

Full article appears in
Intl. J. of Intelligence and CounterIntelligence, vol.36: #3, 912–931.

Threats and Opportunities: Intelligence Analysis for Managing and Exploiting Uncertainty

Yakov Ben-Haim
Technion—Israel Institute of Technology, Haifa, Israel
yakov@technion.ac.il

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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 focusses 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 satisfied) 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 the Japanese attack on Pearl Harbor in 1941, and explore the theoretical properties of, and relation between, these two decision strategies, based on info-gap decision theory.