Adjudicating Influence Below 'The Red Line'

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Introduction

- What is adjudication? 'Adjudication is the process of determining the outcomes of player interactions. It is a key concept.' (MOD Wargaming Handbook pp.7-8)
- Why is it important (and particularly so in influence wargames)? A (obvious) lesson identified from the Dstl Influence Wargaming Project research is that good adjudication is critical to the success of influence wargames. If adjudication is flawed, risks arise
- It is also more challenging than in 'conventional' wargames. This particularly in an analytical/research context (vs training/education). Mitigating these challenges and risks is the purpose of this presentation
- 'Exam question': how can we safely and effectively adjudicate influence wargames, particularly in an analytical context?



Consequence Management

Identify: 2nd and 3rd order effects Unforeseen consequences

> **Challenges** and **Risks**

The areas that the **Dstl Representation** of Behavioural **Effects Project is** addressing

Audiences' perspectives

Understand: Perceptions of our actions

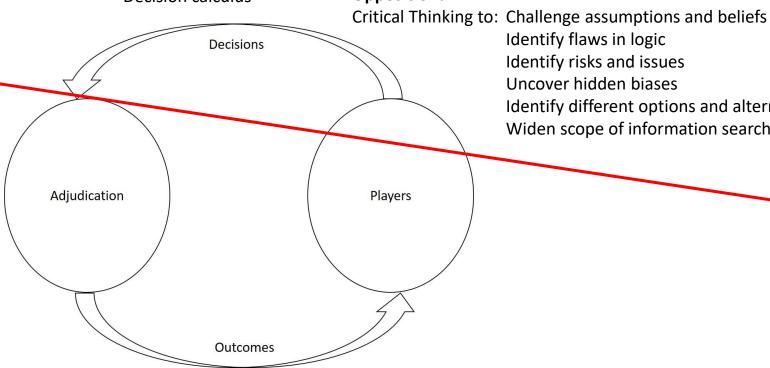
Intentions

Reaction options

Decision calculus

Oppositional

Identify flaws in logic Identify risks and issues Uncover hidden biases Identify different options and alternatives Widen scope of information searches



The simplest representation of a wargame

Challenges (to effective adjudication)

- Real-world quantification of influence effects is hard! How do we game something we don't do well in reality?
- Hence, validation of adjudication methods is problematic
- Current adjudication outcomes are of variable (i.e. unknown) quality, and the levels of confidence and coherence of their outcomes is uncertain
- Adjudication almost certainly suffers from various biases, whether it is Human in the Loop (HITL) or Modelling & Simulation-based
- There is a trade-off between speed of adjudication and: levels of coherence; ability to ascertain confidence levels; and transparency

Risks (arising from flawed adjudication)

- False lessons arise
- Outcomes are unusable due to low confidence or their not being timely
- Effects are misrepresented, under- or over-stated
- Measure Of Effectiveness are irrelevant or underdeveloped
- Key factors or decision points are missed
- People assume a surety of outcome having seen something gamed
- Wargames are not undertaken because 'it's all too difficult'

Design factors

- Degree of support available (e.g. Suitably Qualified & Experienced Personnel, methods, models & tools, connectivity etc)
- Accuracy versus simplicity (reality versus abstraction and playability)
- Level of investigation (discovery, development, validation)
- Not classification: any classification can be wargamed

(Selected) Influence Wargaming Project observations

- Prevalent wargame formats and adjudication methods are matrix-style and/or subject matter expert judgement
- While a HITL is often (always, currently?) required, additional tools and techniques are required to provide quantitative adjudication support
- Calibration is required of:
 - Starting positions
 - In-game movement ranges (in-game deltas and causal links)
- Influence wargames' adjudication should include: (these are also mitigations)
 - A range of outcomes
 - Uncertainty of outcomes
 - Unexpected outcomes ('backfires')
 - Consideration of 2nd and 3rd order effects
 - Consideration of unintended consequences
 - Critical Thinking/Red Teaming

(Selected) Potential mitigations

- Good wargame design!!!
- Multi-factor adjudication, combining multiple techniques
- Recognise the confidence levels of adjudication outcomes
- Subject adjudication outcomes to Critical Thinking
- Ensure the adjudication process and outcomes are transparent
- Determine the importance of an adjudication decision and, hence, the effort required for it and the necessary 'granularity' of factors and outcomes
- Propose a range/spread of outcomes rather than claim to be precise
- Capture the rationale underpinning adjudication decisions
- Identify 'branches' (alternative outcomes) at crucial adjudication points
- Perpetual games (legacy gaming)
- Etc

Focus Questions for breakouts

Exam question: how can we safely and effectively adjudicate influence wargames, particularly in an analytical context?

- How might adjudication be done effectively in influence wargames?
- What risks/benefits might arise when adjudicating influence outcomes?
- How can these be mitigated/exploited