



**Supreme
Allied
Commander
Transformation**

Visions of Warfare 2036: a futurist prototyping methodology to support long term decision making

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Defence Planning Policy and Analysis

- Evolving Character of War
- Function of Foresight
- Power of Storytelling
- Futurist Prototyping
- Concluding Remarks

Obligatory Dead Guy Quote

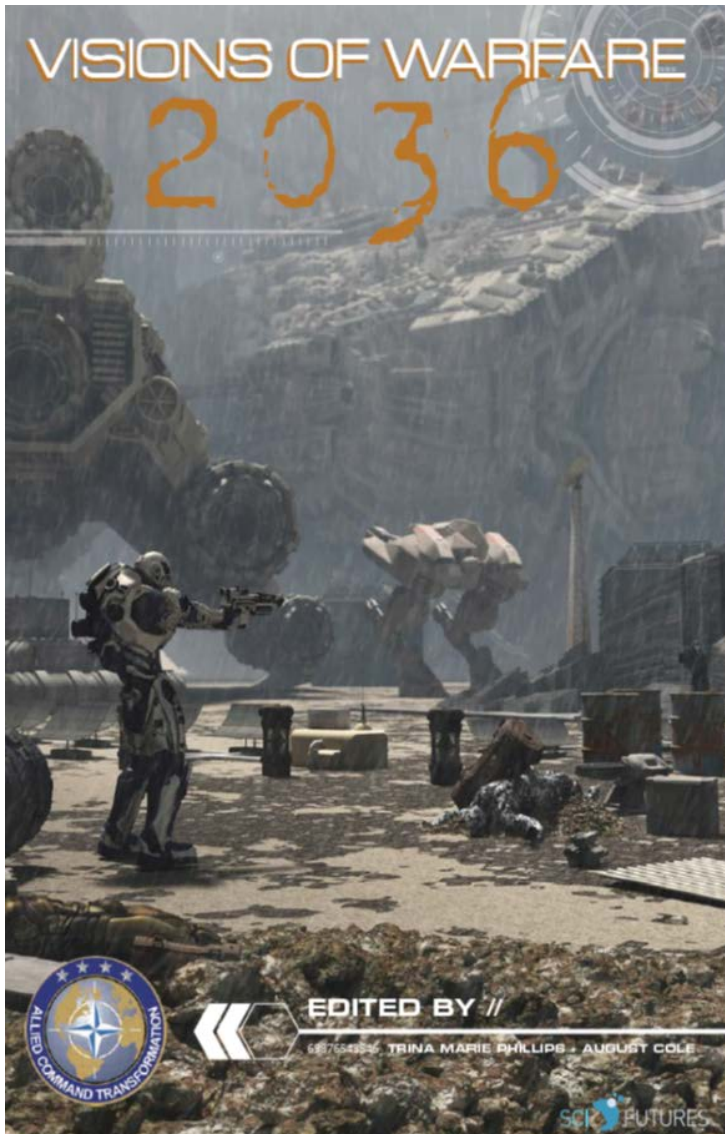
“If a man takes no thought of what is distant, he will find sorrow near at hand”

Confucius, 5th Century BCE

- Thucydides, Sun Tzu and Clausewitz agree that nature of war is constant
 - Contest of wills
 - Driven by fear, honour and interests
 - Play of chance, the fog of war and friction
 - An extension of policy by other means
- But its character changes with the times
 - Technology
 - Doctrine
 - Social norms
 - Legal and ethical constraints
 - changes in enemy objectives and will
- “No matter how clearly one thinks, it is impossible to anticipate precisely the character of future conflict. The key is to not be so far off the mark that it becomes impossible to adjust once that character is revealed.” Sir Michael Howard

- Foresight is not about predicting the future; it is about making better decisions in the present.
- Objectives of Foresight
 - generate better quality thinking about the future;
 - enable faster responses to events based upon an enhanced perception of the future; and
 - energise leadership to set the future context for decision making.
- Foresight can broaden the perspective of decision makers allowing them to “overcome the natural mindset that sees tomorrow as simply a linear extrapolation of the world as it is today.” Krepinevich
- Insight into how issues may develop in the future allows hedges against outliers and provides options to decision makers.
- “luck favours the prepared mind.” Pasteur

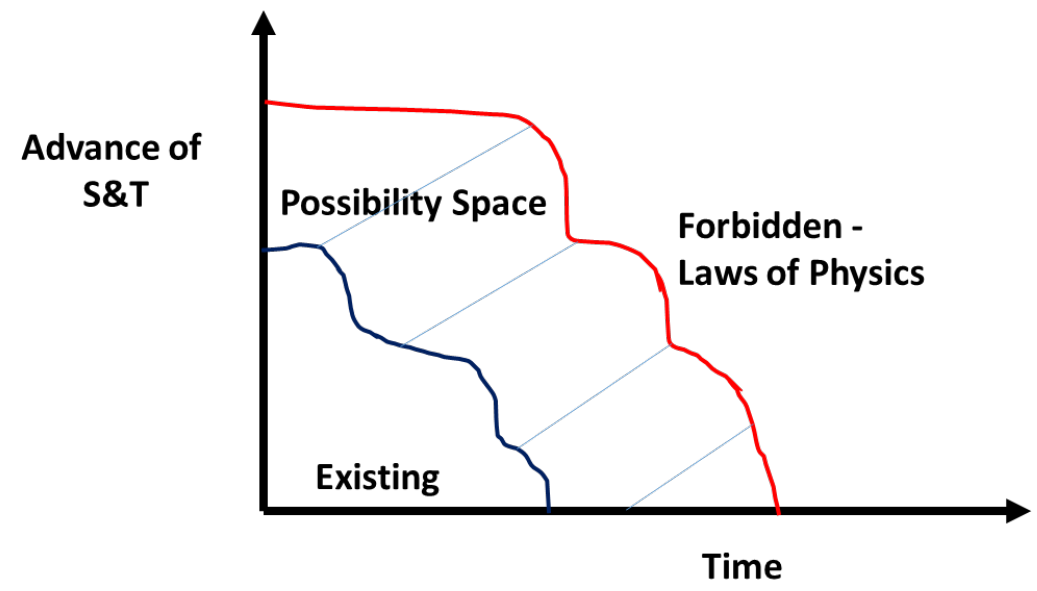
- Stories create believability and engage and hold audiences.
- Many inventions and innovations were described in stories many years before they became a reality.
- Science fiction informs or inspires product design
- Provides context for decision making
- “science fiction can be understood as a kind of writing that, in its stories, creates prototypes of other worlds, other experiences, other contexts for life based on the creative insights of the author.” Julian Bleeker
- “science fiction gives us a language in which to talk about the future” Brian David Johnson



- Designed as a proof of concept to use Futurist (Sci-Fi) Prototyping to inform our long term thinking/decision making
 - Allow open discussion, using strength of storytelling, about the future character of war
 - Discover, from the minds of professional writers, new tech, novel use of existing tech, new doctrines, how and why we will conduct operations ...
 - Add unconventional tool to the toolbox of methods, spark innovation, reduces the risk of stale thinking
 - Strengthen decision making by bringing the discussions into the future context.



- Workshop at SciFutures, baseline set from ACT perspectives on the future
 - Technology Trends Survey (TTS)
 - Strategic Foresight Analysis (SFA)
 - Framework for Future Alliance Operations (FFAO)
 - Long Term Aspects (LTA) of requirements
- Remain “unbounded by military strictures or the subliminal requirement to be “realistic””
- Not meant to be a spanning set of future possibilities, meant to spark the imagination and intellectual thought on the future
- Storylines developed with SciFutures authors
- Culminated in a workshop with defence planners, International Staff, think tanks
 - use the anthology to discuss possible future military requirements



- Explored the possibility space between what is 'state of the art' and what is the 'art of the possible'
- Gibson "the future is already here, it's just not evenly distributed"
- Nothing in the stories approaches the forbidden zone, the 'I believe' button was easily pressed

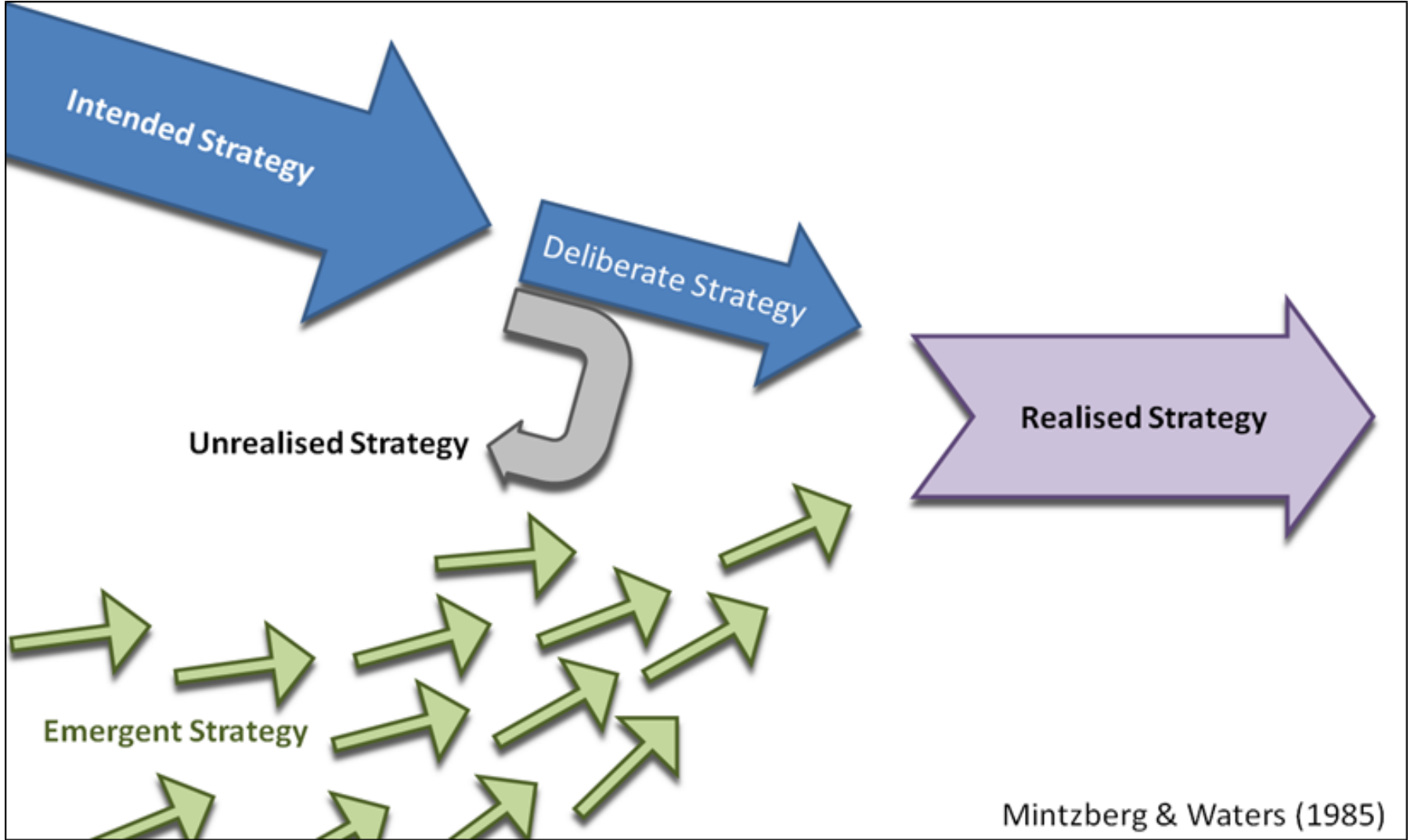


- The global pace of change continues to increase.
 - The volatility of increasingly complex systems –culture, technology, environment ... - frequently creates unanticipated changes.
- How can NATO deal with ‘Unknown Unknowns’
 - Red Teaming, Futurist Prototype
 - Flexible, adaptable, robust and resilient force pool
 - Agile and swift decision making process
 - “plans are nothing, planning is everything”
 - Increasing diversity within the force
- Geography is less relevant
- Difficulty in differentiating combatants
- Stronger affiliation with companies
- Can strategic surprise be achieved?
- AI and autonomy is growing
 - Burden Sharing?



- The Prototype is meant to improve thinking and decision making about future issues
- “If what we are doing is not seen by some people as science fiction, it's probably not transformative enough.”

Sergey Brin, Cofounder of Google



Mintzberg & Waters (1985)

- any ‘realised’ strategy is actually the combination of an ‘intended’ strategy and an ‘emergent’ strategy.
- The emergent component intends to identify fundamental, long-term developments, shocks or trends in: geopolitical security, institutional context, technology development, or underlying economic, legal, moral or social domains.
- Emergent strategies based on this component allow organisations to learn and change – “to respond to an evolving reality rather than having to focus on a stable fantasy.” Mintzberg and Waters

