

Review of *Reasoning for Intelligence Analysts: A Multidimensional Approach of Traits, Techniques and Targets*

Noel Hendrickson (2018). *Reasoning for Intelligence Analysts: A Multidimensional Approach of Traits, Techniques and Targets*. Lanham, Maryland: The Rowman & Littlefield Publishing Group Inc. LCCN 201048900 (print), ISBN 9781442272309 (cloth : alk.paper). 335 pages. \$98.00

Are Intelligence Analysts born or made? Is Intelligence Analysis (IA) a trade craft or profession? Will academic rigor and coursework improve critical thinking? Can the foundations of logic, methodology, and reasoning allow analysts to reach proper and transparent conclusions? Dr. Noel Hendrickson, in his textbook *Reasoning for Intelligence Analysts: A Multidimensional Approach of Traits, Techniques and Targets* proposes that the twenty-first century, which ushered in the information age, has created significant challenges for Intelligence Analysts. Most notably, the navigation of the vast amounts of open resources and the speed of transmission of information. Furthermore, because Intelligence Analysts ultimately serve as advisors to policymakers and decision makers, their critical thinking skills and methodology are applied to conclusions that must be replicable and clear as crystal. Dr. Hendrickson's work is intended to improve intelligence analysis in the twenty-first century by combining evidence, theory, and analytical reasoning techniques. He places significant value on balancing theory with real world application. Thus, he supports that intelligence analysis can be vigorous when analysts use consistent techniques, and that these techniques must be able to be mastered by an analyst in a short time frame. Ideally, by analysts utilizing objectivity and gaining mindfulness about pitfalls, they will not only understand the fallibility inherent with being Intelligence Analysts, but will also be prime examples for critical thinking and analysis.

Dr. Hendrickson's foundational argument is that intelligence analysis is a profession that must be supported by academic theory and analytical methodologies—specifically, the abductive approach, which is better suited to the challenges of analysis in the information age. He classifies the information age as beginning in the 1990s with the digitization of information, the control of knowledge, and that an individual is defined by their ability to access and use the supporting information technology. Of course, one of the greatest challenges is processing open source resources in the information age, and making sense of it in a way that is valid and replicable, or that can stand up to assessment. Because abduction deals with guesswork or speculative hypothesis, and can be defined as inference with best explanation, it combines both deductive and inductive argumentation. Deduction

tends to be rooted in rationalism (working with what is logically necessary given the data), inductive reasoning tends to be rooted in empirical observation and measurement (working with what is likely given the data), and abduction is rooted in both (using inductive and deductive reasoning to reason by analogy, to formulate hypotheses). This approach is better suited to the navigation of information in the twenty-first century. Hendrickson points out that the information age is still in its infancy, and therefore is marked by speculation, but the endpoint of the information age may be the universal accessibility to all the world's information.

Dr. Hendrickson spends the first few chapters of his 31-chapter textbook on the challenges of general reasoning. Many are familiar with basic reasoning challenges like personal traits, which can cause errors such as ethical dilemmas. The second is social media, blogs, etc. where anyone can publish their ideas, theories, and opinions and create a following and validation. Print publishing had a stop gate for people, called editors and peer review, which prevented individuals blogging from the basement to gain credibility. In the information age, everyone has a voice, Internet credibility, and can deliberately spread misinformation and fake news authority.

Additionally, there are constant and twenty-first century variables that muddy the waters for reasoning and contribute to analytical pitfalls. These include mindsets (beliefs about the world) and fallacies (poor reasoning). Also, the clustering of people based on their political beliefs or other ideological factors, via technology, has dramatically affected rational resolution of issues in the information age. Significantly, there is an increasing amount of unreliable data and misleading data. With all of these challenges, the analyst also has to contend with increasing speed of information that requires timely and rapid decisions. Often this occurs before all outcomes can be possibly weighed, which is another determining factor for utilizing the abductive approach.

While both inductive and deductive reasoning should be utilized by both experienced analysts and academically oriented analysts, to mitigate, navigate, and refine these techniques with twenty-first century challenges, Dr. Hendrickson discusses the use of the abductive reasoning approach, which marries theory and practice. In his chapter one, he explains that abductive, deductive, and inductive inferences are strategies for developing knowledge and wisdom, while also pointing out their use, success, and inherent pitfalls. According to Dr. Hendrickson, while inductive and deductive reasoning have been utilized historically and successfully in the IA community, it is abductive reasoning that "... has the potential advantage of creating an integrated approach to both 'theory' and 'practice' that will balance both academic rigor and practical relevance ..." (3). In abductive reasoning, the conclusion is an explanation of the available information. This is a critical point because of the inherent challenges that he outlines in the information age.

While the author begins his book with a general overview and methods of reasoning, the majority of the textbook is a detailed and comprehensive breakdown of analytical methodologies. This is supported by clear and well intentioned graphs and diagrams that highlight main ideas, as well as provide compare and contrast to applicable methodologies and theories. A thoughtful chapter that supports one of the book's themes that analytical reasoning is personal, and which is not often approached in academic textbooks, is chapter 9, "How to Know your Personal Characteristics as an Analyst." This chapter examines how the personal traits of an analyst influence the quality of their reasoning. Inherently, the title of analyst often embodies analytical prowess, which might make the analyst unaware of their own abilities and flaws. This chapter provides advice and a starting point for an analyst to be mindful about their personal thinking processes.

Reasoning for Intelligence Analysts is a timely tool for the analyst's toolbox in a complex world as it builds and expands upon what could be considered the limited use of behavioral and social science approaches and analytical techniques. Historically, the pioneering work of Richard Heuer's structured analytical techniques and its competing hypothesis theories, has been utilized in coursework, but has been found to be limited. One of the strongpoints of Dr. Hendrickson's text is that he does not criticize previously utilized analytic techniques, but rather builds on their strengths and directs readers toward what they are useful for. The information that supports the explanation of various analytical techniques is intended to offer a clear, straightforward, and detailed overview. This delivers ease of understanding and allows for debate.

The limitations of the textbook are almost nonexistent. The author points out the one drawback to his book is the lack of space available to address detailed case studies that illustrate the methodology being explained. However, there is the use of historically important analytical examples (post WWII) that he feels an analyst should be familiar with. Also, the textbook is intended for students and working analysts, who have a foundational understanding of argumentative reasoning. Recently, I queried a Defense Contractor, who hires approximately 300 Intelligence Analysts a year for civilian positions within the government and military. The top four degrees of new hires were Criminal Justice, History, Cyber-Security, and Homeland Security. The contractor, interested in building in-house coursework to measure and assess these new hires' critical thinking based on the competencies of ICD 203, 206, and 208, said that it might be a challenge to utilize Dr. Hendrickson's book as a building block for that coursework. This book's audience may be better suited to students in higher level (300+) Intelligence Analysis coursework for which Dr. Hendrickson is intimately familiar, as he is an Associate Professor of Intelligence Studies at James Madison University (JMU).

Since 2005, Dr. Hendrickson has focused his research on reasoning approaches for Intelligence Analysts. In addition to teaching at JMU, he is the found-

ing member of the JMU's Intelligence Analysis Program. His background is in philosophy and he earned a Ph.D. in Philosophy from the University of Wisconsin in 2002. He is a frequent speaker at related education and training conferences as well as author of *Counterfactual Reasoning: A Basic Guide for Analysts, Strategists and Decision Makers* (2008) and a coauthor of the *Rowman and Littlefield Handbook of Critical Thinking* (2008). Significantly, his approach to Intelligence Analysis has been utilized since 2007 in a four-semester analytical methodology course that supports the JMU Bachelor of Science Degree in Intelligence Analysis. He has refined and evolved his methodological approach through interaction with students, intelligence analysts, and colleagues in academia and the intelligence community.

Intelligence Analysis has moved beyond a craft to a noble profession supported by academia, and competitive intelligence academic programs provide the groundwork for critical thinking in the information age. At the core of intelligence analysis is the reduction of ambiguity for decision makers by providing understanding into complex twenty-first century military challenges. Yet, it is not fake news that, at times, the intelligence community has had difficulties converting knowledge into wisdom by forecasting and understanding armed conflicts and intelligence issues. While there has been historical preference for inductive and deductive reasoning and a reliance on heuristics, a proactive, timely, and contemporary approach may be to make use of a comprehensive intelligence analysis methodology that has been developed in *Reasoning for Intelligence Analysts*. Dr. Hendrickson's modern approach to a modern age specifically takes into account twenty-first century challenges, all with the goal of turning out the next era analyst.

Margaret S. Marangione

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