III. Book Reviews

"Counterterrorism Bookshelf": Literature on Intelligence and Terrorism

Books & Monographs on Intelligence Agencies, the Intelligence Process and Intelligence Analytic Methods that Contribute to Improving Terrorism and Counterterrorism Analysis

Reviewed by Joshua Sinai

Effective governmental counterterrorism aims to preemptively detect, disrupt, and dismantle terrorist cells (including lone wolves) before they act, as well as rolling up their terrorist support infrastructures, such as financial, logistical, bomb-making, propaganda, radicalisation, and recruitment networks. With terrorist groups and their supporters also active on the Internet, effective counterterrorism also has to monitor, detect, disrupt, and dismantle their operations in the additional battleground of cyberspace. To implement such preemptive capabilities, counterterrorism analysts must quickly ascertain the reliability, implications and details of intelligence reporting on terrorist threats, synthesize them into actionable reports at the strategic, operational and tactical levels and then disseminate such threat-related information to their relevant counterpart partners, as needed for tactical execution, whether in law enforcement, the military, or even the private sector. Finally, these terrorist threat analytic products must be disseminated to senior policy makers in their governments in a timely and ongoing basis to provide them with continuous situational awareness to manage the overall counterterrorism campaigns, including providing them with metrics to measures the effectiveness of these campaigns.

To attain such analytical capability, the intelligence community – supported by the academic community – has developed a spectrum of analytic methodologies and software programs to provide counterterrorism analysts and practitioners with the tools to extract pertinent intelligence information from a variety of sources, diagnose, evaluate and measure the magnitude of terrorist threats facing a targeted country at the strategic, operational, and tactical levels, including the possibility of denial/deception practices by the terrorist adversary, analyse, map and model the nature of terrorist networks and infrastructures, including forecasting future warfare trends, and prepare finished reports, of varying lengths, that are disseminated to their appropriate end-users.

This review column focuses on a selective listing of books and monographs that examine how intelligence agencies operate, the intelligence process, and intelligence-based analytic methodologies and software programs that contribute to improving terrorism and counterterrorism analysis and execution.

Please note that some of the books listed under "Intelligence Agencies and the Intelligence Process" also include analyses of intelligence methods. With a few exceptions where one author is listed in companion publications, the books are listed in alphabetical order, according to the lead author's last name.

Intelligence Agencies and the Intelligence Process

Vian Bakir. *Torture, Intelligence and Sousveillance in the War on Terror: Agenda-Building Struggles.* **Burlington, VT: Ashgate, 2013.** 328 pages, US$119.95. ISBN: 978-1-4094-2255-6.

A critical examination of the roles of torture, intelligence and sousveillance (surveillance via cameras or electronic listening devices at the "human level") by the counterterrorism programs of the British and American governments in order to gain the upper hand against their terrorist adversaries. The author argues that the rise of this "torture-intelligence nexus" has led to abuses by both governments, and he recommends a series of measures to restrain them through the exposure of such activities by NGOs and the media of communications.

Henry A. Crumpton. *The Art of Intelligence: Lessons From a Life in the CIA's Clandestine Service.* **[Reprint Edition] New York, NY: Penguin Books, 2013.** 352 pages, US$18.76. [Hardcover], US$12.19 [Paperback] ISBN-13: 978-0143123378.

The author is a former veteran of the CIA's Clandestine Service, who played a leading role in the U.S. counterterrorism campaign against al Qaida in Afghanistan in the aftermath of the 9/11 attacks. Of particular interest is his discussion of the components of effective counterterrorism at the tactical to strategic levels, which he believes are based on the intelligence imperative of understanding and charting the human terrain in an unconventional war. Also crucial is the value of intelligence, integrating multiple government entities in the campaign, understanding one's local partners and working closely with them, applying technology (such as unmanned aerial vehicles which the author was instrumental in introducing into U.S. counterterrorism) that is driven by specific needs, developing flat and networked counterterrorism organisations, quickness and precision in force projection, and sound leadership.

Philip H.J. Davies and Kristian C. Gustafson (Eds.). *Intelligence Elsewhere: Spies and Espionage Outside the Anglosphere.* **Washington, DC: Georgetown University Press, 2013.** 320 pages, US$23.82. [Paperback] ISBN-13: 978-1589019560.

The contributors to this important edited volume focus on the "intelligence culture" of national intelligence agencies "outside the Anglosphere" in countries such as China, India, Russia, Arab and Islamic countries (such as Pakistan, Iran, and Indonesia), Japan, Ghana, Argentina, Sweden, and Finland. The country chapters discuss their intelligence culture, current intelligence practice, and whether they have engaged in security sector reform. What

is especially interesting about these country studies is the insight they offer on the contrasts and similarities of these intelligence agencies with those of the U.S. and NATO countries.

Robert Dover and Michael S. Goodman (Eds.). *Learning From the Secret Past: Cases in British Intelligence History.* **Washington, DC: Georgetown University Press, 2011.** 336 pages, US$26.96. [Paperback] ISBN-13: 978-1589017702.

The contributors to this highly interesting and important edited volume present ten cases that detail successes and failures from post-World War II British intelligence history, such as the Malayan Emergency, the Cuban Missile Crisis, Northern Ireland, and the lead up to the Iraq War. Each case (accompanied by historical documents from that era) is intended to reveal lessons that might apply to current intelligence challenges, particular in democratic countries. The cases discuss the structuring of the intelligence communities at the time, how intelligence was employed, for instance, in counterinsurgency or uncovering WMD proliferation, the intelligence gains of interrogations (including any ethical dilemmas that might have been involved in such practices), the value of human intelligence, and the potential for the politicization of intelligence in those cases where it played a factor.

Roger Z. George and James B. Bruce (Eds.). *Analyzing Intelligence: Origins, Obstacles, and Innovations.* [2nd Edition] **Washington, DC: Georgetown University Press, 2008.** 352 pages, US$27.84. [Paperback] ISBN-13: 978-1589012011.

The contributors to this important edited volume assess the state of intelligence analysis since 9/11, which ushered in an era of new analytical challenges. The volume is divided into six sections: the analytical tradition (the evolution of intelligence analysis, is intelligence analysis a discipline), the policy-analyst relationship (serving the national policymakers, intelligence analysis and "politicization"), enduring challenges (the art of strategy and intelligence, analytical imperatives in foreign denial and deception, and military intelligence analysis), diagnosis and prescription (making analysis more reliable, the analyst-collector relationship), leading analytic change (managing analysis in the information age), and new frontiers of analysis (computer-aided analysis of competing hypotheses, predictive warning methods, and homeland security intelligence). The concluding chapter proposes innovative ideas for improved analytical methods, including new forms of analytic collaboration and training a new profession of intelligence analysis. A revised and updated edition is scheduled to be published in March 2014.

Roger Z. George and Harvey Rishikof (Eds.). *The National Security Enterprise: Navigating the Labyrinth.* **Washington, DC: Georgetown University Press, 2011.** 384 pages, US$29.66. [Paperback] ISBN-13: 978-1589016989.

In this important edited volume, the contributors examine the organisational culture of the U.S. government agencies involved in national security issues, the interagency process that

enables them to work together, Congressional and Judicial checks and balances on executive power, and the influence in national security of private sector organisations, such as lobbyists, public policy think tanks, and the media. Specific agencies covered include the National Security Council, the Departments of Defense and State, the Office of the Director of National Intelligence, the Central Intelligence Agency, the Federal Bureau of Investigation, the Department of Homeland Security, and the Office of Management and Budget. Among the editors' conclusions is that the national security enterprise needs to adjust and evolve to address the dissolution of the previous "clear line between domestic and foreign security threats…in regard to counterterrorism, as well as other transnational issues like climate, immigration, and health." (p. 332)

Dwight Hamilton. *Inside Canadian Intelligence: Exposing the New Realities of Espionage and International Terrorism.* Toronto, Canada: Dundurn, 2011. 2nd ed., 288 pages, US$26.99. [Paperback] ISBN-13: 978-1554888917.

An account by former Canadian intelligence officers and journalists of the national security threats facing Canada and the government's organizations involved in responding to these threats, especially in the areas requiring intelligence and counterterrorism measures. The book's appendices include important documents, such as proceedings of the special Senate committee on anti-terrorism, the security of information act, and a section of the Canadian Criminal Code (Terrorism).

Carl J. Jensen, III, David H. McElreath, and Melissa Graves. *Introduction to Intelligence Studies.* Boca Raton, FL: CRC Press, 2012. 374 pages, US$79.95. [Hardcover] ISBN: 9781466500037.

This authoritative textbook provides a comprehensive overview of the U.S. intelligence community, its history, evolution and latest developments (for instance, the role of the intelligence component in the Department of Homeland Security and the office of the Director of National Intelligence) and how the various intelligence agencies operate. Also covered are the components of intelligence, such as collection, analytic methods, the intelligence cycle, counterintelligence, and covert operations. The components of military intelligence, as well as criminal intelligence and crime analysis are also covered. The final chapters discuss the nature of national security threats that are addressed by the intelligence community, as well as future challenges, including forecasting future threats.

Mark M. Lowenthal. *Intelligence: From Secrets to Policy*. CQ Press/ 2011. 5th ed., 386 pages, US$45.19. [Paperback] ISBN-13: 978-1608716753.

This textbook discusses how the intelligence community's history, structure, procedures, and functions affect policy decisions. Attesting to the book's popularity and longevity, this 5th edition highlights new challenges affecting policy-making in the intelligence community, such

as changes in the management of U.S. intelligence through the creation of the Director of National Intelligence, new developments in collection and analysis, particularly with the increase in the number of weak and failed states, and the challenges of maintaining secrecy in the age of Wikileaks. The book also includes expanded coverage of foreign intelligence services. The author is a former high-level official in the U.S. intelligence community.

Ronald A Marks. S*pying in America in the Post 9/11 World: Domestic Threat and the Need for Change.* **Santa Barbara, CA: Praeger/ABC-Clio, LLC, 2010**. 153 pages, US$34.95. [Hardcover] ISBN-13: 978-0313391415.

A valuable examination of how the threat of post-9/11 terrorism is managed by domestic intelligence in the United States, while attempting to balance civil liberties and effectiveness in intelligence collection. Of particular interest is the author's discussion of the complexities of determining the types of information that need to be collected against the relevant targets, which are elaborated upon in the sections on the intelligence cycle, and the components of risk management, which begin with an awareness of a country's critical infrastructure and key resources (CIKR), formulating a threat assessment, a risk assessment, and then generating a risk management equation, which the author defines as "Given what we wish to protect, what we know about our enemies' capabilities and desires, and what we think is more likely to happen against that we are protecting, what should we spend on manpower, machinery, and money to protect our designated CIKR?" (p. 32).

David Omand. *Securing the State.* **New York, NY: Columbia University Press, 2010.** 288 pages, US$23.10 [Hardcover], US$16.72 [Paperback]. ISBN-13: 978-0199327164.

While much of this excellent book focuses on the relationship between balancing justice and civil liberty and the need to fortify a democratic state's security (for which the author establishes a set of principles and approaches for upgrading intelligence in counterterrorism while respecting the requirements of basic civil liberties), of particular interest is his discussion of the components of effective intelligence analysis. In terms of warning intelligence, the author distinguishes between *strategic* surprise, in which an "intelligence community is unable to give any warning at all of trouble brewing, and a *tactical* surprise if despite such warning the time, place or nature of the attack still comes as a surprise" (p. 214). This has special applicability to terrorism, which the author explains "implies surprise," as "the weaker side engages in an asymmetric conflict in the hope of being able to choose the time, place, method and target of attack so that the security forces will always be caught unawares" (p. 220). The author, a retired senior level intelligence and security official in the British government, is a visiting professor in the War Studies Department of King's College London.

Paul R. Pillar. *Intelligence and U.S. Foreign Policy: Iraq, 9/11, and Misguided Reform.* **New York, NY: Columbia University Press, 2011**. 432 pages, US$28.80 [Hardcover], US$20.77 [Paperback] ISBN-13: 978-0231157926.

An examination of the effectiveness of the various reforms that have been instituted in the U.S. intelligence community since 9/11 and their impact on intelligence gathering operations and the execution of the nation's foreign policy. The events of 9/11 and the 2003 invasion of Iraq are utilized as case studies to assess the author's assumptions. The author is a former high level official in the CIA, including its Counterterrorist Center and National Intelligence Council.

Hank Prunckun. *Counterintelligence Theory and Practice.* **Lanham, MD: Rowman & Littlefield Publishers, Inc., 2012**. 216 pages, US$78.97 [Hardcover] US$39.95 [Paperback]. ISBN-13: 978-1442219335.

A discussion of the components required for effective counterintelligence operations. Chapters cover topics such as the fundamentals of counterintelligence, defensive counterintelligence planning (including physical, personal, information, and communications security), the tenets of offensive counterintelligence (including detection, deception, and neutralisation), and the ethics of counterintelligence. The appendices include counterintelligence reference materials such as a sample personal history statement, a summary of audio surveillance products, and a specimen chain-of-custody record. The author, a former counterintelligence officer, is a prominent academic specialist on counterintelligence.

Gudrun Persson. Fusion Centres – *Lessons Learned: A Study of Coordination Functions for Intelligence and Security Services.* **Stockholm, Sweden: Center for Asymmetric Threat Studies (CATS)/National Defence College, 2013**. 40 pages, [No price], [Paperback]. ISBN: 978-91-86137-17-5. The monograph is located at: https://www.fhs.se/Documents/ Externwebben/forskning/centrumbildningar/CATS/publikationer/Fusion%20Centres%20- %20Lessons%20Learned%20(english).pdf .

With the boundaries between external and internal threats becoming increasingly blurred, this monograph examines how fusion centers play important roles in providing integrated responses by various government intelligence and security agencies at national and local levels to different types of threats, ranging from natural disasters to terrorism. With the monograph's first part discussing general lessons learned and best practices in fusion centers' effectiveness in addressing new types of threats, the second part presents overviews of fusion centers in Denmark, France, Germany, United Kingdom, The Netherlands, Spain, Sweden, Australia, Canada, New Zealand, and the United States.

Julian Richards. *The Art and Science of Intelligence Analysis.* **New York, NY: Oxford University Press, 2010**. 232 pages, US$110.00 [Paperback], ISBN-13: 978-0199578450.

An assessment of the intelligence tradecraft's ability to absorb massive amounts of data and information to support efficient intelligence analysis, particularly in countering terrorism. Issues affecting cognitive processes in analysis and interpretation of data are examined, such as memory, hindsight, perception, bias, hypothesising and evaluating data, especially within the context of the intelligence organisational machinery and environment. Also discussed are the external pressures and influences on intelligence analysis, such as politics, ethics and civil liberties, cultural factors, and the changing nature of security threats and their impact on the intelligence process. Case studies and scenario-based exercises on tactical, strategic and operational areas of intelligence analysis are used to illustrate the author's thesis. The author concludes with recommendations for improving analytical judgments and the intelligence process. The author, a former intelligence official in the UK government, is Deputy Director of the Centre for Security and Intelligence Studies at the University of Buckingham.

Jennifer E. Sims and Burton Gerber (Eds.). *Vaults, Mirrors & Masks: Rediscovering U.S. Counterintelligence.* **Washington, DC: Georgetown University Press, 2009**. 320 pages, US $28.45. [Paperback] ISBN-13: 978-1589012677.

The contributors to this important edited volume examine counterintelligence (and counterespionage) as a tradecraft, similar to "positive intelligence," that aims to gain intelligence advantage over one's adversary by exploiting, disrupting, denying, or manipulating its intelligence activities. Also discussed are economic and industrial espionage, counterintelligence and law enforcement, and the relationship between counterintelligence, counterterrorism, and civil liberties, particularly over the possible establishment of a domestic intelligence agency in the United States.

Gregory F. Treverton. *Intelligence for an Age of Terror.* **New York, NY: Cambridge University Press, 2009**. 320 pages, US$35.60 [Hardcover], US$17.81 [Paperback]. ISBN-13: 978-0521518451.

An examination of the transformation of the targets of intelligence analysis from focusing primarily on state adversaries to concern about non-state actors, such as terrorist organizations, as well.

Intelligence Analytic Methods

Wilhelm Agrell. *Essence of Assessment: Methods and Problems of Intelligence Analysis.* **Stockholm, Sweden: Center for Asymmetric Threat Studies (CATS)/National Defence College, 2012.** 207 pages, US$8.00 + postage [Paperback]. ISBN: 978-91-86137-12-0.

A comprehensive and authoritative discussion of "the opportunities and problems" of intelligence analytic methods, such as attempting to reduce uncertainty about the unknown, the intelligence cycle (requirements, collection, processing (or analysis), and dissemination)

and its limitations, the components of short- and long-term analysis involving strategic intelligence, current intelligence, warning intelligence, and special investigations, employing pattern analysis by seeing links and aggregates, identifying an adversary's disguises and deceptions, employing intelligence assessment as a hypothesis, the importance of understanding one's adversary in order to avoid "mirror imaging," conducting post-mortems of intelligence analysis, and the relationship between signals, noise, and the intelligence analysis's dilemma of proof. These analytical methodologies are accompanied by real world examples of intelligence agencies' successes and failures. The author is a noted Swedish academic in intelligence analysis.

Babak Akhgar and Simeon Yates, editors. *Intelligence Management: Knowledge Driven Frameworks for Combating Terrorism and Organized Crime.* **New York, NY: Springer, 2011.** 234 pages, US$99.00 [Hardcover]. ISBN-13: 978-1447121398.

This is an excellent scientific account of how the rapid development in computing power and the ability to mine and visualize complex data sets provide their intelligence agency end users, whether in law enforcement, weapons of mass destruction counter-proliferation, or counterterrorism, with actionable situational awareness about their specific targets of investigation. Also discussed are topics that apply to counterterrorism such as strategic intelligence management for combating crime and terrorism, cybercrime profiling and trend analysis, and the relationship between technology, society and law enforcement agencies.

John Buckley. *Managing Intelligence: A Guide for Law Enforcement Professionals.* **Boca Raton, FL: CRC Press, 2013.** 503 pages, US$63.56 [Paperback]. ISBN-13: 978-1466586420.

Written by a veteran practitioner in intelligence and law enforcement in Britain, this authoritative and well-written handbook presents an overview of how intelligence is managed in law enforcement; the importance and relevance of various types of intelligence (ranging from law enforcement to military); the role of operational intelligence; the psychology of conducting intelligence analysis (such as cognitive and hindsight biases); the nature of the intelligence cycle, including setting operational and tactical priorities; formulating collection requirements from covert and open sources; the nature of intelligence analysis, including limitations and misconceptions in such analysis, the benefits of data visualization, conducting gap analysis, profiling targets, conducting social network, spatial, and financial analyses, and other types of threat analyses; and the way ahead in terms of standardizing and coordinating intelligence in fusion centers and other future challenges. Of particular interest to the counterterrorism community are the sections on terrorism, law enforcement and intelligence, in which the author writes that "Gathering intelligence on terrorism is similar to gathering intelligence on any other group," except with "notable differences" such as the fact that the "psyche of a terrorist" differs from that of a criminal, that "Intelligence with regard to

terrorism is more likely to be fragmentary and sparse," (pages 44-45) as well as "relatively short on specifics but full of generalities." (page 449)

Robert M. Clark. *Intelligence Analysis: A Target-Centric Approach.* **[4ᵗʰ Edition] Washington, DC: CQ Press/SAGE, 2012.** 403 pages, US$58.18 [Paperback]. ISBN-13: 978-1452206127 0.

This textbook comprehensively and authoritatively examines the components involved in effective methods of developing and managing intelligence analysis through what the author terms "a collaborative, target-centric approach" that meets the needs of the end-user. The book's chapters cover topics such as understanding the intelligence process and the intelligence cycle; the nature of the intelligence "target" (especially as a complex system or network); defining the intelligence problem (for example, as a "strategies-to-task" process); conducting counterintelligence analysis; creating intelligence conceptual models, such as pattern and relationship models, profiling, and geospatial, human terrain, and space-time combination models; the sources of intelligence information; collection strategies, including evaluating and collating such data; identifying adversary denial, deception, and signaling; conducting predictive analysis; the nature of the intelligence customer (e.g., policy-makers, legislatures, other implementing agencies); presenting analysis results to managers and other end-users; and managing analysis and analysts. The conceptual frameworks are illustrated by numerous real world examples, making this an excellent textbook resource for university students and intelligence practitioners.

Robert M. Clark. *Intelligence Collection.* **Los Angeles, CA: CQ Press, SAGE, 2013.** 544 pages, US$70.20 [Paperback]. ISBN: 978-1-4522-7185-9.

This textbook provides a comprehensive and authoritative coverage of the components involved in the collection, processing, and exploitation by intelligence analysts of what the author terms "literal and non-literal information." Literal collection involves open source intelligence (OSINT), human intelligence (HUMINT), communications intelligence (COMINT), and cyber collection. Nonliteral collection, on the other hand, involves collection sensors and platforms; optical, radiometric and spectral imaging; radar, including synthetic aperture radar; passive radio frequency; acoustic and seismic sensing; materials intelligence, biological, medical, and biometric intelligence; and material acquisition and exploitation. The concluding chapter discusses the components involved in managing intelligence collection at the front end, the back end, across boundaries, as well as managing the end-user customer's expectations. Also discussed are how to bring new collection capabilities online and evaluating collection. Each type of collection material is illustrated with images and graphics.

Ben Connable. *Embracing the Fog of War: Assessment and Metrics in Counterinsurgency.* **Santa Monica, CA: RAND National Defense Research Institute, 2012.** 340 pages, US$36.50 [Paperback]. ISBN-13: 978-0833058157.

This highly innovative volume provides a scientifically rigorous methodology to assess effectiveness in counterinsurgency campaigns. Of particular interest is the discussion of the effects-based approach to assessment which takes into account measures and indicators, how they are selected and how their thresholds are determined, weighting the overall assessment, and producing "color-coded" reports. Also of interest is the chapter on choosing core metrics and determining their respective values, including formulating input and output measures of effectiveness and linking them to an overall campaign doctrine. The conceptual framework is applied to two primary case studies (Vietnam, ca.1967-1973, and Afghanistan, as of late 2010). The concluding chapters assess the factors involved in the failure of some centralized assessments in counterinsurgency, offer recommendations and options for improved effectiveness assessments, and alternatives to centralized campaign assessments.

Paul K. Davis, Eric V. Larson, Zachary Haldeman, Mustafa Oguz, and Yashodhara Rana. *Understanding and Influencing Public Support for Insurgency and Terrorism*. **Santa Monica, CA: RAND National Defense Research Institute, 2012.** 270 pages, US$36.00 [Paperback]. ISBN: 978-0-0833058690.

As an application of social science methodologies to analyse terrorism and counterterrorism, this innovative volume employs social movement theory to analyse public support for insurgency and terrorism in the cases of Al-Qaeda's transnational jihadist movement, the Taliban insurgency in Afghanistan, the Kurdistan Workers' Party (PKK) in Turkey, and the Maoist insurgency in Nepal. A model of "persuasive communications" by terrorist and insurgent groups is presented to link the study's research to issues of strategy and policy.

Paul K. Davis and Angela O'Mahone., A *Computational Model of Public Support for Insurgency and Terrorism: A Prototype for More-General Social Science Modeling*. **Technical Report. Santa Monica, CA: RAND National Defense Research Institute, 2013.** 110 pages, US $29.95 [Paperback]. ISBN: 978-0833079190.

In an example of how computational social science can contribute to counterterrorism analysis, this monograph presents "a prototype uncertainty-sensitive computational model" to describe public support for adversary terrorism and insurgency. As described by the authors, the model assigns mathematical meaning to a factor tree's factors and sub-factors, identifies a suitable "building block" that combines algorithms, and takes into account the uncertainty in their values and the relationships among them. The authors then discuss how the model can be implemented in a visual-programming environment, show how it can be used for exploratory analysis under uncertainty.

Paul K. Davis, Walter L. Perry, Ryan Andrew Brown, Douglas Yeung, Parisa Roshan, and Phoenix Voorhies. *Using Behavioral Indicators to Help Detect Potential Violent Acts*. **Santa**

Monica, CA: RAND National Defense Research Institute, 2013. 300 pages, US$32.95 [Paperback] ISBN: 9780833080929.

An examination of how social science-based observable individual-level behavioral indicators can be utilized at checkpoints or other screening areas to preemptively detect and possibly thwart potential violent attacks by hostile individuals or groups, whether as suicide bombers or handlers of improvised explosive devices (IEDs). These risky behavioral indicators are drawn from technologies and methods that exploit data on communication patterns, "pattern-of-life" data (such as online activities), and data relating to an individual's body movement and physiological state. Because some of these behavioral indicators are highly controversial, for instance, due to privacy and civil-liberties concerns, the study discusses ways to resolve them while still mitigating the threats they are intended to counter.

Thomas Fingar. *Reducing Uncertainty: Intelligence Analysis and National Security.* **Stanford, CA: Stanford University Press, 2011**. 192 pages, US$54.00 [Hardcover], US$15.96 [Paperback]. ISBN-13: 978-0804775946.

An important examination of how the challenge of "uncertainty" in intelligence analysis can be reduced, for instance, by devoting more attention by analysts to "opportunities" than merely to perceived "threats," which the author argues will increase the likelihood of more positive outcomes in predictive analysis. Also discussed is the role and importance of National Intelligence Estimates (NIEs) in representing authoritative judgments of the Intelligence Community, which are illustrated by several cases, including some that proved to be problematic, such as the cases of the Iraq WMD and Iran nuclear NIEs. The author had served as the CIA's first deputy director of national intelligence for analysis and as chairman of the National Intelligence Council, and is currently a Distinguished Fellow at the Freeman Spogli Institute for International Studies at Stanford University.

Baruch Fischhoff and **Cherie Chauvin (Eds.).** *National Research Council of the National Academies. Intelligence Analysis: Behavioral and Social Scientific Foundations*, **Washington, DC: The National Academies Press, 2011**. 350 pages, US$70.00 [Paperback]. ISBN: 978-0-309-17698-9.

An assessment by leading academic social scientists of the utility of analytic methods and sophisticated technologies in supporting intelligence analysis. The chapters cover topics such as the contributions of operations research, game theory, signal detection, and qualitative analysis in intelligence analysis; the requirements for improving analysts' capabilities, and changes and reforms to improve the functioning of intelligence organizations and their workforces.

National Research Council of the National Academies. *Intelligence Analysis for Tomorrow: Advances from the Behavioral and Social Sciences.* **Washington, DC: The National Academies Press, 2011.** 116 pages, US$30.25 [Paperback]. ISBN-13: 978-0309163422.

As a companion to *Intelligence Analysis: Behavioral and Social Scientific Foundations*, this volume provides a series of recommendations for applying methodologies and tools from the behavioral and social sciences to the Intelligence Community's analytic workforce. These include how to characterize and evaluate analytic assumptions, methods, technologies, and management practices.

Richards J. Heuer Jr., and Randolph H. Pherson. *Structured Analytic Techniques for Intelligence Analysis.* **Washington, DC: CQ Press/SAGE, 2011.** 343 pages, US$62.70 [Spiral Bound]. ISBN-13: 978-1608710188.

This important and authoritative manual/textbook covers what is termed as "structured analytic techniques" in intelligence analysis. The introductory chapter discusses the value of team analysis in an intelligence agency, the analyst's task, and a history of the application of structured analytic techniques in the intelligence community, where these techniques are especially useful in a field where analysts typically deal with incomplete, ambiguous and sometimes deceptive information. This is followed by a chapter on building a taxonomy of analytic methods, which are divided into four categories: expert judgment, structured analysis, quantitative methods using expert-generated data, and quantitative methods using empirical data. Successive chapters discuss the criteria and guidance for selecting 50 structured analytic techniques, which are divided into eight categories: decomposition and visualization (such as chronologies and timelines matrices, network analysis, mind/concept/process maps, and Gantt charts); idea generation (such as structured and virtual brainstorming, quadrant crunching), scenarios and indicators (such as alternative futures analysis and multiple scenario generation); hypothesis generation and testing (such as simple or multiple hypotheses, analysis of competing hypotheses, argument mapping, and deception detection); cause and effect (such as red hat analysis, forecasting model, and prediction markets); challenge analysis (such as pre-mortem analysis, red team analysis, and Delphi method); conflict management (such as adversarial collaboration and structured debate); and decision support (such as complexity manager and decision matrix). Each structured technique is accompanied by a step-by-step overview that can either be self-taught or taught by a professional trainer. The authors are former high-ranking CIA officers who had developed some of the analytic methodologies discussed in the volume.

Sarah Miller Beebe and Randolph H. Pherson. *Cases in Intelligence Analysis: Structured Analytic Techniques in Action.* **Los Angeles, CA: CQ Press/SAGE, 2012.** 241 pages, US$50.00 [Paperback]. ISBN-13: 978-1608716814.

This handbook/textbook provides a set of twelve cases on significant events in foreign intelligence, counterintelligence, terrorism, homeland security, law enforcement, and decision-making support that are designed to provide analysts an opportunity to apply structured analytic techniques to tackle such real-world problems. Each case provides a narrative and a set of questions that attempt to challenge a student to think critically in applying the appropriate structured analytic technique to better understand the case at hand. Photos, maps, figures, tables, boxes, and technique templates support the volume's analysis and instruction. A matrix of the 12 cases and the 23 techniques used throughout the handbook provides an "all-in-one" view of the volume's contents. The authors are former CIA analysts who are experienced trainers in structured analytic methods.

Katherine Hibbs Pherson and Randolph H. Pherson. *Critical Thinking for Strategic Intelligence.* Los Angeles, CA: CQ Press/SAGE, 2013. 329 pages, US$37.00 [Paperback]. ISBN-13: 978-1452226675.

In this teaching book, the authors provide a guide to critical thinking in strategic intelligence analysis. Generating an analytic product involves four stages: getting started, locating the needed information, developing an argument, and conveying the message effectively. A set of case studies, focusing on a wide range of topics covering political, economic, military, cyber, and health-related issues, is provided to reinforce understanding of the book's key points. At the end of each chapter, a set of questions is provided for use by instructors and students to test the absorption of key teaching points. The back cover includes a highly useful foldout graphic, "The Analyst's Roadmap," that captures the key tasks and points made in the book. The authors (husband and wife) are former high-ranking CIA officers with extensive experience in analytic methodology development and training.

Walter L. Perry, Claude Berrebi, Ryan Andrew Brown, John S. Hollywood, Amber Jaycocks, Parisa Roshan, Thomas Sullivan, and Lisa Miyashiro. P*redicting Suicide Attacks: Integrating Spatial, Temporal, and Social Features of Terrorist Attack Targets*. Santa Monica, CA: RAND Corporation, 2013. 112 pages, US$21.95 [Paperback]. ISBN: 978-0-833078001.

In an application of computational social science to counterterrorism, the volume's authors present a methodology that seeks to predict the determinants and locations of suicide attacks by an adversary terrorist group, including its likely targeting. Using Israel as the case study, the study team focused on spatial attributes, in which they created a risk index that later incorporated socio-cultural, political, economic, and demographic factors into the model's data base in order to refine its predictive capability. A quantitative and qualitative analysis was then conducted to determine why certain areas were at greater risk for suicide attacks than others. The authors conclude that the methods used to assess target preferences by suicide attackers in Israel can be transferred to the United States or other countries.

Nate Silver. *The Signal and the Noise: Why So Many Predictions Fail – But Some Don't.* **New York, NY: The Penguin Press, 2012.** 544 pages, US$27.95 [Hardcover]. ISBN-13: 978-1-594204111.

The author, whose former blog, "FiveThirtyEight.com" for *The New York Times*, was widely followed for its statistics-based political predictions, followed it up with this best-seller, which examines the world of prediction, particularly how to distinguish a true signal from a universe of noisy data. In the author's judgment, most predictions fail because they are not based on an understanding of probability and uncertainty. To attain higher accuracy in forecasting it is necessary, according to the author, to develop a superior command of probability, which then enables one to better distinguish signals from noise. Chapter 13, "What You Don't Know Can Hurt You," provides an excellent discussion of the application of forecasting to the probability of the frequency terrorist attacks, ranging from low- to high-impact, including this observation about how to increase effectiveness in terrorism forecasting: "the Bayesian approach toward thinking about probability is more compatible with decision making under high-uncertainty. It encourages us to hold a large number of hypotheses in our head at once, to think about them probabilistically, and to update them frequently when we come across new information that might be more or less consistent with them." (p. 444).

V.S. Subrahmanian, Aaron Mannes, Amy Silva, Jana Shakarian, and John P. Dickerson. *Computational Analysis of Terrorist Groups: Lashkar-e-Taiba.* New York, NY: Springer, 2013. 315 pages, US$109.00 [Hardcover]. ISBN: 978-1461447689.

A highly innovative application of advanced mathematics and computational analysis techniques, including methods for "big data" analysis, to quantify the environment in which the Lashkar-e-Taiba (LeT) operates, with its terrorist operations over a 20-year period represented in a relational database table. This table is then explored by employing sophisticated data mining algorithms in order to gain detailed, mathematical, computational and statistical insights into the LeT and its operations. The book begins with a history of LeT, its activities in Pakistan, Kashmir, and India, and then applies its methodology to analyse its targeting patterns, for instance, against civilians, tourist and transportation sites, security forces, and other types of attacks. The concluding chapters apply computational analysis techniques to examine various policy options to counter LeT's terrorist activities. The book's appendices provide additional information about the data methodology employed in the analysis, including its "policy computation engine."

Gregory F. Treverton (Ed.). *Comparing Early Warning Across Domains.* **Stockholm: Center for Asymmetric Threat Studies (CATS)/ National Defence College, September 2011.** 35 pages, [No Price], [Paperback]. ISBN: 978-91-86137-08-3. The monograph is located at: https://www.fhs.se/Documents/Externwebben/forskning/centrumbildningar/CATS/ publikationer/Comparing%20Early%20Warning%20Across%20Domains.pdf .

This working paper reports on a workshop that was held in Stockholm, Sweden, that brought together a range of Swedish and international experts on early warning in intelligence. The components of effective early warning analysis, according to the experts, include formulating the main argument (including alternative explanations), assembling the most important evidence, and generating critical assumptions (including those that may be uncertain, outdated, or invalid). Also of interest is the discussion of national perspectives on early warning in the cases of Sweden, Great Britain, Switzerland, and the United States. The next section examines the challenges of formulating early warning for terrorism, anticipating radicalisation into violent extremism, proliferation of weapons of mass destruction, anticipating cyber attacks, and forecasting financial breakdowns. The concluding section provides a discussion of lessons learned in homeland security.

About the Reviewer: **Dr. Joshua Sinai** *is the Book Reviews Editor of* '*Perspectives on Terrorism*'.