## Threats and Opportunities: Intelligence Analysis for Managing and Exploiting Uncertainty

Yakov Ben-Haim Institute for Research on the Methodology of Intelligence 2 May 2024

Nations face two types of challenges—threats and opportunities— both of which are usually very uncertain. Intelligence analysis must support the selection of policy or action in response to both types of challenges. This article focuses on methodology in support of decisionmaking, and claims that different analytical tools are appropriate for threats and for opportunities. Decision support for responding to threats should be based on evaluating the robustness against uncertainty, while guaranteeing specified critical outcomes. In this approach, the quality of the outcome is adequate (the outcome is satisficed) while the robustness to surprise is maximized. This methodology is called robust satisficing. This differs from the standard approach of attempting to achieve an optimal outcome. Decision support for responding to opportunities should be based on exploiting favorable circumstances to facilitate (although not necessarily guarantee) better than anticipated outcomes. In this approach, the analyst supports a decisionmaker who aims at wonderful windfall outcomes at the lowest possible uncertainty. This is called opportune windfalling. We discuss several examples and explore the theoretical properties of, and relation between, these two decision strategies, based on info-gap decision theory.

Source material:

- 1. Yakov Ben-Haim, 2022, What strategic analysts and planners for national security need to know, *Intl. J. of Intelligence and Counter-Intelligence*, 35: 57–72, 2022.
- 2. Yakov Ben-Haim, 2023, Threats and opportunities: Intelligence analysis for managing and exploiting uncertainty, *Intl. J. of Intelligence and CounterIntelligence*, vol. 36: #3, 912–931.
- 3. Citations of articles employing info-gap theory in national security:

https://info-gap.technion.ac.il/homeland-security/

 $<sup>\</sup>label{eq:lictures} talks \lib \inst-res-meth-int 2024 abs 001.tex$