

BOOK REVIEW

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The Human Factor: A Hybrid Book Review of Dr Charles Vandeeper's *Applied Thinking for Intelligence Analysis: A Guide for Practitioners.*

Vandeeper, C. (2014) *Applied Thinking for Intelligence Analysis: A Guide for Practitioners*. Canberra: Air Power Development Centre. ISBN 9781925062045 (paperback). Available online at: <https://airpower.airforce.gov.au/publications/applied-thinking-intelligence-analysis>. [Accessed 21 August 2022].

Abstract: *Training manuals for Intelligence Analysts can vary in their focus, depending on where within the world of security science their intended audience sits. This book, which could be argued to be one such training manual, is quite unique in two regards. One, it provides an overview of Intelligence Analysis invaluable for those outside or on the periphery of the community, which this review argues should see it included as required reading for all those working with or intending to work with the profession. Two, it focuses on the human factors, skills, and fallibilities fundamental to the profession, yet so often treated as a small chapter or afterthought within a more technical, instructional picture. The author offers excellent practical solutions and options to mitigate the dangers of overconfidence in all its manifestations and encourages humility. As such, it is not just a manual for those being initiated into Intelligence Analysis, but also for those well-versed but humble enough to recognise the value of refreshing old skills and perspectives. This review also highlights elements of the book that potentially speak to the future of Intelligence Analysis and could reignite important debates or encourage new perspectives and research.*

Applied Thinking for Intelligence Analysis: A Guide for Practitioners is a relatively short, easy to read book of 106 pages consisting of 14 Chapters. It self-describes in Chapter 1 as “a reference text to support introductory training on critical thinking and analytic techniques given to intelligence analysts entering the Royal Australian Air Force (RAAF)” (p1), though the author acknowledges the book’s value beyond this scope. After providing an overview of the profession in Chapter 2, the author addresses some fundamental problems that can affect analysts at the start of any piece of work in Chapters 3 and 4. Chapters 5 through 10 focus on the many ways in which overconfidence (and therefore humility) and a closed view can affect analytical work, including as relates to our interpretations of the world and the ways we express certainty. Before closing with a summary in Chapter 14, the book spends time looking at the usefulness of Structured Analytic Techniques, the impact of biases and fallacies, and the importance of peer review and collaboration.

As explained by the author, and as one might expect, a book for intelligence analysts in one discipline is generally a book for analysts in any discipline. Intelligence analysis is relatively consistent in its philosophies and methodologies across multiple arenas, although the training, guidance and support on offer to analysts can vary significantly depending whether a practitioner works for the government, military, police, or in the growing body of corporate sector organisations adopting the intelligence doctrine. Non-analyst managers and decision-makers will also have dramatically varying understanding of the purpose and capabilities of their analysts, resulting in different daily and professional challenges for analysts in different organisations and departments.

Whilst intelligence manuals can be found to support these analysts in their learning and development, there is a tendency for them to be quite instructional; a ‘how to’ book of solutions and options for a range of practical difficulties in the intelligence industry. At first glance Dr Charles Vandeppeer’s *Applied Thinking for Intelligence Analysis: A Guide for Practitioners* could quite easily fall into this category, with familiar sub-headings such as ‘Diagnostic Evidence’, ‘Nominal Group Technique’ and ‘Inductive Reasoning’ featuring on the Contents pages. However, those same pages reveal a much greater depth and breadth of approach than found in other ‘manuals’. *Applied Thinking for Intelligence Analysis: A Guide for Practitioners* (hereafter, “*Applied Thinking*”) champions the profession and provides an accessible level of

insight into those afore-mentioned philosophies and methodologies not often found elsewhere. It also speaks, with a very human voice, to the common difficulties experienced by analysts, inevitably providing reassurance to those new in the field, or siloed and remote, that they are not alone.

Although it is not typical for a book to be reviewed eight years after its publication, especially when the author has a more recent book in circulation¹, *Applied Thinking* teases to the fore important topics that to date remain somewhat undervalued, ignored, or misunderstood. These topics include the need for greater education around Intelligence Analysis for customers of the profession, the potential value of intuition, and the resounding importance of humility. As well as providing a critical synopsis of the book overall, this review seeks to ignite and revive crucial conversations about these topics, to hopefully keep benefitting the tradecraft of intelligence analysis in every relevant sector.

When it comes to intelligence analysis, the career of Dr Charles Vandeeper is a smorgasbord of relevant perspectives and experience. A Squadron Leader and then Reserve Intelligence Officer for the Royal Australian Air Force, he moved into civilian life as a research scientist and an academic focused on intelligence analysis, decision making and critical thinking. He is currently a Senior Lecturer of the Australian Graduate School of Policing and Security at Charles Sturt University. Vandeeper draws upon this breadth of knowledge and network to ensure a robust offering in this book “principally written to support introductory training for junior analysts” (Trotman-Dickenson, 2014). Although both Trotman-Dickenson and Vandeeper himself note the potential readership and benefits to be wider than those stated above, the author does not acknowledge the significant degree to which this is the case; perhaps due to the humility he so encourages analysts to embrace throughout *Applied Thinking*. Vandeeper is also the creator of the Mind of War Project², a website / podcast advocating for better understanding of the self and others as human beings, using moments from and persons in war history as the basis for his reflections. This focus on the self as worthy of greater understanding shines through in *Applied Thinking*, with the ‘human factor’ woven throughout.

¹ Vandeeper, Charles (2017) *Asking Good Questions: A Practical Guide*. Adelaide: Freshwater Publishing.

² <https://www.mindofwarproject.com/>

Vandepier starts the book by explaining that ‘applied thinking’ is simply deliberate thinking and reasoning about analysis, where that analysis is geared towards producing a judgement, assessment, or other similar, tangible outcome. He then “situate[es] intelligence analysis” in the second chapter, making the true purpose of the profession and the difficulty of its execution clear to the reader (in a fashion that will make any analyst proud to hold their role).

Applied Thinking begins the core of its training journey by devoting Chapter 3 to what those familiar with the Intelligence Cycle will recognise as ‘Direction-setting’. Rightly so, of course, as this oft-overlooked element of analysis should be the first step in the problem-solving process and yet causes such anxiety in analysts, uncertain how to approach the tricky task of what can be perceived as challenging authority. Vandepier follows this up in Chapter 4 with another tricky task faced by analysts; time management. In both chapters Vandepier offers solutions for consideration, including the “5 whys” approach, inviting practitioners to “[ask] ‘Why’ five times, in order to get to the root cause of the problem” (p13). Future editions of the book may wish to consider a caveat here given the advice of ex-FBI Negotiator Chris Voss, who recommends answering instead of asking ‘why’. As anyone who has listened to the curiosity of a toddler knows, seemingly relentless ‘why’ questioning can be incredibly annoying, and in the workplace can come across as defensive or accusatory. If we regard the Direction-setting phase of analytical work as a negotiation, and indeed recognise the importance of the human factor in all we do, then asking questions commencing ‘how’ or ‘what’ are far more likely to help us on our path to achieving an answer for why (Voss, 2016).

From Chapters 5 to 9, *Applied Thinking* starts to delve deeply into the title concept, keenly exploring the definitions of knowledge, information and evidence, and the dangers of hidden assumptions. Emphasised across each of these chapters is the fact that much of the material collated and evaluated by Intelligence Analysts relates to inherently complex and unpredictable human behaviour. It is here where Vandepier starts to temper any feelings or beliefs of ‘expertise’ amongst analysts and quietly begins to instil the core value of humility. The discussions of the origins and importance of the Probability Yardstick in Chapter 9 certainly contribute to that purpose, though the topic would have possibly benefited from the inclusion of case studies highlighting the established risks of not appropriately reflecting degrees of certainty in analytical output.

Chapter 10 retains the focus on the self but invites the reader to take a step back and consider the influence of their work environment on “the way we behave and interpret the world” (p70). Vandepier then takes an even further step back, reminding us of the existence of a global analytical community through his nod to evidence-based Intelligence Analysis in Chapter 11. This is the ‘critical thinking’ chapter in which he explains a small number of Structured Analytical Techniques (SATs), although it’s fair to say that SATs are alluded to at various points along the book’s journey (for example, Key Assumptions Check in Chapter 8). The time given to these techniques is much less, and the style far more narrative in nature, than in the “official” *Structured Analytic Techniques for Intelligence Analysis 3rd Edition* (Pherson & Heuer, 2021) or the older *Quick Wins for Busy Analysts v2.0* (Professional Head of Defense Intelligence Analysis, 2016). *Applied Thinking* could be argued to be a signpost towards these more instructional offerings, with the latter presenting far greater numbers of formal critical thinking techniques overall.

Chapter 12 moves us into a discussion of Mindsets, Biases & Arguments reminiscent of Richard J Heuer Jr’s *Psychology of Intelligence Analysis* (Heuer, 1999). Pleasingly, *Applied Thinking* includes the topic of logical fallacies, referred to as “poor arguments”, a topic vitally important not just in terms of information evaluation and analysis but in communication and stakeholder relationship management also.

Before concluding with a summary, Vandepier uses the penultimate chapter to stress the importance of open-mindedness and propose the inclusion of integrity and humility as two fundamental analytical principles. Above the others, it is humility that stands out as having been most greatly promoted throughout the course of *Applied Thinking*, though there is no doubt that the emphasis has overall been on the human factors behind the Intelligence Analyst, rather than the technical skills. Wastell et al. (2006) would almost certainly be on board with this approach, themselves having identified that “analysts need empathic skills over and above analytic skills”, though it follows that they would then highly likely argue for the inclusion of empathy alongside integrity and humility in that cache of analytical principles.

There is no doubt that this book excellently serves its main purpose of inducting junior analysts into the profession, making them wise to the many pitfalls, traps, and challenges they are likely to face, and forearming them with the opportunity to develop the necessary qualities and

solutions in readiness. However, what especially stands out is the potential value of this book in training and educating people who work *with* Intelligence Analysts. The detective, the leader, the decision maker, the data scientist; whoever they may be, this book can help them better understand what analysts need, how they approach their work, and why they ask the questions they do. Certainly, the initial chapters at least provide the ‘why’ behind the ways and means sometimes perceived as secretive, insubordinate, or pedantic. Making *Applied Thinking* mandatory reading for persons requesting or consuming analytical products would go at least some way to addressing the dearth of training, highlighted by a number of authors, in that regard (Ratcliffe, 2008; Walsh, 2011; Burcher & Whelan, 2018).

Connected to this, in a fashion that will become apparent towards the end of this paragraph, *Applied Thinking* gives a nod in Chapter 11 to the importance of what could be termed ‘evidence-based intelligence’. In discussing SATs, Vandepier explains: “One benefit of adopting formal methods is that many have already been applied to problems in other fields, with their usefulness evaluated, peer reviewed and results formally published” (p76). Although Vandepier incorporates methods from the worlds of project management³ and behavioural psychology⁴, a training technique with its origins in the aviation industry could further benefit the analyst of Ratcliffe’s (2008) 3-i model; that is, the analyst who not only interprets the environment, but also influences the decision-maker to impact that environment. This technique is Crew Resource Management (CRM) training, designed to address those more interpersonal skills such as leadership, decision making, and coping with stress. A core element of this training is to apply it to the whole team in a way that transcends any hierarchy, focusing on the facilitation of communication in any direction along that hierarchy. CRM has become increasingly popular in the field of medicine, and a recent systematic review indicates that it does indeed have a positive impact on team reactions, knowledge, and behaviour (Buljac-Samardžić, Dekker-van Doorn, & Maynard, 2021).

Beyond this, *Applied Thinking* also hints at the future direction of research into and surrounding Intelligence Analysis. One of the ways it does this, perhaps unintentionally, is through the inclusion of a brief passage on intuition in Chapter 5. Vandepier does not delve deeply into the

³ Chapter 4 – ‘Backcasting’

⁴ Chapter 5 – The Johari Window

subject but does explicitly warn that we should not "ignore creative thinking or intuition" (p.35) when it comes to making analytical judgements. Intuition is a hotly contested topic in the analytical community, although the stance taken by any one person will inevitably be affected by their definition of the concept and their experience of it in the field. Medina (2022) argues that since Daniel Kahneman's publication of the System 1 – System 2 dichotomy (Kahneman, 2011), there has been an "overcorrection" within the community towards System 2 thinking, with anything more associated with System 1, such as intuition, being dismissed as dangerous. She suggests that analytical output could instead be improved by combining intuition with conscious reasoning, learning which thinking abilities are best suited to which situations, and developing new techniques to improve our understanding and handling of intuition. Whether the very real 'gut feel' associated with intuitive insight, almost inevitably experienced by any analyst who has worked on dynamic, time-critical crimes in action where information and situations flow and change at breakneck speed, could speak to an altogether new category of processing remains to be seen. Nevertheless, the analytical community could well benefit from closely following research into Cognitive Neuroscience, Psychology, and even specifically the Enteric Nervous System. The breadth of opinion and hypothesising on the matter clearly stretches beyond anything that could be captured in this book review, but the inclusion of 'Intuition' within *Applied Thinking* could at least pique the interest of the reader to explore the topic further.

Applied Thinking, thanks to its focus on the person, will inevitably stand the test of time and remain a useful reference for anyone working in or with the intelligence community. Whether for the newly initiated or the seasoned professional, this book serves as an excellent reminder of the need for humility within our industry – something on which all of us need a refresher at some point in our careers. *Applied Thinking* should almost certainly form part of the backbone of introductory texts for the junior analyst, but also part of the upskilling of those decision-makers and customers whom the analyst seeks to influence to create impact. And this is where this text is unique; in a world where the value of analytical work still struggles to be grasped by some outside the intelligence community, this book can act as a bridge towards better relationships and understanding.

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