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Threats and Opportunities:

Intelligence Analysis for Managing and Exploiting Uncertainty

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Abstract 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 paper focuses on methodology in support of decision making, 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 (though not necessarily guarantee) better than anticipated outcomes. In this approach the analyst supports a decision maker 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.

"For every opportunity out there, there are also challenges and threats - real or potential." George Tenet¹

Keywords: Threats, opportunities, uncertainty, policy choice, decision support.

¹ George J. Tenet, The CIA and the security challenges of the new century, *Intl. J. Intelligence and CounterIntelligence*, vol. 13, 2000, pp.133-143, p.138.