



Forecasting and Foresight in Strategic Decision Making

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Superforecasting Attributes

- **Set Conditions with the Right Question**
 - Must be observable to an outcome that can be agreed on
 - Break down to clusters for large issues; a family of questions
 - Target to conditional points where decisions can implement action
- **Personal Actions**
 - **Start with Base Rate / Outside View**; mitigate anchoring bias
 - **Scope Sensitivity** - Horizon
 - **Know your numbers**; both sides of probability, estimations
 - **Record your results**; a) slow the story, b) prevent hindsight bias
 - **Monitor and Accept Updates**; over-confidence
- **Team Actions**
 - Aggregate Partial Information
 - Estimate / Talk / Estimate



Game Theory Applied

- Interest Based Analysis.
- Analytical decision-tree approach grounded on linear system linkages of Action, Outcome, Preference
- Prisoner Dilemma, 2/3 Average exercise
- Set ground for students to comprehend the emergent hybrid model of prediction marrying algorithms with experts.
- Key Readings
 - Bruce Bueno de Mesquita, *The Predictioneer's Game*
 - Steven Tadelis, *Game Theory: An Introduction*



History in Forecasting

- History doesn't repeat itself, but it often rhymes.
- Case Study based analysis
- Focus on Worldview / Status Quo
 - Change through linear progression? Generational upheaval?
 - Or chaos and irrationality prevail?
- Key Readings
 - Neustadt and May, *Thinking in Time*
 - Strauss and Howe, *The Fourth Turning*
 - Jervis, "How Decision Makers Learn from History"



Gaming - Wargaming

- Psychologic strengths of the experience
- Rigor and depth of exercises create a learning environment as well as providing outcomes analysis
- High time investment and repetition is costly.
- Guest Presenter – Head Exercise Developer NDU Center for Applied Strategic Learning
- Key Readings
 - JFQ 55, “[Designing Exercises for Teaching and Analysis](#)”
 - Margaret McCown, “[Strategic Gaming for the National Security Community](#)”
 - Perla and McGrady, “[Why Wargaming Works](#)”



Forecasting

- Which one of these things will happen?
 - Futures reduced to specific outcomes
- Monitor for signals diverging
- Noise is risk
- Outcome within horizon of measurement/accountability

Foresight

- What thing out of all possibilities might happen?
 - Futures include all possible outcomes
- Monitor for signal strengthening
- Noise is opportunity
- Outcome beyond horizon of measurement/accountability



Scenario Based Planning

- In-depth Discussion on Trends, Drivers, Signals
- Focus on identifying the critical uncertainties rather than the writing of the outcome scenarios
- Highlight psychological benefits of the narrative experience
- ES students complete Scenario Based Planning formally in the curriculum and provide great peer-to-peer learning.
- Key Readings
 - Schwartz, *The Art of the Long View*
 - NIC Global Trends
 - Laudicina and Peterson, *“No One Saw it Coming”*



Net Assessment

- Signals and Drivers and outcomes focus on asymmetries
- Highlight parallels to Scenario Based Planning
- Show importance of cultural and historical in worldview and status quo
- Discuss uniqueness to Dept of Defense and difficulty of implementing through policy / budget
- Key Readings
 - Bracken, *“Net Assessment: A Practical Guide”*
 - Krepinevich, *“On the Lasting Value of Net Assessment”*



Applying Speculative Fiction

- Focus on creativity and dynamic thinking.
- Breadth of opportunities: books, movies, series, videogames
- Scenario writing on steroids which provides deep narrative experience.
- Recognize technological and budget unreality
- Key Readings
 - Singer and Cole, *The Ghost Fleet*
 - US Army TRADOC Mad Scientist, “Science Fiction: Visioning the Future of Warfare 2030-2050”



Short-Termism in Government

- Triple B – Beltway Bureaucratic Battle
- GPRA
- Anticipatory Governance

- Key Readings
 - Fuerth and Faber, “Anticipatory Governance: Winning the Future”
 - Jonathan Boston, “Governing for the Future: How to bring the long-term into short-term political focus”