate)
- NGOs
- Afghan Government
- Businessmen (Non-legitimate)
  - (inc. narcotics/weapons trading)
- **Media**
- UK Analysts (Int. etc)
- ...

# **Stakeholder interests**

Stakeholder	What defines main aspects of stakeholder interest in IED.
Taleban	IED as force element
ATO Operator	IED as device to be 'made safe'
Local population	IED as personal threat or opportunity
Media	IED as news-story element

# **Context: paying for IED**

eholder	What defines main aspects of stakeholder interests in IED	line of perspective	Measures
n	IED as force element	<ul> <li>Geographical</li> <li>Financial</li> <li>Educational</li> <li>Ideological</li> <li>Social</li> <li>Societal</li> <li>Technical</li> <li>Organizational</li> <li>Political</li> <li>Operational</li> </ul>	
perator	IED as device to be 'made safe'	<ul> <li>Geographical</li> <li>Professional</li> <li>Social</li> <li>Operational</li> <li>Technical</li> <li>Analytical</li> <li>Organizational</li> </ul>	

# **Context: paying for IED**

eholder	What defines main aspects of stakeholder interests in IED	line of perspective	Perceived Desired Position Position X Measures
n	IED as force element	Geographical	No. of regions of influence
		Financial	<ul> <li>Level of self-financing</li> </ul>
		Educational	<ul> <li>number of schools</li> </ul>
		<ul> <li>Ideological</li> </ul>	<ul> <li>% signed-up to ideology</li> </ul>
		Social	<ul> <li>Taliban with referent power</li> </ul>
		Societal	Re-established societal control
		Technical	numbers with IED skills
		Organizational	<ul> <li>% positions of authority</li> </ul>
		Political	Degree of Governmental power
		Operational	% reqd operative status
perator	IED as device to be	Geographical	• % secure patrols & safe areas
	'made safe'	Professional	Degree of achievement
		Social	Extent of social knowledge
		<ul> <li>Operational</li> </ul>	% reqd operative status
		Technical	Extent of device knowledge
		Analytical	Amount of support
		Organizational	Degree of autonomy

# Discussion of multi-perspective approach

- Adopting different viewpoints and considering multiple perspectives has potential for providing interesting crossstakeholder insights.
- The conceptual framework supports a more open and subjective approach to analysis.
- The outline analytical method helps to open-up inquiry and tries to avoid advocacy – visualisation needs further work.
- The approach encourages thinking about possibility in addition to probability – also brings out importance of addressing surprise in addition to beliefs and expectations.

# **QUESTIONS?**

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