Intelligence Analysis

- **Intelligence Analysis** is a powerful, influential tool for improving the decision making processes.

- Formal methods of IA can be troubled by many problems, of which problems with human mental processing are among the most important and difficult to handle.

- Mental weaknesses and biases can be alleviated by an array of analytical tools and techniques described in this book.

Thinking about Thinking

- When seeking ways to improve intelligence analysis, little attention is usually devoted to improving how an analyst actually thinks.

- This book is intended to serve as a guidance tool for modifying an analyst's habits to achieve optimal analytics.

- It aims to improve judgments when facing incompleteness & ambiguity through the use of its mentioned tools and concepts.

- Four main areas are discussed:
  - **Part I**
    - **Limitations** of the mental process.
  - **Part II**
    - **Analytical Tradecraft**: simple tools and techniques for overcoming these limitations.
  - **Part III**
    - **Cognitive Biases**: predictable mental errors due to simplification in mental processing, and whether or not they can be overcome.
  - **Part IV**
    - **Conclusions**: a to-do list for analysts and recommendations for managers on achieving analytical excellence.
Thinking about Thinking

Herbert Simon, an influential social scientist of the 20th century, characterized the limits of human mental capacity.

He advanced the concept of “bounded rationality.”

He argued that the mind, due to its limitations, creates simple models of the complex world, and we reason over these models. Though, they may misrepresent reality.

Psychological research on perception, memory, attention span, and reasoning capacity has helped to characterize our cognitive limits.

This book strives to use experiments from this research to describe the impact that mental processes play on analysis, from an intelligence analyst’s point of view.

It seeks to shed light on the influence that an observer has on observations and interpretations.

Thinking about Thinking

Perceptual Influences

- What we perceive about information are all influenced by:
  - Past experience
  - Education
  - Cultural values
  - Role Requirements
  - Organizational norms
  - As well as
    - the information itself

The biases discussed in Part III are inherent to cognition, but the previous influences on perception affect the mental models that analysts form and reason over.

Intelligence analysts must understand their own reasoning process and the factors that influence it. Not enough training is focused on this.
Thinking about Thinking

- **Training** can help to:
  - Increase **self-awareness** of generic perception & judgment problems of foreign events.
  - Give **guidance & practice** in overcoming these problems.
  - **Exercise** the mental act of thinking and analyzing.
  - It is **not** a given that an analyst can already analyze well.

Mental Models:
- They are **distillations** of all that we think we know about a subject.
  - **Advantage**
    - They help analysts **produce results** quickly.
  - **Disadvantage**
    - They map perception onto understood models, sometimes **ignoring or lessening** the importance of unexpected data.

They must remain **open to alternative interpretations** in a rapidly changing world in order to be successful.

Thinking about Thinking

- Mental models are important to analysis, and should be explored and documented.
- Good, **useful** information must be collected to analyze.
- **Optimal mental models & analytical tools** must be used to help sort through, make sense of, and get the most out of **ambiguous & conflicting** information.

- It is very difficult for an analyst to be self-conscious about the **problems inherent in his or her mental process**, and so that is the focus of this book.