

Yakov Ben-Haim, 2026, Dilemmas of robustness, opportuneness and informativeness: Implications for intelligence analysis, *Journal of European and American Intelligence Studies*, to appear.

Abstract Intelligence analysts support decision makers by using evidence to formulate assertions that are informative and reliable. We identify generic conditions in which informativeness trades off against reliability: Informativeness improves as reliability deteriorates, subject to a condition on scalability of informativeness. We use info-gap decision theory to assess this trade off, thus assessing utility for decision makers of intelligence assertions. We assess reliability of an assertion with the concept of robustness to uncertainty as developed in info-gap decision theory. Robustness responds to the pernicious side of uncertainty, but surprise can be favorable and uncertainty can be propitious. An assertion has great opportuneness from uncertainty if small increments of evidence can dramatically improve informativeness of the assertion. We identify generic conditions in which informativeness trades off against opportuneness. We show that robustness and opportuneness both improve or both worsen as informativeness changes. We develop these ideas generically and discuss an example, demonstrating relevance to intelligence analysis. The example considers whether, and when, the People's Republic of China will invade the Republic of China (Taiwan). The formulation is hypothetical and qualitative, and demonstrates the evaluation and interpretation of the robustness and opportuneness concepts, and their use in choosing reliable and promising intelligence assertions.

Keywords uncertainty, informativeness, reliability, robustness, opportuneness, trade-offs