

Chapter 4 Strategies for Analytical Judgement:

Transcending the Limits of
Incomplete Information

Strategies for Generating and Evaluating Hypotheses

- Situational Logic
- Applying Theory
- Historical Comparison

Situational Logic

- Regard situation as unique instead of an instance of a broader class of comparable situations.
- Draw logical consequences and antecedents based on known facts and understanding of particular instance.

Situational Logic - Weaknesses

- Personal bias – Projecting your own personal interpretations onto the subject of analysis.
- Fails to exploit theoretical knowledge obtained from the study of several similar cases.
 - Causal effects derived by situation logic may just be symptoms of more fundamental events which can be explained by theory.

Applying Theory

- Theory is a generalization based on the study of a large amount of examples.
 - Specifies that when a set of conditions arise, certain other conditions will probably follow.
- Allows analyst to see beyond short-term developments and recognize superficial or significant trends that currently leave little evidence.

Applying Theory – Weakness

- Can blind you to specifics of the current situation which differentiate it from generalized theory.
- Often psychologically difficult to overcome an interpretation based on theory even in light of hard evidence to the contrary.

Comparison with Historical Situations

- Formation of analogies with specific situations in the past.
 - Relies on establishing a broad equivalence between current situation and one or a few past situations.
 - Unknowns in current situations are assumed to take on values of knowns from prior situations.

Comparison with Historical Situations – Weaknesses

- Easy and convenient to assume that the current situation and a past situation are equivalent based on known similarities.
 - Can cause you to interpret a completely new-but-similar situation as a past situation, leading to incorrect conclusions.
- Vivid historical precedents often force themselves to the forefront of consideration.

Strategies for choosing hypotheses

- Satisficing – Selecting the first identified hypothesis that appears to be “good enough”
- Incrementalism – Focusing on a narrow range of hypothesis, each only different marginally.
- Consensus – Opting for the hypothesis that will elicit greatest agreement or support.
- Reasoning by analogy – Choosing the hypothesis that avoids previous error or

Pitfalls of intuitive analysis

- These intuitive methods of analysis have fundamental weaknesses:
 - **Selective Perception** – Only information that is relevant to the initial hypothesis is processed. If incorrect, information suggesting a different hypothesis is lost.
 - **Failure to generate appropriate hypotheses** – Most people are unable or simply do not identify or choose from the full range of potential hypotheses.
 - **Failure to consider diagnosticity of evidence** – Without a full range of alternative hypotheses, evidence that is applicable to the current hypotheses as well as other hypotheses may be used to mistakenly verify the current hypotheses.

Conclusion

- Intuitive analysis often focuses too much on confirmation of a single hypothesis.
- Simultaneous evaluation of multiple hypotheses seem to be the best method of analysis.
 - Cognitively formidable task to maintain so many hypotheses in working memory.