

Assessment: Give me a place to stand, and I will move the world

Dr Erik Bjurstrom, Maelardalen University

Peter Nilsson, Swdeish Defence Research Agency (FOI)

Assessment as we see it

- Making sense of complex situations
- Increasing rationality in C2
- Reducing uncertainty

Uncertainty

- Qualitative vs. Quantitative uncertainty
- Intentional vs. Stochastic uncertainty
- Dynamic vs. Static uncertainty

The evolution of conflicts and uncertainty

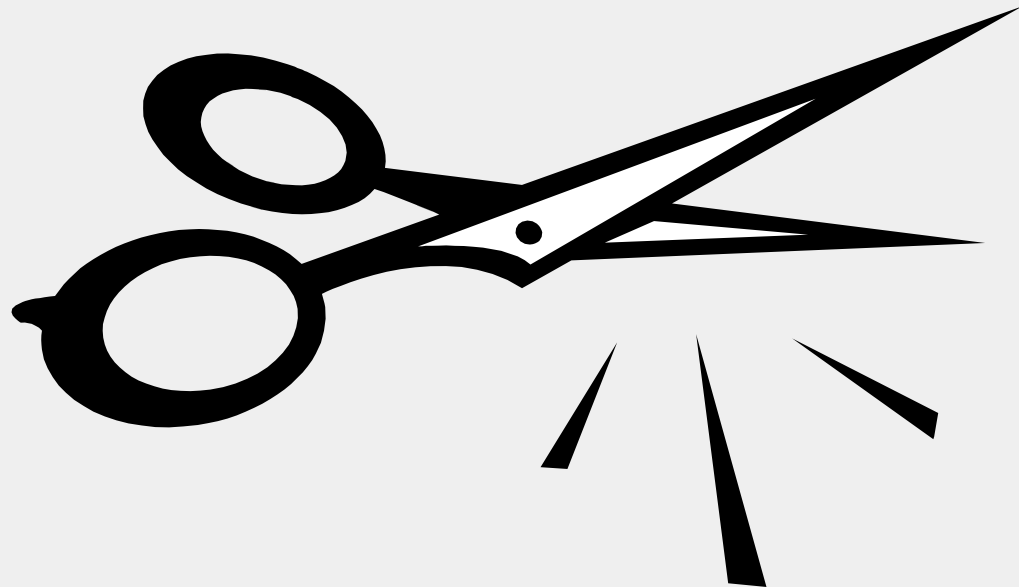
- Information needs can to a lesser extent be satisfied with raw data
- A shift towards qualitative uncertainty
- ..reflecting evolutionary tendencies in the environment
- The logic of the evolution of conflicts doesn't follow any perceptible rules of nature or behaviour

Assessment today

- Physics paradigm
- Objective analysis
- Rationality as a choice between comparable alternatives

Ecological rationality - Simon's scissors

"The mind is one blade, and the structure of the environment the other."
(Herbert Simon)



Dealing with uncertainty in real life

- Bias is not necessarily a bad thing
- Heuristics and rule of thumb
- Pattern recognition
- Learning and skills
- Adaptation rather than prediction

Conclusions

- Probabilistic methods are not agile enough to deal with intentional, qualitative uncertainty.
- We may need to revise the very notion of rationality in C2 decision making, from seeing it as optimization based on objective facts, to instead seeing the very act of adaptation as an expression of rationality, in every part of the C2 process including assessment.

Proposals

- A culture of non-objectivity
- Pro-active uncertainty management
- Distributed assessment

- It is safer to know that you are guessing than to believe that you know!