

Studies in Intelligence

Vol. 65, No. 1 (March 2021)

Journal of the American Intelligence Professional

Review Essay

Resistance Operations in Europe during WWII

Artificial Intelligence

Lessons from a DIA Experiment

After Action Reviews in Intelligence

Foreign Languages

The Need for More Translations

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ISSN 1527-0874

Cover: The Commandos Monument located in Scotland, overlooking British WWII commando training grounds.

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The journal is administered by the Center for the Study of Intelligence, which includes the CIA's History Staff, CIA's Lessons Learned Program, and the CIA Museum. In addition, it houses the Emerging Trends Program, which seeks to identify the impact of future trends on the work of US intelligence.

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CENTER for the STUDY of INTELLIGENCE

Washington, DC 20505

Studies in Intelligence

Vol. 65, No. 1 (Extracts. March 2021)

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Remembrance: Douglas John MacEachin (1937-2021)

by *Joseph W. Gartin*

The story goes, from those who were there, that Doug MacEachin leaned back in his chair, put his feet on the Directorate of Intelligence (DI) conference table, and plucked a paper from a large stack before him. Let me show you how your customers read your papers, he said. With that, he glanced at a title and tossed the paper to the floor. Grabbed another, read the first paragraph, and pitched it aside. Then another, and another, until the pile was much diminished.

The assembled roomful of office directors representing the leadership of the DI, as it was known then, watched in silent dismay. Long-term research papers (the longer the better) were the currency of the realm. Promotion panels would discuss how thick an analyst's production folder was; only rarely would they consider impact on policy. After months of research, writing, and revising, if you were lucky enough to bring a paper to print (literally, as there was no electronic publication), the final step would be preparing a mailing list. Unsurprisingly, there was little chance that the list of names and addresses would be even remotely up to date. It was as if CIA analysts were literally tossing their papers over the transom. In a looming digital age, the DI was decidedly analog.

Doug was appointed Deputy Director of Intelligence (DDI) by James Woolsey in 1993, after serving as director of the Arms Control Intelligence Staff, the focal point for supporting US efforts to track Russian compliance with strategic and conventional arms agreements. For some 20 years Doug had been one of CIA's most capable Soviet hands, eventually becoming the director of the Office of Soviet Analysis from 1984-1989. Joining the CIA in 1965 after a stint in the Marine Corps, he had worked his way up through the system, writing and reviewing the kind of research papers that he had just scattered on the floor.

It was a system that he would set about to improve. Driving him were real-world lessons about how intelligence was used—or ignored—by policymakers. Expressions like “the first customer,” “writing for the president,” or “decision advantage” had not yet entered the lexicon. There were no metrics, no measuring clicks and engagement. But Doug understood that intelligence analysis was relevant to decisionmakers only if it came at the right time and answered the right questions with real insight and expertise.

Looking at anyone's career in the rearview mirror lends an illusion of inevitability to the outcome, but for Doug becoming DDI was anything but inevitable. Just two years before, in a highly unusual event, he had been called to testify before the Senate Select Committee on Intelligence as it debated the nomination of Robert Gates to be Director of Central Intelligence. This was Gates' second time as a nominee—the first in 1987 was derailed by controversy over the Iran-contra affair. In addition to renewed challenges over what Gates knew about the arms-for-hostages deal, he faced charges that later as DDI he had politicized intelligence.^a With characteristic directness, Doug told Chairman David Boren in open session,

Anything I say in his favor will be viewed by some as statements of a bureaucrat taking care of his career. Anything I might say which is not viewed as favorable will be seen by others as taking care of my career in yet another way. All I have to hold on to, Mr. Chairman, and I hope at least to have some of it left, is—after this hearing—is the credibility I think I've demonstrated over some 26 years as being willing to challenge the conventional view and take whatever flak comes with it.^b

Befitting his service as a Marine, speaking truth and taking flak were things that came naturally to Doug, and

a. https://www.loc.gov/law/find/nominations/gates/005_excerpt.pdf accessed 1 March 2021

b. <https://www.nytimes.com/1991/10/03/us/the-gates-hearings-excerpts-from-senate-hearing-on-nomination-of-cia-chief.html>, accessed 1 March 2021

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as DDI he was determined to accelerate the DI's development as a profession and to improve the quality of its analysis. Soon after Woolsey picked him to be DDI, Doug focused on the work of Richards Heuer and Jack Davis, pioneers in what we now call analytic tradecraft. A colleague remarked to this author that Doug was the first person he ever heard using the phrase. Doug made Heuer's *Psychology of Intelligence Analysis* required reading and mandated training on denial and deception. An even more consequential effort was his creation of T-2000 (T for tradecraft), the first course aimed at instilling structured analytic techniques to combat cognitive biases. T-2000 would become the forerunner to the Career Analyst Program, CIA's introductory course and the model for several other analytic agencies. The eventual creation of the Sherman Kent School for Intelligence Analysis owes much to Doug's leadership.

Doug finished his career as the officer-in-residence at Harvard, and eventually moved to his beloved France for a few years. Yet even in semi-retirement, Doug never let go of his passion for hard work and intellectual rigor. He was a staunch defender of the CIA's analysis of the Soviet Union and Warsaw Pact, producing monographs on the Intelligence Community's record predicting the Soviet invasion of Afghanistan and another rebutting accusations that the CIA had been oblivious to the Soviet Union's

deteriorating economy and social system.^a He was the natural choice to run an investigative team on the rise of al-Qaeda for the 9/11 Commission, leaving France to take up work in a dilapidated office on K Street. He and his team examined tens of thousands of pages of Intelligence Community and law enforcement documents and drafted what became Chapter Two of the Commission Report, "The Foundation of the New Terrorism."

A few years ago, before Alzheimer's clutched at him slowly but relentlessly, I saw Doug in the CIA headquarters cafeteria, motionless amid the noonday crowd, an eddy of employees swirling around him. We did not speak that day. Doug veered off in another direction, I grabbed a sandwich and headed back to my desk. I wondered then, and now, how many recognized him and knew of his contributions. I also knew that he would have dismissed that question as sentimental claptrap and made a quip about getting a martini; "not the best, but probably the biggest," he was known to say. Like many others, I am sorry not to have had the chance to say farewell to Doug properly and to thank him for a lifetime's work. But even if you did not know him, you are benefiting from his efforts to build up the profession of intelligence analysis. He left a genuine legacy of accomplishment that is still shaping the craft. Rest in peace, Doug.



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a. <https://www.cia.gov/static/462ef87088e6178e83e074e7f404914a/CIA-Assessments-Soviet-Union.pdf> accessed 1 March 2021

Psychiatrists, Professors, Patriots: Remembering Drs. Jerrold Post (1934–2020) and Laurence Cove (1933–2020)

by Dr. Daniel Tsao

November 2020 saw the passing of two giants in the field of leadership and psychological analysis, Jerrold “Jerry” Post and Laurence “Larry” Cove, who collectively served for more than 50 years with the CIA. Drawing from their psychiatric expertise, dedication to the field of political psychology, and deep commitment to national service, they made major contributions that advanced the analytic discipline and the CIA’s overall mission.

The use of psychiatrists and psychologists to assess the personalities of world leaders in support of US national security goes back to World War II when psychoanalyst Walter Langer, the brother of Office of Strategic Services and CIA pioneer William Langer, prepared a psychological analysis of Adolf Hitler for the OSS. That assessment, which later was declassified, was hundreds of pages long (a bit longer than today’s Intelligence Assessments) and contained terms, such as “ego revulsion of latent tendencies,” that might sound archaic to modern-day readers. Nonetheless, the report correctly predicted that Hitler would become increasingly paranoid and vindictive as the war turned against him and, when faced with defeat, his suicide would be “the most plausible outcome.” (In subsequent decades, whenever an autocrat has been cornered, the question invariably has been asked, “Will he—and it is almost always “he”—do a Hitler?” History has shown that it is a rare outcome.)

It was Jerry Post, however, who, as founder and director of CIA’s Center for the Analysis of Personality and Political Behavior, created an enduring program of psychological analysis that continues to this day. During his 21-year career at CIA and in his subsequent academic career, Jerry was devoted to the field of political psychology. He constantly looked for ways to hone methodological approaches and find new sources of information. He recognized the need to minimize what might be characterized as “psychobabble” and make these assessments readily grasped by the lay reader. Recognizing the degree to which cultural and group psychological factors influence personality and behavior, Jerry created a multidisciplinary

unit comprised of psychiatrists, clinical psychologists, cultural anthropologists, and other social scientists. Above all, Jerry strove to make these assessments “actionable”—meaning they would provide readers estimates of what behavior to anticipate and insights that would help inform negotiating approaches.

That approach paid off in 1978 when psychological assessments prepared by Jerry’s unit provided critical support to negotiations that led to the historic Camp David Accords between Egypt and Israel. In giving special praise to these assessments, President Carter stated, “After spending 13 days with the two principals, I wouldn’t change a word.” Indeed, one of Jerry’s most prized possessions was the former President Carter’s autobiography in which Carter wrote in Jerry’s copy: “Dear Jerry, if not for you, Camp David would not have been possible.” Jerry later told me he would “always treasure that book.”

Despite the triumph of Camp David, Jerry, who was awarded the Intelligence Medal of Merit in 1979 and the *Studies in Intelligence* Award in 1980 for his leadership of the Center, continued to look for ways to advance the field and break new ground in applying psychological analysis to key intelligence questions. He initiated efforts to understand the psychology of terrorism. He looked for innovative ways to present psychological analysis, including the use of video presentations. He always kept in mind that questions over the validity of personality assessments—questions going back to the days of Walter Langer—remained both within the intelligence and policymaking communities.

It certainly can be said that Jerry was no stranger to controversy. He was not shy about ruffling feathers. He fought to publish analysis that he thought was vital for policymakers. He once recalled being engaged in a protracted, vigorous effort to have an assessment of a major world leader published, finally getting the go-ahead and seeing it published—on the day the leader died.

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Jerry carried that fighting spirit with him in his second career at George Washington University, where he taught both at GW's Elliott School and GW Medical Center's Department of Psychiatry and Behavioral Sciences. At the Elliott School, Jerry taught scores of students who would go on to serve at CIA and other parts of the IC. It was as a young resident physician in GW's psychiatric department that this writer in 1990 first encountered Jerry, who was giving a fascinating presentation on the mindset of Saddam Husayn to a packed audience sitting in rapt attention. He tirelessly sought to advance the field of political psychology through his work with the International Institute of Political Psychology, of which he was a founding member, and the American Psychiatric Association, where he served as chair of the Task Force for National and International Terrorism and Violence.

That sense of commitment remained with Jerry until the very end of his life. Despite suffering from a growing list of medical issues, Jerry continued to speak out, teach, and travel. Several years ago, he insisted on giving an hour-long presentation on the psychology of terrorism at GW, even though he was suffering from pneumonia and had just gotten off the plane after a long flight from Israel. Perhaps reflecting his relentless commitment and passion to his work, he made it to the end of the talk—and then collapsed in front of his audience. In the last year of his life, Jerry—despite having great difficulty in walking and being unable to drive—asserting that he felt “underutilized”—still looked for new ways to contribute to CIA and its mission.

Although many years have passed since Jerry worked in the halls of CIA, his influence and impact remain.



Laurence Cove

Larry Cove, already possessed of a distinguished career as a child psychiatrist, psychoanalyst, and academic, joined CIA in the mid-1980s and ensured the survival and continued success of the CIA's program of psychological assessments. The survival of that program was by no means guaranteed. Indeed, in the first years of Larry's career, the program underwent considerable change and turmoil. With a commitment to excellence and persistence that marked his career, Larry applied his expertise in ways that consistently enriched the analysis of foreign leaders—and drew major kudos from senior policymakers. A founding member of CIA's Senior Analytic Service, Larry also joined the Senior Intelligence Service in recognition of his invaluable contributions to CIA's analytic mission.

Larry would leave no stone unturned in understanding what made foreign leaders “tick”—their motivations, fears, reactions to stress, and capacity to change. During the 1990s, his assessments helped inform US policymakers involved in complex negotiations. On at least one occasion, he also presciently forecast that a sought-after outcome through negotiations probably would be futile because of the leader's personality and motivations. Larry's dauntless efforts to seek “the truth” in assessing leaders almost certainly reflected both his training in psychoanalysis—in which a core tenet is the pursuit the truth wherever it might lead—and his dedication as an

intelligence officer at CIA, where the inscribed words, “and the truth shall make you free,” face the CIA's Wall of Stars.

Larry paid painstaking attention to providing clarity and conciseness in his assessments to ensure that complex concepts were readily grasped by readers. When he reviewed the work of his colleagues, he unfailingly found ways to improve the message, argumentation, and concision of the analysis. Eschewing the use of technical diagnostic terminology, Larry would always find a better term or phrase to convey a key analytic point. A former chief of the VIP Medical Analysis Center, which managed the psychological assessments program in the late 1990s and early 2000s, once remarked that he viewed any pieces written or reviewed by Larry as “Coved,” and therefore did not require further editing.

Larry's mastery of the English language may seem surprising, given his background. Born Ari Icikovic in Lithuania, he and his mother, a schoolteacher, left the country in the late 1930s at the urging of his father, a prominent Lithuanian Jewish leader, who later perished in the Holocaust. Larry and his mother had to initially stay in Nazi-ruled Germany, where he received treatment for an eye condition that persisted for the rest of his life. They constantly had to stay in hiding, especially after Kristallnacht, the pogrom in November

1938 that presaged the Holocaust. After arriving in the United States in July 1939, Larry struggled in school, in large part because of his difficulties learning English. Nonetheless, through his talent and sheer persistence, he earned scholarships to New York’s Ramaz School, Columbia University, and SUNY Downstate College of Medicine.

After Larry formally retired from CIA in 2003, he returned shortly afterward as an independent contractor. Always apt to be self-effacing, Larry, a self-described “character,” once stated that his role as contractor was to serve as a “professional curmudgeon.” In actuality, Larry, in his quiet, understated way, played a critical stabilizing role as senior expert, informal adviser, mentor, and teacher as the program underwent a renewed cycle of changes, including multiple reorganizations. Perhaps aware of the need to alleviate periods of tension, he enjoyed talking about his beloved dogs, Benjy and Daisy, and could be counted on to give outstanding restaurant recommendations, based in part on tips from his devoted wife, Ann Brody Cove.

Perhaps not surprisingly, it was the role of being mentor and teacher that Larry cherished most of all. He enjoyed working with clinicians and leadership analysts, always generous with his time and unabashedly candid—some would say blunt—with his opinions and recommendations. Even as his health steadily declined, he looked for opportunities to teach about the principles of psychological assessments and to consult with analysts across regional offices and mission centers, sometimes bringing food—including his lunch—which he would then offer to the analysts.

In his last few months, Larry was no longer physically able to go to work, but he still hoped to contribute to the next generations of analysts. Indeed, on the day before he passed away, he reached out one last time, looking to be helpful and supportive—and proud of the people he worked with.

He, too, will be greatly missed.



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Lessons from SABLE SPEAR: The Application of an Artificial Intelligence Methodology in the Business of Intelligence

Craig A. Dudley

If in the other sciences we should arrive at certainty without doubt and truth without error, it behooves us to place the foundations of knowledge in mathematics.

—Roger Bacon

Project SABLE SPEAR, was a multiyear exploration into the opportunities and challenges of applying artificial intelligence (AI) fully into the intelligence process. The experiment provided insights into this new methodological approach to intelligence analysis. Standing in stark contrast to the intelligence methods that define current Intelligence Community (IC) analytic tradecraft, AI abstracts value in data and algorithms and centers original insights and the power of timely discovery in the open-source domain. This article explores the award-winning SABLE SPEAR journey and illuminates insights that will help to define how AI is applied within the IC and what will have to change in IC work if AI is employed.



At the annual Defense Intelligence Agency (DIA) award ceremony in December 2019, Project SABLE SPEAR received a Team Award from the director of DIA. As I accepted the award on behalf of the team, the director said, “Of all the awards, this one intrigues me the most.” I answered, “This is the future of our business,” to which he replied, “I know.”

The previous spring, Brian Drake, the leader of a team of all-source analysts working to understand the global flows of illicit fentanyl—one of the powerful synthetic opioids that cause tens of thousands of deaths each year—had come into my office at Joint Base Anacostia-Bolling with a proposal. DIA had funds available to invest in an “innovative idea” through the continuation of a relationship with a small Silicon Valley start-up that showed early success in applying AI to the production of finished intelligence. Brian’s proposal was simple: although the start-up had built stability models based on historical data, he wanted to illuminate a complex, illicit network in its entirety as near to real time as possible. He would name the project SABLE SPEAR.

Brian’s team had a typical cross section of intelligence analysts at various stages of careers in intelligence and with months of formal training in analytic tradecraft as prescribed in IC directives (ICD) such as ICD-203, “Analytic Standards,” and ICD-206, “Sourcing Requirements for Disseminated Analytic Products.”^a Their formal training and the directives codified best practices in overcoming cognitive biases, avoiding

a. <https://www.dni.gov/index.php/who-we-are/organizations/policy-capabilities/ps/ps-related-menus/ps-related-links/policy-division/intelligence-community-directives?high->

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Although our analysts were experts in intelligence, we were certain we would struggle in the language of AI and requested NGA support interpreting between the two languages.

politicization, and communicating confidence in intelligence products.

We would begin to distinguish this method—elaborated in detail in academic works (including Mark Lowenthal’s *Intelligence: From Secrets to Policy*^a) and professional analytic tradecraft certification programs^b—as “biological intelligence” a term used in the AI community to differentiate the typical analyst’s process from the experience we were about to have with AI.

The team traveled to Palo Alto with two data scientists borrowed from the National Geospatial-Intelligence Agency (NGA). Although our analysts were experts in intelligence, we were certain we would struggle in the language of AI and requested NGA support interpreting between the two languages. Our initial discussions with the company included an overview of our intelligence problem—global trafficking in illicit fentanyl—and an overview of the company’s approach to finding in big data environments associations between illicit behaviors and entities engaging in the behaviors.

The requirement we gave to the company was quite simple: *illuminate*

the networks associated with the distribution of illicit fentanyl.

Before returning to Washington, we gave the vendor some of our understandings of the data sets that could be of particular value and some basic insights into patterns that characterized the phenomenon, but otherwise the company was limited entirely to the open-source domain and its original research. To enable effective auditing, the company was told to show its work to a level consistent with the analytic tradecraft standards used in citing evidence in finished intelligence. Drake’s team would be available to provide guidance to the company and to validate the AI outputs.

Four months later the company sent representatives to Washington to present its initial findings. They were profound.

Across illicit entities and their associations, the company’s outputs were numerically far superior to ours. The company’s AI methods identified 100 percent more companies engaged in illicit activity, 400 percent more people so engaged, and counted 900 percent more illicit activities. In addition, the company’s findings offered a “degree of fidelity we could not have

anticipated.”^c Because the company had been told to “show its work,” the empirical evidence used in drawing the characterizations and correlations were presented for examination and validation.

To be sure, some of the entities the vendor identified were deemed to be false positives by our analysts. That feedback was used to identify and correct the algorithmic framework that had falsely characterized the entities.

Most impressively though, the AI approach identified analytically relevant variables that our analysts probably would never have come up with and made instantaneous associations for those variables across multiple, often complex, data sets. Having identified the unique associative signatures for an “illicit actor” on the internet, for example, AI could then scan the entirety of the internet for that same associative pattern, illuminating considerably more entities within seconds.

Association, Intervention, and Imagination

The more we tried to understand and contextualize the AI outputs—and indeed find the words to explain the process clearly to our decision-makers—we found unique clarity in UCLA researcher Judea Pearl’s work

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a. Mark M. Lowenthal, *Intelligence: From Secrets to Policy* (CQ Press, 2000).

b. For example, the Department of Defense All Source Analysis Certification Program is part of the DoD-wide initiative to professionalize the intelligence field. The development of professional certification programs ensures an integrated, agile workforce that can meet the department’s needs in a dynamic environment. Accessed 19 February 2020 at: <https://dodcertpmo.defense.gov/CDASA/>

c. Brian Drake, DODIIS Worldwide Conference. Tampa, FL, 19 August 2019. Accessed at: <https://www.dvidshub.net/video/703931/sable-spear-using-artificial-intelligence-confront-opioid-crisis>

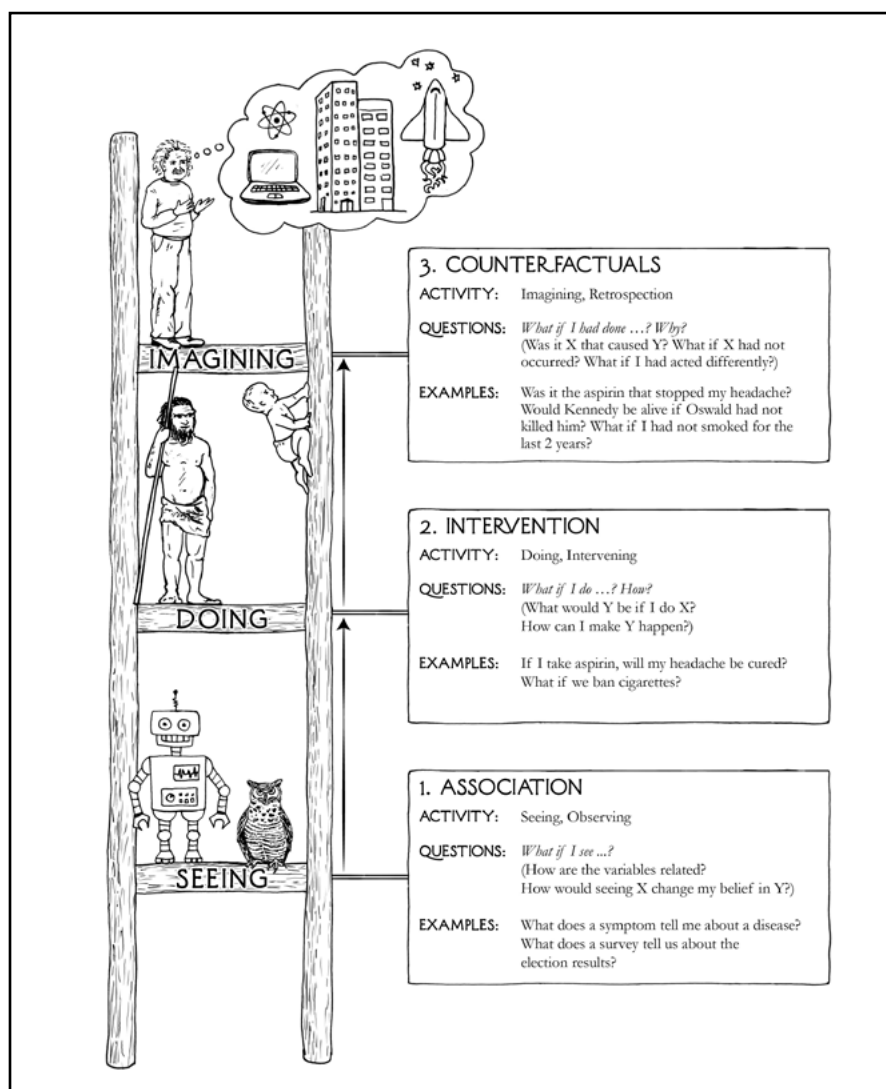
on the power of causal models.^a The first rung in his Ladder of Causality calls for predictions based on “passive observation” and “characterized by the question ‘what if I see...?’” What the AI team was providing us was the power of AI in this phase. In fact, according to Pearl, “Just as they did thirty years ago, machine learning programs (including those with deep neural networks) operate almost entirely in an associational mode.”

In his *The Book of Why*, Pearl identifies advancements in causal science that were exactly what we began to experience in SABLE SPEAR. His “causal ladder” continues to help us to explain, in the business of intelligence, those analytic behaviors that can benefit immediately from AI (associations), the experiments that should now be pursued in the intervention phase, and the contributions that must continue to be served by human imagination.^b

Aggregating and Presenting Data

As we began to refine the outputs from the associative phase, Brian’s intelligence team validated the AI outputs and informed the development of a user interface that enabled the production of strategic intelligence and conveyed clarity and confidence in the empirical behaviors associated with individual entities. Aggregating and presenting the data allowed us to more accurately identify volumes of illicit fentanyl flows, major routes, and the entities commanding the greatest market share.

In fact, we soon had enough fidelity in associations to qualify an entity’s relative criminal behavior in



“Ladder of Causality” © Maayan Visuals (<http://www.maayanillustration.com/>)

a “criminality index” as part of the trafficking ecosystem. The criminality index associated specific criminal behaviors as defined by criminal law—for example, association in a rapid and real-time process of the posting of an advertisement selling fentanyl with the entity (individual) making the post. In cases in which the volume of illicit behaviors an entity

exhibited was higher (posting 30 ads versus posting four ads), the criminality score was elevated relative to other entities. Similarly, if an entity had a higher volume of “types” of US criminal code allegedly violated (selling fentanyl, and selling cocaine, and selling counterfeit documents) they would also have a higher criminality score.

a. Judea Pearl, *The Book of Why: The New Science of Cause and Effect* (Basic Books, 2020).

b. *Ibid.*, page 33.

Pearl argues that computers “cannot tell us what will happen in a counterfactual or imaginary world, in which some observed facts are bluntly negated.”

By implication, this means that once the collective behavioral components of a given intelligence problem are resolved in an information environment, the collective associations that define issues like strategic missile deployment, the names and locations of intelligence officers, and the operational planning of extremist groups could be monitored and illuminated in near real time.

Protecting US Persons Information

We turned next to the issue of protecting information involving US persons. We told the vendor to assume every entity they encounter in the information environment is a US person and only after “proving they are not,” through sufficient associations, could they be revealed to IC customers. For law enforcement customers these restrictions were not necessary.

We quickly found ourselves in an information environment where unique data holders—law enforcement entities at the federal, state, and local level, the Food and Drug Administration, the US Postal Inspection Service—each with an authority to intervene could do so more efficiently and more comprehensively by understanding the entire problem. Not only would these individual entities benefit from the sensemaking of their unique data, but they would benefit considerably from contextualizing their information holdings within the whole.

Issues of Intervention

Intervention is an area where we must continue to explore and invest in the development of causal

models that allow for experimentation—to test the effects of “if we do this,” what might happen as a result. According to Pearl, what is less widely known is that “successful predictions of the effects of interventions can sometimes be made even without an experiment. A sufficiently strong and accurate causal model can allow us to use rung-one (observational) data to answer rung-two (interventional) queries.”^a

Counterfactuals

Pearl argues that computers “cannot tell us what will happen in a counterfactual or imaginary world, in which some observed facts are bluntly negated. Yet the human mind does make such explanation-seeking inferences, reliably and repeatably.” It is within this space that we recognize *the role of the all-source analyst will continue to be critical* — to contextualize the artificial outputs within the national security decision-making space we support as intelligence organizations. Consumers of intelligence will still need timely and comprehensive insights and the role of the all-source analysts in representing those outputs will continue to be central, even if the initial illumination of those insights is artificially derived.

Implications

Having used a grounded theory (GT) methodology in my doctoral research, I can attest that the methodological application created through this AI experiment was, in fact, analogous to GT, in which empirical

a. Ibid., 32.

phenomena are coded and then categorized for examination to develop “theoretical sampling” that explains themes within the data.^b In strategic intelligence terms, this methodology achieved the same objectives as the investment in all-source analysts: the development of “foreknowledge”^c (theoretical sampling).^d

In the case of the AI method developed for SABLE SPEAR, this inductive GT approach happened rapidly and continuously, changing as quickly as the empirical underpinnings of the learned codes and categories; the derivative theoretical sampling (foreknowledge) was dynamic.

For strategic intelligence, foreknowledge could be achieved through AI that is inductive and constantly comparative, with dynamic developments in the information environment. As codes and categories

b. Barney Glaser and Anselm Strauss, *The Discovery of Grounded Theory: Strategies for Qualitative Research* (Aldine Publishing, 1967).

c. Used interchangeably here, foreknowledge and theoretical sampling both imply that future outcomes can to a degree be predictable; a theory is a coherent group of tested general propositions, commonly regarded as correct, that can be used as *principles of explanation and prediction for a class of phenomena*.

d. Theoretical sampling is a process of data collection for generating theory whereby the analyst jointly collects codes and data and decides what data to collect next and where to find them, in order to develop a theory as it is described in Barney Glaser, *Theoretical Sensitivity: Advances in the Methodology of Grounded Theory* (Sociology Press, 1978).

are identified and refined, the ecosystem moves closer to theoretical sampling (foreknowledge) at a pace far exceeding the human mind's cognitive limitations. While the purpose of IC directives—the timely and comprehensive representation of knowledge—would remain valid, the business model to get to that end-state would be more effective with AI.

In fact, the distinctive advantage of this approach may place Lowenthal's work and current intelligence doctrine cleanly in the annals of intelligence history.

For law enforcement, empirical phenomena in the information environment could be correlated instantly to federal, state, and local laws and the entities associated with the violation of those laws. In the second phase of SABLE SPEAR, we proved this scenario through our criminality index. As illicit entities enter and exit the information environment and their level of criminal behavior changes, so does their criminality score. Our use of the scoring system allowed for a prioritization of entities to be targeted, not for extensive investigation, but for validation and arrest.

Lessons in Applying AI

The SABLE SPEAR experiment taught us considerable lessons in the use of AI in our singular focus on a specific mission outcome: the illumination of illicit networks correlated to the marketing and distribution of one opioid. Through this process, a number of the experiences and challenges revealed details about the future of the intelligence business.

The application of AI, and the resources dedicated to that end, must begin with an expectation that the AI output is as timely and comprehensive as the outputs of the algorithms.

As our experience with AI deepened, we began to recognize the paradigmatic differences between the intelligence process of we humans and AI in the development of timely and comprehensive foreknowledge. In the case of our analysts, abstract value is in the minds of analysts, and the IC invests in training to improve expertise, logic, and argumentation, among other skills. Tradecraft, certifications, mentorship, and promotion frameworks are used to incentivize and reward these behaviors.

In the case of artificial intelligence, abstract value resides in data, algorithms, and the insights that can be derived from them. With data and algorithms taking center stage, conversations turn to defining the value of data sets and the level of effort and protocols needed to collect and protect those data.

Abstract Value Distinctions between Biological and Artificial Intelligence

The distinctions between the former and the latter intelligence must be understood as we evaluate technology for use within the Intelligence Community. Tools designed to assist all-source analysts to organize data, navigate cognitive obstacles, and illuminate correlations must be recognized as enabling the current biological intelligence process. In fact, the federal contractor market is saturated with vendors offering exactly these types of tools with varying levels of success.

The application of AI, and the resources dedicated to that end, must begin with an expectation that

the AI output is only as timely and comprehensive as the outputs of the algorithms. These might include a real-time assessment of the likelihood of a strategic missile launch by an adversary, the real-time disposition of foreign intelligence officers, or the movement of illicit weapons among nefarious entities.

Ensuring the Provenance of Evidence

The need to “trace” the empirical correlations that form the foundations of an assessment can be algorithmically resolved within an AI ecosystem and tailored to the needs of contributing stakeholders. For example, if a law enforcement entity requires a standard of evidentiary integrity in judicial proceedings, pieces of evidence used to correlate an entity with criminal activity can be tailored into the production of “charge sheets” that manifest the data and their relationships to a degree sufficient to present in legal proceedings. Similarly, for the producers of strategic intelligence, the data can be adapted to meet to the analytical, argumentation, and presentation standards laid out in IC directives to serve policymaking at all levels.

Analysts' Roles Will Have to Change

All-source analysts, as generally known in the IC today, will differ from analysts who will be required to work with AI. Central to their new roles will be the application of yet-to-be-developed professional standards and processes by which analysts interact within the AI space.

The open-source environment is a common competitive space that must be the domain for the origination of comprehensive and timely discovery.

In addition, tradecraft certifications, IC directives prescribing standards and joint publications describing the roles of analysis in supporting warfighters must change. Integral to these guiding documents must be the articulation of where and how the power of AI will be leveraged to support intelligence customers.

In their new roles, analysts educate AI tools by prescribing the initial characterizations of the problem and assigning *initial relative value* to the data used for characterizing problems. Analysts must also serve the important role of validating the resulting outputs for their customers. As long as decisionmakers rely on cognitive processes, AI outputs must be presented in ways that allow decisionmakers to take advantage of their timeliness and comprehensiveness.

Similarly, the functions described in the common “intelligence cycle” take place simultaneously and in real time in the application of AI methods rather than as distinctive and sequential elements of collection management.

Leveraging Open Source

The open-source environment is a common competitive space that must be the domain for the origination of comprehensive and timely discovery. This is true for two reasons: first, the growing and disproportionate volume of analytically relevant data, for any issue, resides in the open-source domain. Second, the algorithmic environment, including new discoveries and relationships among algorithms, changes rapidly and continuously. *It is unreasonable to expect that the*

dynamic nature of the open source domain can be replicated in a classified environment and maintain the benefit of these phenomena.

The ancient Greek philosopher Heraclitus is said to have observed that “no man ever steps in the same river twice, for it’s not the same river and he’s not the same man.” Similarly, in the everchanging flow of data in the open-source domain, the data used for finding insight may be present one moment and gone the next. This reality is uniquely relevant when we consider moving unclassified data into a classified domain for analysis; there is a corresponding level of latency that affects decision advantage.

A helpful analogy we developed for characterizing the importance of open source was to compare it to the four center squares of a chess board. Holding and dominating the center enables more agile pieces of the enterprise (human intelligence, signals intelligence, etc.) to target information that cannot be discovered in publicly available information. In fact, the open-source domain takes center stage in defining what is and is not secret.

Redefining Data Ownership

For AI to work, data are *centrally valuable* to an assessment whether or not we are able to conceive of their relevance. To this end, *the mechanisms to protect an organization’s unique data must reside in the algorithmic space and not be left to the judgment of individuals to determine what can and cannot be shared.*

One of the greatest obstacles to this end will be the sharing of data between intelligence and law enforcement organizations. While both communities have justifications for protecting the information they gather, their collective data must be accessible to a virtual AI environment in order to drastically improve the understanding of both entities and the collective. For example, if the US government is interested in addressing the opioid crisis, a comprehensive illumination of that problem means a detailed and real-time characterization of the problem in its entirety. To achieve that end state, AI must include all data from all agencies with responsibilities in that space, including the Drug Enforcement Administration, the Federal Bureau of Investigation, the US Postal Inspection Service, the Food and Drug Administration, and state and local governments where the most detailed consumer data exist.

Determining the Value of Sensitive Collection

Applying an AI method with origins in the open-source domain also means that agencies with a specific charter to collect information will have a mechanism to determine the relative value of that information based on its direct relationship to foreknowledge. For example, if an agency has the authority to collect signals or human intelligence, it will be able to *quantitatively* examine the value of that investment based on the weight of specific data points in advancing theoretical sampling. In today’s intelligence framework, analysts are responsible for giving opinions on the value of data—a process that is plagued by shortfalls endemic to cognitive processes.

Knowing this, agencies will have to be ready to accept that specific collection programs may contribute surprisingly little to the resolution of intelligence problems or criminal investigations. Fortunately, the AI methodology will also facilitate an intelligent conversation about where unique collection capabilities need to be focused by defining what is truly unknown in the open information environment. It is in those areas that sensitive collection can be economically focused for a competitive advantage in decisionmaking.

What *is* well known within the IC is that considerable money is spent collecting information that can be known within the unclassified domain—things that are not really secrets.

Experimenting in the “Intervention” Space

A considerable advantage of applied AI is the ability to manipulate data algorithmically to test potential outcomes of actions before those actions take place. For example, in the characterization of an illicit network, an algorithmic modification can determine the effects of removing an entity from the network to determine the costs and benefits associated with that action. The derivative determination is repeatedly learned from previous instances within the information environment where a similar type of entity exited a similar type of network. This means the predicted effects are based on considerable volumes of data and activities rather than the few limited by human cognition.

More impressive, however, is that the machine could also recommend multiple and simultaneous, or sequential, actions to meet *defined objectives*

Agencies will have to be ready to accept that specific collection programs may contribute surprisingly little to the characterization of intelligence problems or criminal investigations.

within the AI environment. The AI ecosystem will be able to automatically generate a set of actions based on the objectives, constraints, and restraints of the analyst educating the ecosystem.

Economic Efficiencies Inherent

Using AI to address national security issues would enable an exponential growth in the level of associations that can be developed across the whole of government, providing more courses of action for intervention. An agency’s participation in an AI ecosystem would mean both the refined understanding of their organization’s areas for action but also a considerable benefit to the collective as the data and users reach the critical mass needed to make it commercially attractive for data, tools, and expertise providers to feed their inputs into the ecosystem.

Commercial attractiveness requires that there be automated mechanisms in place that would make selling or providing data to the ecosystem rapid and painless for government and industry. Imagine how this would work in the absence of an ecosystem approach: the government would need to write contracts to purchase data only after a painfully slow requirements and procurement process. The process could take months, and what is worse, the information would most likely be irrelevant by the time it was made available.

Easing the process of data purchase by allowing ecosystem providers to make digital gateway mechanisms would transform today’s slow

data purchase process into a rapid commercial purchase between two commercial entities.

Once all of this data starts flowing into the ecosystem, it becomes automatically aggregated, connected, and curated in order to make the collective more useful for the entire community in an automatic and data policy managed way. The data policy manager would ensure that confidentiality, publicly identifiable information, and classification policies are strictly and conservatively adhered to.

Ultimately, the purpose behind incentivizing providers to input their data, tools, and expertise into the ecosystem is to have a multiplier effect on the number of associations that can be drawn between desired outputs and the variables available within the ecosystem. More associations will bring more possible points of interventions (what-if capabilities). More intervention points will provide more prescribed courses of action (guidance) for significantly changing the desired outcome.

Conclusion

The implications of applied AI are not evolutionary, but revolutionary, and would require investment changes to the tune of billions of dollars. It means the way intelligence and law enforcement conceptualize “intelligence” must radically change to include a new intelligence cycle in which an “analyst” serves to educate the initial development of an artificial ecosystem and the validation

The implications of applied AI are not evolutionary, but revolutionary, and would require investment changes to the tune of billions of dollars.

and communication of the artificially derived outputs. It means the types of people serving central roles in the intelligence business must be examined through their roles in the

creation and interactions with artificial ecosystems.

The SABLE SPEAR experiment has allowed for an exploration of AI methods, but more such experiments

are needed to fully understand the technical, human, policy, and legal requirements needed to effectively advance the business of intelligence. Each of these realities must continue to be debated, researched, and invested in to determine the types of people and resources needed to be competitive in the application of AI methods.



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From Training Individuals to Building an Organization that Learns: The Case for After Action Reviews in Intelligence

Gregory Sims

“Excellence is not an act but a habit. We are what we repeatedly do.”

—Aristotle (as paraphrased by Will Durant)

“A man who tries to carry a cat home by its tail will learn a lesson that can be learned in no other way.”

—Mark Twain

Today the United States faces an array of disruptive threats that challenge the Intelligence Community’s ability to protect our nation. Many of these threats are novel and intertwined, and the only way to navigate them is to learn our way through. But for numerous organizations, concepts of learning are heavily weighted toward teaching established skills—things people already know how to do. The new insights the Community will need to solve the problems we are grappling with in the moment will not come from the classroom; they will be wrung from day-to-day operations. To facilitate this, we need to learn more at the edge. We need to learn in the mud. The following is my thinking about how it can be done in CIA.

Fortunately, the US Army has pioneered some methods that can help illuminate the way forward. We already adopted one important Army organizational learning practice in the form of CIA’s Lessons Learned (LL) program—established in 2007—which falls under the agency’s Center for the Study of Intelligence (CSI). This small but capable outfit, inspired by the Army’s Center for Army

Lessons Learned (CALL), seeks to extract key lessons from contemporary activities for the benefit of the broader enterprise via periodic deep dive research projects and expert analysis. What is missing, however, is the complementary, grassroots component of the Army’s LL process, the After Action Review (AAR). The Army’s handbook on establishing LL programs flatly states: “You cannot have an effective LL program without the AAR.”^a We should heed this advice and add the AAR to our organizational learning toolbox.

The Concept of Organizational Learning

There is a consensus among authoritative thinkers on strategy and management about the importance of organizational learning in fostering sustained success in environments of disruptive change.^b Institutionally, however, the CIA has tended to associate learning with training, whereby those who possess knowledge pass it down to those who seek it in a pedagogical, teacher-student dynamic, whether in classroom settings or, more recently, using online instructional tools that push content to the

a. Center for Army Lessons Learned (CALL), *Establishing a Lessons Learned Program: Observations, Insights, and Lessons* (CALL,2011), 63.

b. W. Edwards Deming’s PDCA Cycle (plan, do, check, adjust) and Peter Senge’s conception of a Learning Organization are two of the better known examples, but there are many others.

The views, opinions, and findings of the author expressed in this article should not be construed as asserting or implying US government endorsement of its factual statements and interpretations or representing the official positions of any component of the United States government.

The US Army devised and implemented the AAR process after the Vietnam War, when the service was at its post WW2 nadir

workplace. Such methods are useful in passing down core skills on subjects for which we believe best practices are already known, but our most urgent challenges deal with dynamic new issues that we are endeavoring to solve as we face them.

Traditional training techniques are ill-suited to near-real-time knowledge capture, analysis, and adaptation, i.e., learning as we do. We should therefore broaden our concept of learning to more fully embrace methods in which learners themselves harvest key lessons from the daily conduct of their front line operations and transfer these insights upward for the benefit of others. This is a key element of how an organization educates itself and adapts to change, for as Darwin forewarned, it is not the strongest or most intelligent that survive, but the most adaptable.

Many private sector management thinkers have championed the cause of organizational learning and chronicled efforts related to this practice by the likes of British Petroleum, Shell Oil, General Electric, and LL Bean, yet it is interesting how so many tip their hats to the US Army's AAR practice as having blazed the trail.^a This is a rare instance in which a government bureaucracy has innovated an organizational practice that was subsequently embraced by the private sector. It usually works in the other direction. For this reason, and because, like the Army, the CIA

operates in the national security realm, the AAR tool is a logical place to start if we wish to bolster our capacity as a learning, adaptive enterprise. It is a proven and battle tested practice that would be relatively simple to overlay onto our existing structures and integrate with our current LL process and learning enterprise activities. Yet for all its simplicity, establishing an AAR culture offers transformational promise.

AARs and the US Military

The US Army devised and implemented the AAR process after the Vietnam War, when the service was at its post WW2 nadir—defeated, scorned, demoralized, and rife with drug abuse and racial animosity. Army leadership faced up to this challenge by rededicating itself to a process of systematic professionalization in the art of warfighting at all levels. Three key elements of this commitment were; 1) the creation of the National Training Center (NTC) at Ft. Irwin, at which Army combined arms forces were put through lengthy and realistic exercises against dedicated opposing force (OPFOR) units in battle-like simulations; 2) introduction of the AAR as the principal vehicle for practitioners to identify and *push upward* the knowledge gleaned from these experiences; 3) the establishment of the Center for Army Lessons Learned (CALL) at Ft. Leavenworth to conduct deep dive research projects on particular issues

or operations to *pull inward* insights generated at the edge, and to track and analyze the range of observations, including those derived from AARs, for lessons meriting inclusion in an ever-evolving Army doctrine.

Of the three, the AAR was the most revolutionary and central to the evolution of a service-wide culture of learning. The Army leadership's key insight was recognizing that much wisdom about warfighting could be won if it could condition soldiers in lower echelons, who constituted the leading edge of the service, to reflect systematically on the reasons for their failures or successes, and then push their observations upward for consideration by the broader organization.

This was a practice that did not come naturally to an institution more commonly associated with a top-down command & control ethos. As one retired major general put it, "For the US Army, it was a significant culture shock. The preeminence of rank, age, and established doctrinal methods were the foundation of the organization. Now, AARs made the generals and colonels sit and listen while the lieutenants and sergeants commented on how and why battles were won and lost."^b

The US Army's AAR handbook describes the AAR as, "a guided analysis of an organization's performance, conducted at appropriate times during and at the conclusion of a training event or operation, with the objective of improving future performance. It includes a facilitator, event participants, and other

a. See, for example: David Garvin David, *Learning in Action: A Guide to Putting the Learning Organization to Work* (Harvard Business Review Press; 2015); Marilyn Darling et.al., "Learning in the Thick of It," *Harvard Business Review*, August 2014.

b. Robert Ivany, "The US Army's Secret to Building a Leader-Driven, Learning Culture: After Action Reviews." Chiefexecutive.net, October 19, 2018.

observers.”^a The AAR process can be formal or informal and can last for minutes or hours. The discussion always revolves around the same four questions:

- What did we set out to do?
- What actually happened?
- What was right or wrong about what happened, and why?
- What would we do differently next time?

A facilitator generally guides AAR discussions to make sure the participants stay on track. AARs require candor and a temporary suspension of traditional norms of authority to foster an honest interchange between superiors and subordinates, and a recognition that disagreement does not constitute disrespect or insubordination. Thirty-plus years of experience with the process have identified the essential elements needed to make AARs successful:

- They must be structured and stick to the four questions outlined above.
- Conduct them soon enough after the event being reviewed so that memories are still fresh, but not so soon that there has not been time for some initial reflection.
- Include as many participants in the event as practical, and from multiple ranks and disciplines.

- The AAR should be guided by a skilled facilitator (referred to by the Army as the Observer/Controller—O/C) who can be more detached. AARs should pointedly not be conducted by the leader of the activity being reviewed.
- The AAR must be a vehicle for learning, not accountability, working under the presumption that everyone makes mistakes. The atmosphere should encourage participants to discuss their own shortcomings and call it like they see it, but without rancor. It is about the mission, not egos.
- The results should be written up promptly and forwarded to the component charged with reviewing the takeaways for possible flagging to the broader organization.

The migration of the Army’s AAR process from training exercises to operational deployments and combat situations did not gain traction until Operation Desert Storm and the post 9/11 conflicts. Although official Army literature on AARs, including its current handbook, remains heavily weighted toward the tool’s application to training exercises, it is a tribute to the cultural transformation that AARs helped to establish that Army personnel now reflexively reach for it to navigate a wide range of real-world challenges outside of training.

AARs in Business

It did not take long for business thinkers to recognize the implications of this innovation for commercial enterprises. Peter Senge, a leading business theorist and author of *The Fifth Discipline*, described the AAR as “arguably one of the most successful organizational learning methods yet devised,”^b and he urged businesses to adopt the practice to foster reflection, broaden awareness, and sustain learning over time.

Columbia University School of Business Professor Willie Pietersen lauded the AAR in the context of generating “strategic learning,” which he characterized as an “insight-to-action-to-insight cycle” that was about “learning your way to excellence.”^c Harvard’s David Garvin wrote, “AARs are a powerful, appealing tool. The concept is easy to grasp and inexpensive to apply, amounting to little more than organized reflection.”^d

Many experienced US Army officers entering the business world around this time also brought the AAR with them as a best practice adaptable to the private sector. For example, Todd Henshaw, formerly the Director of Military Leadership at West Point, refined the AAR concept for executive leadership programs at the University of Pennsylvania’s Wharton School,^e and former Army Chief of Staff Gordon Sullivan devoted an entire chapter to AARs and CALL in his book on the application

a. *A Leader’s Guide to After Action Reviews*. Headquarters, Dept. of the Army, 2013.

b. Peter Senge, Introduction to M.Darling & C.Parry’s *From Post-Mortem to Living Practice: An In-Depth Study of the Evolution of the After Action Review* (Signet, 2001), 4–5.

c. Willie Pietersen, *Strategic Learning: How to be Smarter than Your Competition and Turn Key Insights into Competitive Advantage* (Wiley, 2010). 172.

d. Garvin, *Learning in Action*, 111.

e. Todd Henshaw, “After Action Reviews,” *Wharton Executive Education*, February 15, 2019.

of Army leadership principles to business.^a

One difference in how AARs are employed by business relative to the military is the greater emphasis placed by business in the tool's value in creating altogether new insights from ongoing operations, often referred to as "generative learning," rather than teasing out incremental improvements, referred to as "adaptive learning," from training exercises. Marilyn Darling and Charles Parry coined the term "emergent learning" to characterize the concept, and they described the AAR as an excellent vehicle for putting this into practice due to its demonstrated ability for "weaving a disciplined process for learning through experience into the tapestry of ongoing work . . . and [thereby] 'learning our way through' difficult and complex situations."^b

AARs and Intelligence

Today the CIA and other intelligence agencies face a host of wicked challenges that we must learn how to deal with quickly and effectively if we are to prevail against increasingly capable adversaries. Our conception of learning, however, mostly centers around developing efficient ways for the enterprise to deliver learning content associated with established professional skills to agency personnel to help make them better at their jobs. While this is an essential function, to generate the new knowledge and insights we will need overcome our current challenges, we must more effectively meld our learning with our doing in a way that creates a

truly bi-directional learning process in which knowledge is passed not only downward from the enterprise to practitioners, but upward from practitioners back to the enterprise based on what they are experiencing at the front lines.

The CIA's establishment of a formal Lessons Learned process to capture knowledge gleaned from current operations demonstrates that CIA leadership recognizes this imperative. Current LL efforts, however, represent only part of the organizational learning equation, one that cannot realistically hope to affect the agency's learning culture at scale. Today's LL projects marshal knowledgeable, but external, teams of observers who deploy for a limited number of events to pull salient observations from participants, usually via an oral interview process. The teams then take this information back for analysis that, in time, results in scholarly and high quality assessments containing insights with relevance to other operations.

While clearly valuable, what is missing are the more ubiquitous and timelier streams of observations pushed upward by operators themselves that a cadre-driven AAR process could provide. AAR reports would be shorter and less polished than those resulting from LL research projects, to be sure, but since the practitioners would be conducting the analysis themselves rather than delegating this to external actors, working levels would steadily cultivate habits of professional reflection and complex analysis in multidisciplinary team environments. This in

turn would hold better prospects for advancing our learning culture and collaborative instincts.

Local CIA managers may occasionally conduct AAR-like debriefings or "hot washes" after real-world operations, but these are done irregularly at best and are generally locally initiated and locally consumed. The lessons gleaned from such *ad hoc* reviews also tend to dissipate quickly as a consequence of our practice of regular personnel rotation and our underdeveloped mechanisms for reflection and knowledge sharing.

Both military and business users stress the value of AARs as an iterative process for generating continuous learning loops rather than being thought of as singular events. Those who employ the tool only infrequently will be disappointed. AARs must become routine practice if we are to leverage their true power. Relatedly, we should view AARs as more than just a tool to be used when something goes wrong, but as a behavior that is tied to the process wanting to get better—of wanting to win. We should use them in both successful and unsuccessful operations, as both present opportunities to learn.

Mating a grassroots AAR process to our existing Lessons Learned and Learning Enterprise functions would not require a fundamental, Agency-wide reorganization nor an extensive shift of resources or personnel. Its logic is self-evident, so we should not need to retain outside expertise at great expense to help us figure it out. The military and private sector have learned much about the tool's

a. Gordon R. Sullivan and Michael V. Harper, *Hope is not a Method: What Business Leaders can Learn from America's Army* (Broadway Books, 1997), 189–211.

b. Charles Parry and Marilyn Darling, "Emergent Learning in Action: The After Action Review," *The Systems Thinker*, February 6, 2018.

strengths and weaknesses over the past 30 years, so we can benefit from their experience and avoid the pitfalls they encountered as we tailor the process to our needs. Sometimes it pays to be a late adopter.

While the Army has provided an excellent model in the AAR, the tool would require thoughtful customization to take into account differences in the circumstances under which the CIA, and other intelligence agencies, and the US Army operate. For one, at any given time only a fraction of US Army personnel are engaged in combat operations, providing significant time while in garrison for training and reflection. CIA staffing levels, on the other hand, require its personnel to operate in a state of near continuous engagement, whether that be human or technical operations, analysis, or support activities.

Peacetime for soldiers is wartime for intelligence officers. An AAR methodology for CIA must be sensitive to the need to avoid prolonged absences from day-to-day mission responsibilities. Another CIA peculiarity is the more stringent requirement for secrecy and compartmentation relative to Army operations. Greater discretion would be required in reporting particularly sensitive information in CIA AARs, but the agency has mechanisms for compartmentalizing and handling classified information, and indoctrinates its personnel from the outset to deal with such decisions.

Committing to an AAR culture would not be especially complicated, but it would take determination and perseverance to ensure the behavior was institutionalized.

Conclusion

Committing to an AAR culture would not be especially complicated, but it would take determination and perseverance to ensure the behavior was institutionalized. One option would be to oblige any activity or operation that entailed the expenditure of a set dollar amount or employment of a certain level of personnel resources to conduct an AAR upon its conclusion to mine learning points for the benefit of the enterprise, whether the operation was successful or not.

We might also try positive incentives to encourage the practice, such as by rewarding teams that produce AARs whose insights were subsequently viewed and employed by others, much as we do by tracking the readership and usage of other products. In this spirit, it should be possible to expand our organizational metrics to track not only outputs and outcomes as measures of success, but also inputs and investments that are proven to lead to future success, such as learning and collaboration, behaviors strengthened by practices like the AAR.

A respected management thinker defined a learning organization as one “skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.”^a To better live up to this standard and foster a spirit of organizational autodidacticism, we need not just instructors,

curricula, and courses, but facilitators and processes woven into the fabric of our ongoing operations to capture and metabolize new lessons that we generate as we go about our business. We can then leverage these insights into the innovations and initiatives we need to overcome the complex challenges we face.

Given the hectic pace of our work caused by the urgency of these challenges, this practice can also serve as a vehicle through which the agency’s leadership can signal not only its acceptance, but its expectation that frontline operators take brief but regular pauses from their pressing business to candidly analyze and discuss, as teams, what and how they are doing, and adjust and innovate accordingly. The AAR concept is ready-made for this. It is deceptively simple yet, if employed systematically across disciplines and hierarchies, offers in a single tool the prospect of honing multiple key behaviors beyond learning that our workforce needs to be successful: collaboration, shared purpose, systems thinking, initiative, and innovation.

The AAR is widely acknowledged as having played a key role in transforming the US Army from a rigid, doctrinaire force into an adaptive, learning organization. There is no reason to think it could not offer similarly profound benefits to CIA or other IC components. We need only resolve ourselves to borrow it.



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a. Garvin, “Building a Learning Organization.”

Going Beyond English to Better See the World

Stephen C. Mercado

Many US analysts of foreign affairs—whether writing in the Intelligence Community, at a newspaper, in a university or at a think tank—see things beyond our shores in a dim light, their view obscured by an opaque bubble arising from dependence on English-language information sources and a paucity of translated material: According to one authoritative estimate, only 3 percent of all books published in the United States are translated works.^a

Access to foreign sources in foreign languages would break that bubble and yield many insights not discoverable in English-language works. These will often include what might be considered foreign intelligence (FI) as well as counterintelligence (CI) insights. Some media reports published abroad in vernacular languages even reveal US intelligence details that might be secret in the United States but not overseas. US CI analysts need to know of them.

The problem is that many analysts cannot conduct research in relevant foreign sources. The near absence of translated publications from US publishers prevents them from finding such sources on the shelves of even the best bookstores. What can be done? A start would be for employers to make language a key hiring qualification. Universities would restore earlier language requirements and orient classes for future analysts. Increasing government support for student acquisition of language and area knowledge would help, as would funding projects to further develop computer-assisted translation (CAT), speech-to-text, and other relevant technologies.

Using foreign-language material in analyzing foreign affairs applies to countries and issues around the world. To tackle such a broad topic, I will use examples of North Korean material. After all, if conducting research in foreign languages aids in analyzing secretive North Korea, arguably the world's greatest analytical challenge, then it should be useful in general.^b

Novel Insights

Columbia University Press opened a window onto the Democratic People's Republic of Korea last year in publishing an English translation of a popular North Korean novel. *Friend*, the story of a judge looking into the circumstances behind a woman's petition for divorce, sheds light on society in the DPRK.^c What we read is not a piece of revolutionary propaganda but a conservative Korean tale, largely focused on the judge's paternal concern for the couple's son if he grants the divorce. Didactic yet nuanced, approved by the censors, yet much read in North Korea—as well as seen in its adaptation to a television series—the novel offers us a view of a country that we perceive only dimly.^d

Fictional literature can also provide paths to understanding foreign affairs. Fiction may even reveal truths little seen in formal government documents or state media. As Director of Central Intelligence (DCI) Allen Dulles put it over a half century ago, “Even a novel or play may contain useful information about the state of a nation.”^e

a. *Three Percent*, <https://www.rochester.edu/college/translation/threepcent/about/>. *Three Percent* is a blog site of the University of Rochester's translation project launched in 2007. It established a database of translated works compiled by volunteer readers that spans the years 2008 to the present. That database is now maintained on the *Publisher's Weekly* website at <https://www.publishersweekly.com/pw/translation/home/index.html>.

b. Korean words in this article are rendered according to the standard McCune-Reischauer system, minus the diacritical marks.

c. Paek Nam-nyong. *Friend: A Novel from North Korea*, translated by Immanuel Kim (Columbia University Press, 2020).

d. See Paek's interview with his translator in Immanuel Kim, “The Interview: Life of North Korean Author Paek Nam-nyong,” *The Journal of Korean Studies*, 21:1 (2016): 245–57.

e. Allen Dulles, *The Craft of Intelligence* (Harper & Row, 1963), 55. In US popular culture, this idea is found in the work of “Condor,” codename for Robert Redford's character in *Three Days of the Condor* (1975). In the film, Condor works at a covert site, the American Lit-

The views, opinions, and findings of the author expressed in this article should not be construed as asserting or implying US government endorsement of its factual statements and interpretations or representing the official positions of any component of the United States government.

Friend is far from the only North Korean novel that shows us aspects of that nation's history, society or politics. The following are a few examples:

- *Changgom* [Long Sword] features a hero who operates against intelligence organs of Imperial Japan in the Second World War and against the United States in the Korean War. The author includes many actual individuals, events, organizations, and intelligence techniques in his story.^a
- *Unmyong* [Destiny] recounts Pyongyang's history in the Cold War as a center of global revolution. The novel depicts Kim Il Sung in the 1960s contending with Moscow's efforts to use the Council for Mutual Economic Assistance (COMECON) to stymie his nation's development, conferring as an equal with Chinese counterparts, and standing in solidarity with Cuba. Meanwhile, in the skies over Vietnam, pilot Choe Pong-ho shoots down US military aircraft. The author gives us Pyongyang's view of its place in the socialist camp in that era.^b
- *Taeyang Changa* [A Song in Praise of the Sun] is the story of the establishment of the pro-Pyongyang General Association of Korean Residents in Japan (Chosen Soren, also known as Chongryon), under the leadership of Han Tok-su, to organize Koreans living in hardship in postwar Japan. The author shows the DPRK's relationship to Korean compatriots in Japan and the competing organizations there that swear loyalty to either Pyongyang or Seoul.^c

Reading the literature of North Korea gives us access to DPRK narratives written for the public, ranging from high politics to everyday life. Knowing such narratives is helpful for anyone conducting analysis—whether intelligence analyst, journalist, university professor or think-tanker—in regard to North Korea. Reading North Korean fiction not only gives us a “feel” for DPRK politics and society; it can even teach us basic facts. For example, it was in reading *Unmyong* that I learned that Pyongyang had sent pilots to fly combat missions in the Vietnam War.^d

The publication of *Friend* is thus a welcome development but also a troubling one, both for its novelty and for its late appearance. *Friend* is the first and only DPRK novel published in the United States.^e The dearth of translations should not be seen as a reflection of the lack of material. Although I have never come across hard statistics for the number of novels published in Pyongyang over the years, the output must be considerable. In the literature section of the DPRK information portal Uriminzokkiri alone there are links to at least a thousand novels and stories for adults, young readers, and children.^f

Considering that Pyongyang has been a major concern in US policy and intelligence circles since the outbreak of the Korean War seven decades ago, it is regrettable that the translated novel should be alone in the United States. Troubling, too, is the time that it took to appear in English. Pyongyang's Literature and Art Publishing House published the story over 30 years ago.^g In France, a prominent publishing house beat the US publisher to press by nine years.^h

erary Historical Society, which monitors and exploits open sources in various languages for their potential intelligence value. Condor's report on a translated novel linked to a rogue CIA operation leads to the murder of his society colleagues and his own flight from danger.

a. Hong Tong-sik. *Changgom* [Long Sword]. Vol. 1 (Pyongyang: Kumsong Youth Publishing House, 2005) and Vol. 2 (2006). For my review of the novel, see *Changgom* [Long Sword], *Studies in Intelligence* 54, No. 4 (2010).

b. Chong Ki-chong. *Unmyong* [Destiny] (Pyongyang: Literature and Art Publishing House, 2012).

c. Nam Tae-hyon. *Taeyang Changa* [A Song in Praise of the Sun] (Pyongyang: Literature and Art Publishing House, 2006).

d. Hanoi and Pyongyang confirmed only in 2000 that DPRK pilots had fought in Vietnam. See Merle Pribbenow. “North Korean Pilots in the Skies over Vietnam” (Wilson Center, December 5, 2011). Accessible via www.wilsoncenter.org.

e. Previously, three DPRK short stories and an excerpt from the famous novel *Hwangjini* appeared in an anthology of “enemy” literature: Alane Mason, Dedi Felman, and Samantha Schnee, eds., *Literature from the “Axis of Evil:” Writing from Iran, Iraq, North Korea, and other Enemy Nations* (The New Press, 2006). The 2017 publication in the United States of *The Accusation: Forbidden Stories from Inside North Korea* (Grove Press), purportedly penned by an anonymous DPRK author and smuggled outside the country, does not count as 1) the stories were never published in Pyongyang and 2) neither the identity of the author nor the origin of the stories can be verified.

f. <http://www.uriminzokkiri.com>.

g. Paek Nam-nyong. *Pot* (Pyongyang: Literature and Art Publishing House, 1988).

h. Baek Nam-ryong, trans, Patrick Maurus and Yang Jung-Hee, *Des amis*, (Actes Sud, 2011) That the novelist's name (백남룡) should appear in two European-language translations in two different variations of the standard McCune-Reischauer transliteration system points to

Open Sources and Ground Truth

We can profitably read Pyongyang sources, whether fiction, propaganda or science, for insights into North Korea. Such open sources can help us answer that basic intelligence question, expressed so memorably by Paul Newman in the movie *Butch Cassidy and the Sundance Kid*: who are those guys? North Korean novels and movies give insights into DPRK social conditions. Editorials of the Workers Party of Korea (WPK) organ *Rodong Sinmun* signal the party's politics by word, emphasis, and other aspects of propaganda. Pyongyang's output of scientific literature and news suggests the capabilities and possible directions of DPRK civilian and dual-use R&D. We can read the body of the report to follow the research and study the endnotes to understand the domestic and foreign scientific literature to which the authors have access.^a In short, we can gain ground truth from direct access to primary sources—whether a popular novel, a party newspaper, or a science paper. This is, of course, the work of open-source analysts in CIA, but their work rarely reaches the public.

Pyongyang from the Periphery and Beyond

We also enhance our understanding of North Korea by looking to the periphery. China and Russia border North Korea. Japan lies a short distance across the Sea of Japan. These three countries all provide windows to North Korea.^b All three have long had extensive ties with the DPRK. All possess abundant open sources with information to help answer that question: who are those guys? Examples:

- Xinhua (New China News Agency) journalist Du Baiyu arrived in Pyongyang in March 2012, one in a long line of reporters assigned there since China's official news agency opened its Pyongyang office in 1949. Not long before her departure in July 2014, she published her impressions of life and work in Pyongyang in the book *Wo de Pingrang gushi* [My Pyongyang Story] and the photograph collection *Chaoxian yinxiang* [Korean Images].^c In addition to writing of her duties as a reporter and auxiliary member of the Chinese embassy, Du described outings with Korean and foreign friends. One memorable scene in the book is her visit to the Friendship Bar in Pyongyang's diplomatic quarter, where she heard songs from America's Backstreet Boys and Taiwan's Teresa Teng playing from the speakers.^d The city is beautiful in her eyes and the people are friendly to her. Her perspective stands in stark contrast to the dark image commonly found in US media.^e
- The Chosen Soren in Tokyo published in 2012 *Chosen: Miryoku no tabi* [DPR Korea: Charming Travel], arguably the world's best travel guide to North Korea. As with Robert Willoughby's worthy guide, the Japanese-language book includes color photographs and descriptions of major tourist sites in Pyongyang and around the country. The Chosen Soren publication also features an impressive "Pyongyang Gourmet Guide," with photos and information on city restaurants and their cuisine, as well as a detailed map of downtown Pyongyang and a layout of the Pyongyang's flagship Koryo Hotel.

the challenge of writing Korean names in English. That the novel's title (벗), a single noun, should appear in English in the singular and in French in the plural suggests just how difficult Korean is to translate into Western languages.

a. Pouring over Pyongyang science journals should put to rest the lazy notion of North Korea as a "hermit kingdom" cut off from the world. The endnotes of Pyongyang science articles cite US, Chinese, and other foreign scientific literature, including the papers some of the scientists wrote while studying abroad, showing a scientific establishment connected to the world. A DPRK website of Pyongyang's flagship Kim Il Sung University, (www.ryongnamsan.edu.kp) includes a collection of science journals for anyone interested in such DPRK science articles and their foreign endnotes.

b. The peripheral approach is valid beyond open sources. In signals intelligence and human intelligence, for example, Imperial Japan found natural intelligence partners in the nations along the periphery of the Soviet Union. In the Second World War, the Japanese military attache in Sweden cooperated with Finnish counterparts and gathered intelligence from sources around the Baltic to track Soviet moves. See Onodera Yuriko, *Barutokai no hotori ni te: Bukan no tsuma no Daitoa Senso* [On the Shores of the Baltic Sea: The Greater East Asia War as Experienced by the Wife of a Military Attache] (Kyodo Tsushinsha, 1985).

c. Du Yubai, *Wo de Pingrang gushi* (Huaxia Publishing House, 2014) and *Chaoxian yinxiang* (People's Daily Publishing House, 2014).

d. *Ibid.*, 25.

e. Many Chinese travelers are positively impressed with North Korea. One such person, a Beijing art journal editor, found the DPRK's quiet and beauty a nostalgic reminder of China before its opening to the world at the end of the 1970s. Sha Hui, *38° Bandoxing* [Peninsular Travel on Both Sides of the 38th Parallel] (China Youth Publishing House, 2010).

- Konstantin Tsiolkovsky, President Vladimir Putin's representative in the Russian Far East, rode the rails with the late DPRK leader Kim Jong Il to Moscow and his 2001 summit meeting with Putin. Pulikovskiy then wrote an account of his trip and his traveling companion; the book is a rare source of information on the father of Pyongyang's present leader.^a

Beyond North Korea's periphery lie other sources of information. Pyongyang has long maintained relations with many countries, expanding its ties since the Cold War's end from the socialist and non-aligned camps to countries in the West. Germany is a particularly interesting case. Pyongyang had a long history of engagement with East Berlin, built in part on the German Democratic Republic's contribution to the country's reconstruction after the Korean War's battlefield hostilities ended. Since Germany's unification, Pyongyang has responded to Berlin's policy of engagement by engaging in cultural, economic, and scientific exchanges. German institutes frequently send individuals and delegations to North Korea for everything from classical music education to international business seminars. Korean musicians, scientists, and political delegations have gone to Germany numerous times to play in concerts, engage in scientific research and development, or develop political relations.^b Lying well beyond the periphery, Germany has served as North Korea's window on the West. Accordingly, there is a large volume of German material—books, newspaper articles, institute websites, and science papers—related to the DPRK. Information also exists elsewhere in Europe, as well as Africa, Asia, and Latin America in such languages as Arabic, French, Persian, Spanish, and Vietnamese.

Here I would like to cite a real-world example of how to leverage sources in multiple languages from

many countries to improve research on the DPRK. In Washington, DC, the Woodrow Wilson Center for International Scholars has taken such an approach. In its Cold War International History Project (CWIHP) and the North Korea International Documentation Project (NKIDP), the Wilson Center has been acquiring declassified diplomatic telegrams and other primary documents released by the major players in the Cold War, translating them, and depositing them on line for anyone to read. It also posts the works of scholars who draw on this material to write analytical papers on Cold War history and North Korea.^c

Relatively Little Information on American Bookshelves

Mining the abundant open sources around the world for information on North Korea would give us much more information to use in analysis, but we should not simply hope that US publishers will one day publish more North Korean novels or other primary sources of information.^d This sets the United States apart from the world's other major publishing industries. I have often experienced a sense of amazement, followed by one of bewilderment, at the sight of all the translated nonfiction works on the shelves and tables of bookstores in Taipei or Tokyo, then wondered why even books from elsewhere in the Anglosphere are relatively rare in US bookstores.^e My oddest such experience was seeing the memoir of Charles Jenkins – the US Army defector who spent nearly 40 years in Pyongyang before finally leaving in 2004 – appear in the United States in 2008, three years after the Japanese translation had hit the shelves in Japan. Moreover, the Japanese version not only appeared earlier

a. Konstantin Pulikovskiy. *Vostochnoy ekspress: Po Rossii s Kim Chen Irom* [Orient Express: Across Russia with Kim Jong Il] (Gorodets, 2002).

b. German conductor Alexander Leibreich taught music as a visiting professor in Pyongyang in 2003. For his account of working there, see "Pjöngjang singt. Deutschland sing mit" in Christoph Moeskes, ed., *Nordkorea: Einblicke ein rätselhaftes Land* [North Korea: Insights into an Enigmatic Country] (Berlin: Ch. Links Verlag, 2004).

c. The Center's Digital Archive (<https://digitalarchive.wilsoncenter.org/>) is an OSINT treasure trove.

d. Worth noting is that North Korea has published more American literature than the other way around. I do not know Pyongyang's total output of American literature in authorized translations, but in Stanford University's library catalog there are at least two: Theodore Dreiser's *American Tragedy* and Margaret Mitchell's *Gone with the Wind*, as well as such world classics as Homer's *Iliad*, Boccaccio's *Decameron*, Milton's *Paradise Lost*, and Hugo's *Les Misérables* (<https://searchworks.stanford.edu>, accessed 21 January 2021).

e. On DPRK topics, the Japanese have translated many works on the DPRK written by American authors, including Barbara Demick (*Nothing to Envy*), David Halberstam (*The Coldest War*), and Bradley Martin (*Under the Loving Care of the Fatherly Leader*). Apart from Wada Haruki (*The Korean War: An International History*), I am unaware of any other of the countless Japanese authors on North Korea being published in English in the United States.

but came out better edited and featuring a useful timeline of events not found in the US book.^a

Breaking Through the English Bubble To See North Korea

There are several reasons why we need to break through the bubble and leverage foreign languages to understand North Korea.

- First, North Korea produces relative little in English and much of what it does is incomplete. For example, only some of Pyongyang’s scientific and technical journals include English abstracts. Even with abstracts, Korean is needed to read the details.
- Second, Pyongyang’s English publications are intended for foreign audiences and are not simple translations of the Korean media published for domestic audiences. The *Pyongyang Times*, for example, is not the English version of the *Rodong Sinmun* and cannot serve as the basis for media analysis. For that matter, Seoul’s output in English does not necessarily reflect what the authorities there are publishing in Korean on the North.
- Third, only an original text is authoritative. All translations are suspect. Some are unintentionally ridiculous.^b At a minimum, Pyongyang’s English media require inspection against the original before use. For example, a British editor working in Pyongyang witnessed his Korean colleagues arguing whether or not Marshal Kim Jong Il’s proclamation on 13 March 1993—a time of escalating military tension with Washington—of a *chunjonsi sangtae* should be translated as “a state of semi-war” or something else. If arguments over the correct English translation are possible for

Pyongyang editors, suggesting the possibility for misleading choices or outright errors, the same must be true for translations published in Seoul, Washington or elsewhere.^c One can readily imagine the pitfalls of attempting to analyze shifts in DPRK propaganda via translated texts alone.^d

- Fourth, unique and useful information is found in languages other than Korean and English. This is particularly so for the Korean Peninsula’s “peripheral” languages: Chinese, Japanese, and Russian.^e

Despite these reasons for using foreign languages in analyzing foreign affairs, significant barriers stand in our way:

- First, we lack incentives to learn other languages. We have grown accustomed to the world speaking English.^f We often do not need to master a foreign language, even for jobs analyzing foreign affairs.^g
- Second, since the campus upheavals of the late 1960s, most colleges and universities no longer require students to study a foreign language. Worse, many have been cutting languages in recent years as the result of declining demand and budget pressures.
- Third, few analysts are literate in more than a single foreign language, leaving them unable to exploit useful peripheral languages to a given issue in foreign affairs.

Fortunately, there are solutions to these problems:

- Employers should require a working proficiency in relevant foreign languages. Employers making clear that

a. See my review essay on the two books: “An American Deserter and the Shortcomings of the US Publishing Industry,” *Intelligence and National Security*, 26:5 (2011): 730–36.

b. The title of the Korean Central News Agency (KCNA) translated report on catfish farming is needlessly comical: “Great Men and Catfish Breeding” (<https://kcnawatch.org/newstream/1590658309-972508213/great-men-and-catfish-breeding/> accessed May 30, 2020). The original title is the straightforward *메기양어가 전하는 인민사랑* [Love for the People Conveyed by Catfish Breeding] (<https://kcnawatch.org/newstream/1590646615-867355081/메기양어가-전하는-인민사랑/>, accessed May 30, 2020).

c. Michael Harrold, *Comrades and Strangers: Behind the Closed Doors of North Korea* (John Wiley & Sons, 2004), 355.

d. For an insightful article, see Maureen Cote, “Translation Error and Political Misinterpretation,” *Studies in Intelligence*, Winter 1983: 11–19.

e. This holds true for reference works as well. After the DPRK’s *Cho-Yong Taesajon* (New Korean–English Dictionary) (Pyongyang: Foreign Languages Publishing House, 2002), my favorite Korean dictionary is Japan’s *Chosengo Jiten* (Korean–Japanese Dictionary) (Shogakukan, 1993). As evidence of the English bubble, no US publisher offers a serious Korean dictionary.

f. Robert McCrum, *Globish: How English Became the World’s Language* (W.W. Norton & Co., 2011).

g. The *New York Times*, seeking last year to hire a Russian correspondent, listed “fluency in Russian” as merely “preferred,” the only one of eight qualifications so described. See https://nytimes.wd5.myworkdayjobs.com/en-US/INNYT/job/Moscow-Russia/Russia-Correspondent_REQ-008536 (accessed January 25, 2021).

they require, rather than simply prefer, job applicants to know a relevant foreign language would provide a powerful incentive to acquiring a second language. Aspiring American analysts of Korean politics should learn Korean. American correspondents sent to Moscow should be fluent and literate in Russian.

- Colleges and universities should restore the language requirements eliminated after the 1960s.^a They should also expand their language offerings to include more courses related to such fields as economics, military affairs, and politics for students whose primary interest lies elsewhere than in literature. Government and private interests should offer more scholarships and tailor them to future employment as analysts.
- The public and private sectors should ramp up projects to develop increasingly accurate and sophisticated computer-aided translation (CAT), speech-to-text software, and other desktop technologies that would enable individual analysts to exploit multiple foreign languages. Whether the Defense Advanced Research Projects Agency (DARPA), the Intelligence Advanced Research Projects (IARPA), Google or some combination of such public and private bodies, there exist organizations capable of developing such products. Analysts proficient in Korean are better equipped to analyze Pyongyang matters than those who know only English. Analysts proficient in Korean with access to

CAT and other technologies to exploit Chinese, Japanese, and Russian sources on North Korea would be even better able to do their work.

Pyongyang and the Rest of the World beyond the Bubble

Working from inside the bubble makes it harder to see North Korea. Relying on English sources alone leaves us vulnerable to missing both the details and the big picture. Depending on foreign organizations or liaison partners for information leaves us open to deception and manipulation. Those who rely on government reports or newspaper articles built largely or entirely on government briefings in Seoul or defector interviews brokered by the South Korean government or its auxiliaries risk flying blind. A historical analogy would be that of a British journalist writing stories on the administration of President Abraham Lincoln from Richmond on the basis of Confederate press briefings and tales told by Northern defectors dependent on Southern hospitality for their livelihood.

Finally, what goes for North Korea goes for the rest of the world. My argument is that if those of us seeking to understand Pyongyang can strike gold in mining open sources in one or more foreign languages, then the same should be true for other countries. Let us do more to apply foreign languages to key issues in foreign affairs.



The author: Stephen Mercado is a retired Open Source Enterprise officer who continues to delight in reading in foreign languages.

a. A report of the Modern Language Association (MLA) shows that the rate of modern language enrollment per 100 students in US colleges and universities between 1960 and 2016 had peaked in 1965 and fallen to less than half that level in 2016. See <https://www.mla.org/content/download/110154/2406932/2016-Enrollments-Final-Report.pdf> (accessed January 25, 2021).

Review Essay: Evaluating Resistance Operations in Western Europe during World War II

J. R. Seeger

The Resistance in Western Europe, 1940–1945

Olivier Wieviorka, translated from French by Jane Marie Todd (Columbia University Press, 2019), 488 pages.

Hidden Armies of the Second World War: World War II Resistance Movements

Patrick G. Zander (Praeger, 2017), 262 pages, maps, photos.

Contemporary Special Forces and intelligence communities in the United States and the United Kingdom trace their heritage to the rapid expansion of intelligence and special operations units during World War II. During the war, these units focused on deciphering codes, collecting vital tactical and strategic intelligence, deceiving the Axis powers, and managing resistance operations inside occupied Europe and SE Asia. Due to the sensitive nature of these operations and the continuity of many of the same operations into the Cold War, historians have had considerable difficulty in gaining access to primary source material on strategic and local campaigns in the European, China-Burma-India, and Pacific theaters of operations. Following the collapse of the USSR in 1991, more documents on US and UK support to resistance operations were declassified, and now, 75 years after the war, even more documents have been declassified. Historians have leapt at the opportunity for archival research on some of the greatest secrets of World War II and the early Cold War.

As more archival material became available, historians continued to debate the value of intelligence and special operations in the European theater of operations (ETO) with the recent publication of well-researched histories on the “war in the shadows.” Readers can choose reviews of grand strategy such as Max Hasting’s book, *The Secret War*; through a number of tactical discussions of special operations such as *Rogue Heroes* by Ben Macintyre and *The Ministry of Ungentlemanly Warfare* by Giles Milton, not to mention dozens of tales of intrepidity and sacrifice by the men and women of the Special Operations

Executive (SOE) and the Office of Strategic Service (OSS).

After the swift defeat of Allied armies by the German Wehrmacht in 1940, the United Kingdom was left alone facing a possible German invasion—unlikely though a worst-case possibility—and the far more likely scenario of a long-term German occupation of France, Belgium, Holland, Denmark and Norway. Prime Minister Churchill demanded both his military and secret service create units that would weaken German occupation. The military responded by creating small raiding forces called “assault forces” (and eventually known collectively as the Commandos) to raid German defenses in occupied Europe. British intelligence collection inside Europe remained the primary mission of the Secret Intelligence Service (SIS, or MI6). SIS also managed codebreaking efforts centered at Bletchley Park. The SOE, inside the Ministry of War Production, conducted sabotage and subversion operations inside Europe; and the Political Warfare Executive (PWE) conducted propaganda operations through radio and print media.

Even before the United States entered the war, the Coordinator of Information (COI) William Donovan began planning for a US-based organization that would manage all operations of the secret war: intelligence collection; sabotage and subversion; direct action raids; and propaganda, which Donovan called “morale operations”. Even before the OSS was officially sanctioned in June 1942, Donovan’s men and women had begun training in each of these missions. OSS would provide the first

All statements of fact, opinion, or analysis expressed in this article are those of the author. Nothing in the article should be construed as asserting or implying US government endorsement of its factual statements and interpretations.

US ground force, Detachment 101, to fight in the China-Burma-India Theater. From 1942 until VE day, OSS field operators worked by, with, and through local resistance forces to defeat or weaken Axis forces.

A centerpiece of both SOE and OSS operations in the ETO was support to the European resistance. In what US military doctrine now labels “unconventional warfare” (UW), SOE and OSS operators were infiltrated by parachute or by sea to work with the resistance. These operators met with resistance groups, reported their strengths and weaknesses, provided supplies through clandestine parachute deliveries, and, as needed, provided military advice. As the invasion of Europe approached, these same men and women, augmented by British Special Forces, OSS Operational Groups, and joint allied Jedburgh teams helped synchronize resistance operations with Allied conventional forces. The Allied goal for the resistance from the beginning was to enhance the conventional force operations by creating havoc deep behind enemy lines. At least in the case of the invasion of France, General Eisenhower is said to have considered the French resistance critical to the establishment of the Normandy bridgehead and to its initial expansion into France.

Resistance Points of View

While it is certainly more exciting to read about the combat stories of SOE, OSS, and resistance forces inside occupied Europe, one point often ignored, or at least obscured, by stories of Anglo-American heroism is how the leaders of the resistance movements in each of the countries of occupied Europe felt about their situations and when, where, and how they decided to join forces with the Allies. Resistance forces were always interested in liberation from either the German occupation or the Fascist government in Italy. However, their most important challenge was to balance resistance and survival. As with most histories of intelligence operations, the story of the resistance is most often told by outsiders, agent handlers, or special operators training locals—not by actual agents committing espionage or resistance members living in the shadows.

There are many scholarly articles and books written in European languages about how the people of Europe felt about Nazi and Fascist occupation and what motivated them to accept occupation or resist it. In the last few years, there have been several English language studies

on this precise subject. For any practitioner of UW, these studies are absolutely critical. No matter how operators might think they are doing in supporting resistance operations, the actual metric for success has to include an honest discussion of what members of the resistance feel about the effort.

The two books featured in this review offer very different perspectives on resistance in Europe during World War II. *The Resistance in Western Europe, 1940–1945* by Olivier Wieviorka, translated from French by Jane Marie Todd, offers a strategic view. Wieviorka is a French scholar who in 2016 provided a superior understanding of the complexities of the French resistance in his work *The French Resistance*. In this new book, he provides insight into the decisionmaking of the national leaders of resistance movements throughout Europe.

Wieviorka demonstrates exceptional research skills in this effort. He has found, compiled, and translated documents in multiple European languages as well as key documents in the SOE and Whitehall documents at the British National Archives, documents that tell the story of support to the resistance movements. His perspective is not that of Washington or London, but that of the exiled European governments and the governments and leadership living inside Nazi occupied Europe. It should not be surprising that strategic requirements expressed in the White House, Whitehall, and the Allied high command in

Also discussed in this review:

Stewart W. Bentley Jr., *Orange Blood, Silver Wings: The Untold Story of the Dutch Resistance during Market-Garden* (Author House Publishing, 2007).

M.R.D. Foot, *SOE in France: An Account of the Work of the British Special Operations Executive in France, 1940–1944*, revised (Whitehall History Publishing, 2004).

Robert Gildea, *Fighters in the Shadows. A New History of the French Resistance* (Harvard University Press, 2015).

David Lampe, *Hitler's Savage Canary: A history of the Danish Resistance in World War II* (Skyhorse Publishing, 2014).

David Stafford, *Britain and European Resistance 1940-1945: A Survey of the Special Operations Executive, with Documents*, 2nd paperback ed. (Thistle Publishing, 2013).

Olivier Wieviorka, translated by Jane Marie Todd, *The French Resistance* (Harvard University Press, 2016).

London often were not in synch with the strategic necessities of political and military leaders focused on survival in occupied Europe. Equally obvious is that European governments at the end of the war and for many years later burnished the image of local resistance movements.

As Wieviorka says in his introduction,

In short, we must leave behind four oversimplifications: first the belief that omnipotent allies pulled the strings of internal resistance; second, the notion that these movements were able to develop effectively on their own; third, the idea that the need to destroy Nazism suddenly obliterated arguments based on self-interest; and fourth, the overestimation of the role of national factors in the common struggle. (5)

With these benchmarks stated, Wieviorka takes readers through a detailed discussion of the political aspects of UK and, eventually, US support to resistance movements, the political and historical context for the diverse nature of “resistance” in each of the occupied countries, and the complex relationship between the exiled leaders and the resistance leaders in occupied Europe. In every chapter, Wieviorka offers densely packed discussions of the strategic aspects of resistance from 1940 through the Allied liberation of each of the occupied countries in Western Europe.

While Wieviorka discusses the politics of resistance in each of the occupied countries, he spends the greatest effort in his discussion of the complex nature of French resistance groups and the exiled leader of the Free French, Gen. Charles de Gaulle. The author describes substantial tensions between the Free French exile organization and the resistance groups as early as 1942, especially the organized communist resistance groups operating throughout Nazi-occupied France. As the invasion of France approached, UK and US leaders reluctantly accepted the leadership of de Gaulle as spokesman for the resistance and allowed him greater access to propaganda broadcasts into France. Wieviorka writes that de Gaulle’s focus had always been on what France would look like after liberation rather than on the role of French resistance before D-Day. He demonstrates that other resistance groups were focused on conducting resistance operations that would weaken the Nazi hold on France well before D-Day. But de Gaulle, he writes,

believed that his countrymen . . . had to take an active part. In his mind, however, insurrection was to be as brief as possible and to occur in close correlation with the progress of the allied forces. The communists did not see things the same way. They were counting on a general insurrection, preceded by a vast movement of strikes that, they hoped, would allow them to accelerate the pace of liberation, to celebrate the role of the underground forces, and to welcome in the capacity of victors the Anglo-American liberators. (269)

The story of the French resistance—or as Robert Gildea prefers to call it “the resistance in France” in his book *Fighters in the Shadows*—was managed in the postwar environment by de Gaulle. Once he became the post-war French leader, de Gaulle made a clear effort to emphasize the role of Free French fighters to the detriment of other resistance groups whether they were simply independent companies or members of larger communist resistance groups in France. The political aspect of this tension was sufficiently challenging that the UK government refused to let M.R.D. Foot first publish his work on the French resistance, *SOE in France*, until 1966, at the end of de Gaulle’s term as president of France.

Every page of the book offers lessons for current and future planners of UW missions. This book makes it very clear that support to resistance operations in WWII is probably best understood as a game of three-dimensional chess. Every effort, regardless of the country or region had multiple, interlinked challenges. These included logistics demands by resistance movements versus Allied logistics limitations; conflicts among resistance commanders; conflicts between resistance commanders and special operators in the field; conflicts between special operators in the field and their commanders in the rear; and, finally, conflicts between the strategic postwar objectives of resistance leaders, and near-term campaign objectives of conventional military commanders.

It should be noted that Wieviorka’s book is not an easy read. It is a book for scholars and students of UW. Whether it is because of Wieviorka’s writing or the translation, it is a book that demands concentration. While the book follows the timeline of 1939–45, it often jumps from one country to another, from the field to special operations headquarters, and from those headquarters to the policymakers in London and Washington. There are

times when the density of the detail may require readers to keep notes just to follow the thread of the arguments. Finally, in a book that is this monumental in scope, it should be no surprise that there are some small errors. In an early discussion of UK operations in occupied Europe, Wieviorka conflates the origins of SIS and SOE operations under one story, when both SIS and UK MoD elements were involved in the creation of SOE. Further, Wieviorka assumes that propaganda efforts in the United States were the primary responsibility of the Office of War Information, when OSS Morale Operations Branch was in charge of disruptive/deceptive propaganda efforts similar to the UK PWE. These errors in no way detract from the importance of the work as a whole, however.

In contrast to Wieviorka's book, Zander's work focuses on tactical and operational aspects of the European resistance. The main characters of this work are not the political leaders of governments in exile or even resistance leaders. His work focuses on regional leaders and fighters. Also, he specifically notes that "resistance" in Europe was more than armed combat operations or sabotage. Zander underscores that resistance in occupied Europe often meant peaceful noncooperation, underground media, undermining productivity in war-related industries, espionage, assisting evading airmen and escapees from POW camps. After early chapters setting the stage for the Nazi occupation of Europe, Zander takes the reader through each of the occupied countries. Every chapter describes the level of Nazi occupation and the specifics of resistance operations in specific countries, ending with the defeat of Nazi forces and liberation by Allied forces.

This is not the first book to discuss the "on the ground" efforts of resistance movements. There are numerous works and dozens of memoirs focusing on resistance inside single countries of Nazi-occupied Europe. Wieviorka's and Gildea's books on the French resistance; David Lampe's work on the Danish resistance, and Stewart Bentley's book on the Dutch resistance during Operation Market-Garden are just a small sampling of research conducted in this century. What makes Zander's book especially worthwhile is that in one relatively slim volume, he has compiled excellent summaries of all of

the resistance operations against Axis powers in Europe, setting the scene immediately before the Nazi blitzkrieg and ending with the liberation of each of the countries involved. This provides in a single book an opportunity to understand the complex battlefield SOE and OSS operators faced.

The history of US and UK efforts to support the European resistance to Nazi occupation colored how their intelligence services and their special forces managed early Cold War operations against Soviet occupation of Eastern Europe. When the SIS, SOE, and OSS veterans of World War II addressed the challenge of the Cold War, they knew that it was possible to support resistance movements, even in the most repressive occupations. Early Cold War efforts focused on the same mix of propaganda broadcasts, internal subversion, and small-scale combat operations conducted by forces infiltrated behind the Iron Curtain. With the exception of some of the propaganda operations, these efforts were not successful in forcing a Soviet withdrawal or a change in the structure of the communist governments in Eastern Europe.

Based on detailed research conducted in the 21st century, we now know that the well-meaning efforts in the 1950s by the US and UK governments were based on a less-than-perfect understanding of the complex story of resistance operations in Europe from 1939 to 1945. Resistance to the Nazi occupiers in Europe meant many things to the people under occupation. On rare occasions when resistance groups worked in harmony, they were capable of harassment operations or strategic sabotage operations. These forced the Wehrmacht to commit armed forces in areas it would otherwise have better left to local collaborators. Those shifts in resources benefitted conventional Allied forces that were in direct combat with German and Italian forces. When the resistance operations were most successful, they often resulted in horrific Nazi reprisals. In the end, only the full force of the Allied conventional armies resulted in the liberation of Europe. These are lessons that modern practitioners of unconventional warfare and intelligence operations in denied areas must understand. For this reason alone, the books described in this review are essential reading.



Other Readings

1. Hastings, Max, *The Secret War: Spies, Ciphers, and Guerrillas, 1939-1945*. New York: Harper Perennial Publishers, 2017.
2. Macintyre, Ben, *Rogue Heroes: The History of the SAS, Britain's Secret Special Forces Unit that Sabotaged the Nazis and Changed the Nature of War*. Crown Books 2018.
3. Giles, Milton. *The Ministry of Ungentlemanly Warfare*. John Murray, 2018.
4. Recent works on individual fighters in the resistance include the following:
5. Paul Kix, *The Saboteur: The Aristocrat Who Became France's Most Daring Anti-Nazi Commando* (Collins Publishing, 2017)
6. Julius Rosenberg, *The Art of Resistance. My Four Years in the French Underground* (William Morrow, 2020)
7. Jonathan Ree, *A Schoolmaster's War. Harry Ree, British Agent in the French Resistance* (Yale University Press, 2020)
8. Tania Szabo, *Violette: The Mission of SOE Agent Violette Szabo, GC* (The History Press, 2019)



The reviewer: J.R. Seeger is a retired CIA paramilitary officer and a frequent contributor to *Studies*.

Intelligence in Public Media

Geospatial Intelligence: Origins and Evolution

Robert M. Clark (Georgetown University Press, 2020), 346 pp; chapter endnotes, glossary, abbreviations, bibliography, index, 58 b&w and color illustrations.

Reviewed by Joseph W. Caddell Jr.

I have had the good fortune to teach courses on intelligence collection and geospatial intelligence at the National Intelligence University. In discussing geospatial intelligence with NIU students, I often say (only half jokingly) that defining GEOINT in the Intelligence Community is a tautological loop. “What is GEOINT? It’s all that stuff NGA does. What does NGA do? Oh, they do GEOINT.” Though its component disciplines and concepts are well established—imagery intelligence, cartography, precision navigation and timing, geographic information sciences, geodesy, graphic visualization, and much more—geospatial intelligence suffers the definitional malady of being many things to many people.

Robert Clark’s *Geospatial Intelligence: Origins and Evolution* does for GEOINT what his previous books have done for other complex intelligence topics: it offers a primer that, despite certain shortcomings, is the single-best available work on its subject. Clark’s *Intelligence Collection* (2013), *Intelligence Analysis: A Target-Centric Approach* (multiple editions), and his coedited volume *The Five Disciplines of Intelligence Collection* (2015) provided readers with a logical structure and comprehensive reference materials on their topics. Like these works, *Geospatial Intelligence* provides clear and reliable definitions, examples, and backstories for the various elements and subelements of geospatial intelligence.

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Clark's discussion of modern GEOINT—both inside and beyond the IC—is also strong. He provides an excellent survey of current developments in commercial smallsat remote sensing; automated imagery detection and recognition efforts; volunteered geographic information; and the GEOINT implications of cybersecurity and critical infrastructure concerns. One particularly insightful passage on the US raid that killed ISIS leader al-Baghdadi in 2019 well summarizes GEOINT's IC role in terms of multi-INT fusion:

US intelligence already knew from HUMINT that many Daesh troops had fled to Idlib province as their last holdings in Syria collapsed. The wife of an al-Baghdadi aide and one of al-Baghdadi's couriers had been captured in Iraq earlier in 2019 and interrogated. They gave their interrogators names and locations—enough leaders so that Iraqi and Kurdish intelligence officers could establish al-Baghdadi's pattern of travel. . . . With the help of these sources, along with satellite and UAV imagery, US intelligence began surveillance of the routes al-Baghdadi used and identified his movement pattern. . . . The al-Baghdadi raid was an exemplar of GEOINT in a combat situation, but it also points to the direction that all GEOINT is taking at the national level. (319–20)

Clark's use of the al-Baghdadi raid as a GEOINT "exemplar" reminds readers of the IC's challenge to define GEOINT in terms of resources and responsibilities. Should this entire affair be considered "GEOINT" because so much of it revolved around spatiotemporal data? Or is "time and space" too broad of a portfolio to assign to a single intelligence discipline or agency?

As Clark makes clear, the private sector and academia define geospatial intelligence differently than the IC does.

a. For an excellent discussion of the impact of the Gambit systems see Bruce Berkowitz, "The Soviet Target: Highlights in the Intelligence Value of Gambit and Hexagon, 1963–1984," *National Reconnaissance: Journal of the Discipline and Practice* Issue 2012 U1: 103–20. Available at https://www.nro.gov/Portals/65/documents/history/csnr/articles/docs/gh%20journal_web.pdf.

b. Many NPIC alumni will bristle at this error and point out that not only was Dino Brugioni never the director of NPIC he was not, strictly speaking, an imagery analyst. Dino, who passed away in 2015 at the age of 93, managed NPIC elements dealing with collateral research and intelligence production, ultimately retiring as a GS-15 division chief. Owing to his success as a published author and frequent interview appearances on matters related to imagery intelligence, Dino is frequently mischaracterized as a photointerpreter or imagery analyst (technically incorrect, though Mr. Brugioni obviously knew a great deal about these topics). This is the only place I have seen Mr. Brugioni mischaracterized as NPIC director.

c. These sources include an interview with former NIMA/NGA Director James Clapper; Jack O'Connor's *NPIC: Seeing the Secrets, Growing the Leaders* (Acumensa Solutions, 2015); and Ann Daugherty Miles' excellent monograph *The Creation of the National Imagery and Mapping Agency: Congress' Role as Overseer* (Joint Military College, April 2002).

Individuals engaged in commercial or academic GEOINT focus primarily on geographic information systems and the analysis and visualization of spatial data—data that may or may not be derived from remote sensing. By contrast, though certainly concerned with spatiotemporal analysis of geospatial data, GEOINT in the IC tends to deal more closely with classified (and unclassified) remote sensing data. NGA is the IC’s primary source of imagery analysis and reporting; IC GEOINT devotes a greater percentage of budgets and billets to specialized remote sensing data than does corporate/academic GEOINT. Moreover, many IC and military individuals engaged in tasks Clark describes as GEOINT (e.g., geolocating activities via MASINT or analyzing data by visualizing it in digital mapping software) would not describe their activities as geospatial intelligence—or themselves

as part of the GEOINT enterprise. Clark generally sidesteps the aforementioned tautological loop of “GEOINT is what NGA does and NGA does GEOINT”—a loop the IC itself has yet to fully address—by both acknowledging the importance all geospatial intelligence concepts have for the IC and allowing that NGA cannot claim to own all parts of geospatial intelligence.

As a primer on the complex subject of geospatial intelligence, *Geospatial Intelligence* is without peer. This book should be assigned in any survey course on geospatial intelligence. Clark’s summary of cartographic principles, imaging and nonimaging sensors, spatiotemporal analysis, and the fusion of these disparate concepts to form a larger (if occasionally murky) whole is exactly what study of this subject requires.



The Reviewer: Joseph W. Caddell, Jr. is an adjunct assistant professor with the National Intelligence University, where he has taught graduate courses on intelligence collection, geospatial intelligence, and US intelligence history. Mr. Caddell has published articles on intelligence and security topics in *Intelligence and National Security*, NGA’s *Geospatial Intelligence Review*, *Pathfinder*, *War on the Rocks*, and *Studies in Intelligence*.

Intelligence in Public Media

Behind the Enigma: The Authorized History of GCHQ, Britain's Secret Cyber-Intelligence Agency

John Ferris (Bloomsbury Publishing, 2020), 823 pages, illustrations, maps, portraits, bibliography, index.

Reviewed by Jessica Garrett-Harsch

The history of GCHQ, Britain's cryptologic and cyber-intelligence agency, has largely been shrouded in mystery. The public knows about the WWII successes of British codebreaking against the German Enigma machines that helped sink U-boats terrorizing Allied shipping in the Atlantic. The brilliance of Alan Turing and his colleagues at Bletchley Park is legendary. But what is revealed in the new book by John Ferris, *Behind the Enigma: The Authorized History of GCHQ, Britain's Secret Cyber-Intelligence Agency*, is the much longer, richer, and influential history of British codebreaking.

Ferris is one of the preeminent scholars of intelligence and cryptologic history in the world today. He brings his expertise from a long academic career, combined with a deep understanding of the two major SIGINT organizations in the world, GCHQ and NSA, to this work. For years, he has been a popular speaker at the Symposium for Cryptologic History organized by NSA's Center for Cryptologic History (CCH). From 2008 to 2009, he was the CCH's first international scholar-in-residence, working on an innovative reinterpretation of the pre-WWII British and American SIGINT relationship. Shortly thereafter, he was chosen to write the authorized history of GCHQ. Throughout the book, it's clear that his time working closely with both organizations has given him an insight that is rare in a historian outside the Intelligence Community. While not perfect, it is and will be an important reference guide for scholars of British intelligence history, the US-UK intelligence relationship, and, more generally, the evolution of SIGINT.

Officially GCHQ is just over 100 years old (1919–2021) but elements of what became one of the premier intelligence agencies in the world started either in the first weeks of WWI or, depending on how you look at it, years before with other, more informal, codebreaking organizations. Ferris begins well before WWI, in Victorian England, describing early intelligence gathering focused on mail and telegrams. He spends some time exploring how intelligence was gathered and used in the early

Victorian period, and how it grew, changed, and faded away in the late Victorian period, and then reemerged in the early days of the First World War.

World War I is where British codebreaking, and Ferris's narrative, really hit their stride. These pre-WWII chapters work particularly well because information on early cryptology, and WWI cryptology specifically, is scarce. What Ferris argues is that "SIGINT was a success for Britain between 1914 and 1918, yet its limits were notable." There were successes in the European theater, as well as the Middle East, but most successes were canceled out by German successes on the other side. The problem mainly came down to the fact that SIGINT requirements and ability greatly outpaced the science and technology of communications at the time. It was hard to effectively use SIGINT to support military operations with WWII-era SIGINT capabilities, while military and communications technology was less developed. However, British codebreaking continued to mature and evolve so that when World War II broke out it could leverage the technology and skill of its small organization into the intelligence juggernaut of ULTRA fame.

The chapters on WWII codebreaking retread a lot of known material but also expand the general understanding of the period. Ferris writes, "Bletchley shaped the war and the future of intelligence and data processing, SIGINT and GCHQ, but in different ways than the myth suggests. Bletchley matters too much for the history to be understood through myth." To combat that he discusses the interagency struggles between Whitehall, Bletchley Park, the War Department, and the Royal Navy. He delves into collection and management issues and problems with herding brilliant, independent analysts within the constraints of the growing and increasingly diverse, worldwide presence of GCHQ. For me, the real importance of the WWII discussion is showcasing the origins of the cryptology-computer relationship that ultimately birthed the realm of cybersecurity that would become

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so important not only to intelligence but to the everyday lives of people worldwide.

Also of significance is his discussion, from the British perspective, of the early and lasting importance of the UK-USA agreement which led to the Five Eyes community, the most important SIGINT partnership in history. The case studies on the development of the UK-USA relationship, especially the Suez Crisis and the Hungarian Revolution, are an interesting look at the challenges both agencies faced. Ferris does a nice job of showing the importance of navigating, and nurturing, that relationship for both sides. He also succeeds in showing how the success of UK-USA during the Cold War ultimately helped stop the war from going hot.

The majority of this book is devoted to the post-WWII period, as GCHQ navigated changes in UK government policy, changed locations from the suburbs of London to rural Britain, and fostered the UK-USA relationship, which while long lasting, had warmer and cooler periods. Scholars will find details here that they probably haven't seen before, especially not in one large volume. But for those not steeped in British government bureaucracy or with only a limited understanding of mid-20th-century British politics, the details can be lost in the confusing narrative of hiring practices, clerical vs. executive levels, issues with Whitehall and funding, and even division of labor against targets.

The other issue for some readers will be the focus on mostly pre-2000 operational issues. There is a long section of detailed case studies, including one on the Falklands War, which covers about as many pages as the post-2000 material. That section could have been condensed into a much shorter section and still hit the point that the Falklands War was a major success for GCHQ. Unfortunately, the part on terrorism and cybersecurity encompasses about 50 pages of a 800+ page book, and while that may be understandable because of security and classification issues (which Ferris briefly addresses), it

still comes as a letdown for those looking to get the inside scoop on the challenges that GCHQ is able to solve today within the realm of cutting-edge technology.

One of the places in which the book works best is Ferris's exploration of the challenges that GCHQ still faces with diversity. It will come as a surprise to some that British codebreaking organizations (predecessors to GCHQ) employed large numbers of women much earlier than any other intelligence agency in the world. There were brilliant women codebreakers as early as WWI. However, in current times, as we in the United States have seen, women rise to the highest levels in the intelligence world, with a woman having run CIA for two and a half years, a woman nominated to become the director of national intelligence, and several women in the number-two spot at NSA, GCHQ has lagged behind in promoting women to the highest levels. Ferris also explains that GCHQ continues to struggle with issues of hiring and promoting people of color, a problem that started in the days of colonialism that has not yet been fully addressed. His exploration of issues related to class, race, sex, and colonialism work to draw a deeper portrait of the environment GCHQ employees navigate. While this is clearly a less desirable facet of GCHQ, it also shows that they are striving to grow into a more diverse and successful organization.

Overall Ferris has produced an informative, detailed, and, at times, compelling history of GCHQ, and British codebreaking in general. It will be the go-to reference guide for those interested in a deeper understanding of British cryptologic history. But readers should be aware that this is a scholarly work, written in a traditional style of history. This book is not a collection of exciting GCHQ operational success stories that reads like a spy thriller as many might expect. This book requires extensive prior knowledge of the subject to really get the most out of it. Ultimately *Behind the Enigma* works well for the scholar or committed intelligence enthusiast, but possibly not for the casual reader.



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Intelligence in Public Media

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Clark's discussion of modern GEOINT—both inside and beyond the IC—is also strong. He provides an excellent survey of current developments in commercial smallsat remote sensing; automated imagery detection and recognition efforts; volunteered geographic information; and the GEOINT implications of cybersecurity and critical infrastructure concerns. One particularly insightful passage on the US raid that killed ISIS leader al-Baghdadi in 2019 well summarizes GEOINT's IC role in terms of multi-INT fusion:

US intelligence already knew from HUMINT that many Daesh troops had fled to Idlib province as their last holdings in Syria collapsed. The wife of an al-Baghdadi aide and one of al-Baghdadi's couriers had been captured in Iraq earlier in 2019 and interrogated. They gave their interrogators names and locations—enough leaders so that Iraqi and Kurdish intelligence officers could establish al-Baghdadi's pattern of travel. . . . With the help of these sources, along with satellite and UAV imagery, US intelligence began surveillance of the routes al-Baghdadi used and identified his movement pattern. . . . The al-Baghdadi raid was an exemplar of GEOINT in a combat situation, but it also points to the direction that all GEOINT is taking at the national level. (319–20)

Clark's use of the al-Baghdadi raid as a GEOINT "exemplar" reminds readers of the IC's challenge to define GEOINT in terms of resources and responsibilities. Should this entire affair be considered "GEOINT" because so much of it revolved around spatiotemporal data? Or is "time and space" too broad of a portfolio to assign to a single intelligence discipline or agency?

As Clark makes clear, the private sector and academia define geospatial intelligence differently than the IC does.

a. For an excellent discussion of the impact of the Gambit systems see Bruce Berkowitz, "The Soviet Target: Highlights in the Intelligence Value of Gambit and Hexagon, 1963–1984," *National Reconnaissance: Journal of the Discipline and Practice* Issue 2012 U1: 103–20. Available at https://www.nro.gov/Portals/65/documents/history/csnr/articles/docs/gh%20journal_web.pdf.

b. Many NPIC alumni will bristle at this error and point out that not only was Dino Brugioni never the director of NPIC he was not, strictly speaking, an imagery analyst. Dino, who passed away in 2015 at the age of 93, managed NPIC elements dealing with collateral research and intelligence production, ultimately retiring as a GS-15 division chief. Owing to his success as a published author and frequent interview appearances on matters related to imagery intelligence, Dino is frequently mischaracterized as a photointerpreter or imagery analyst (technically incorrect, though Mr. Brugioni obviously knew a great deal about these topics). This is the only place I have seen Mr. Brugioni mischaracterized as NPIC director.

c. These sources include an interview with former NIMA/NGA Director James Clapper; Jack O'Connor's *NPIC: Seeing the Secrets, Growing the Leaders* (Acumensa Solutions, 2015); and Ann Daugherty Miles' excellent monograph *The Creation of the National Imagery and Mapping Agency: Congress' Role as Overseer* (Joint Military College, April 2002).

Individuals engaged in commercial or academic GEOINT focus primarily on geographic information systems and the analysis and visualization of spatial data—data that may or may not be derived from remote sensing. By contrast, though certainly concerned with spatiotemporal analysis of geospatial data, GEOINT in the IC tends to deal more closely with classified (and unclassified) remote sensing data. NGA is the IC’s primary source of imagery analysis and reporting; IC GEOINT devotes a greater percentage of budgets and billets to specialized remote sensing data than does corporate/academic GEOINT. Moreover, many IC and military individuals engaged in tasks Clark describes as GEOINT (e.g., geolocating activities via MASINT or analyzing data by visualizing it in digital mapping software) would not describe their activities as geospatial intelligence—or themselves

as part of the GEOINT enterprise. Clark generally sidesteps the aforementioned tautological loop of “GEOINT is what NGA does and NGA does GEOINT”—a loop the IC itself has yet to fully address—by both acknowledging the importance all geospatial intelligence concepts have for the IC and allowing that NGA cannot claim to own all parts of geospatial intelligence.

As a primer on the complex subject of geospatial intelligence, *Geospatial Intelligence* is without peer. This book should be assigned in any survey course on geospatial intelligence. Clark’s summary of cartographic principles, imaging and nonimaging sensors, spatiotemporal analysis, and the fusion of these disparate concepts to form a larger (if occasionally murky) whole is exactly what study of this subject requires.



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Intelligence in Public Media

We Are Bellingcat: An Intelligence Agency for the People

Eliot Higgins (Bloomsbury, 2021), 255 pages, bibliography, index.

***Untraceable* (A novel)**

Sergei Lebedev, translation by Antonina W. Bouis (New Vessel Press, reprint in translation, 2021), 236 pages in print, reviewed in Kindle edition.

Reviewed by J.E. Leonardson

We are Bellingcat

Plagued as we are these days by disinformation campaigns and bizarre conspiracy theories, it is easy to wonder if anyone is working effectively to combat them. Thankfully, the answer is yes, and Eliot Higgins, the founder of Bellingcat, the best-known and most influential private organization involved in these efforts, tells the story in a combination memoir and call to arms, *We Are Bellingcat*.^a It might be a stretch to call Bellingcat an “intelligence agency for the people,” as Higgins does, but his book is well worth reading, both as a methodological primer and also for a glimpse of how the worlds of intelligence and journalism may be converging.^b

In 2011, Higgins was a college dropout stuck in a boring office job and unsure what to do with his life. Intrigued by the Arab Spring and then the revolts in Libya and Syria, he began following events by reading blogs, watching video clips, and following social media posts. Trying to confirm the veracity of what he saw, Higgins began using such basic internet tools as Google Maps to geolocate where videos had been shot. He then began posting his findings to the comments sections of various blogs before starting one of his own. From there, Higgins connected with other knowledgeable observers and volunteers to undertake meticulous analyses of information—perhaps we can call this CROWDINT?—gleaned from tweets and other social media posts, and videos and still photographs. By the summer of 2013, his blog had become an authoritative source on the Syrian war and the Assad regime’s atrocities and use of chemical weapons.

a. The name is taken from a fable in which mice, seeking warning of the approach of a local cat decide to hang a bell around its neck.

b. The Bellingcat mission, various interrelationships, and funding sources can be found at <https://www.bellingcat.com/about/>

What really put Higgins and his collaborators, by then calling themselves Bellingcat, on the map was their investigation into the shootdown of Malaysian Airlines Flight 17 (MH17) over Ukraine in July 2014. Higgins recounts how, after months of combing through cell phone and dashcam videos on YouTube, tweets, and postings on Facebook, Bellingcat was able to document the movements of the Russian air defense unit and, within it, the particular surface-to-air missile launcher that destroyed MH17. Eventually, Bellingcat’s contributors used these tools to identify the individual officers and others responsible for the attack.^c

Russia, not surprisingly, since then has provided Bellingcat with a steady source of investigative projects. After MH17, Bellingcat’s next major case was the nerve agent poisoning of Sergei Skripal in Salisbury, England, in 2018. Starting with clues released by British authorities and gleaned from Moscow’s clumsy denials, Bellingcat set out to identify the GRU hit men. Moscow, learning from the MH17 experience, at the same time tried to scrub all traces of the culprits from the web and social media sites. In response, Bellingcat volunteers widened their search methods to include scouring the internet for obscure documents that could help penetrate false identities and piece together true biographies. (Been to a wedding in the past decade? Any idea if your face is in the background of a photo still on some other guest’s Facebook page?) Most notably, to pursue leads they started to purchase Russian databases on the black market and in some instances, specific files from individuals with access to closed databases. Bellingcat eventually not

c. Posts on Bellingcat’s website detail how the organization used these techniques to investigate the nerve agent poisoning of Russian opposition leader Aleksei Navalny in 2020, a case too recent to have been included in this book.

All statements of fact, opinion, or analysis expressed in this article are those of the author. Nothing in the article should be construed as asserting or implying US government endorsement of its factual statements and interpretations.

only identified the would-be killers but also the chain of command and others involved in the attack.

Small wonder that the Russian government and its trolls have sought to discredit Bellingcat at every turn. Moscow's efforts to deny and confuse by sowing disinformation and outright lies have failed, however, and make it clear that Higgins is right when he says that disseminating clear, accurate information is key to defeating the disinformation that plagues our world today. Higgins documents in detail the methods Bellingcat uses to collect information and, as he points out several times, how the organization maintains its credibility by insisting on rigorous fact-checking and transparency in sourcing—methods it propagates in workshops that Bellingcat's website says it offers and derives income from. Higgins claims that Bellingcat's "firewall of facts," as he calls it, always defeats the "counterfactual community"—the trolls, cynics, and extremist conspiracy theorists of the alt-right and alt-left "who begin with a conclusion, skip verification and shout down contradictory facts"—because "when citizens can see the facts for themselves, lying becomes a fool's mission." (116, 123).

One place where Higgins is wrong, however, is in his assertion that his "intelligence service for the people" is a new, exciting creation. In fact, it looks more like he is replicating a traditional intelligence service. Higgins notes several times, for example, that Bellingcat relies on collaboration by ordinary citizens. As he identifies these partners, though, it becomes clear that not all of Bellingcat's contributors are as ordinary as he suggests—a former Stasi analyst, a professor of visual computing, experts in various types of weapons, and people with the skill and patience to spend days searching for information—but, instead, sound a lot like the types of specialists long found at CIA and other traditional state services. Moreover, his description of finding people in Russia who are willing to sell specific bits of information sounds like traditional targeting and recruitment, and the thoroughness of Bellingcat's searches of social media and the most obscure corners of the web would make our own open-source analysts proud. Finally, Higgins's discussion of threats to Bellingcat's people and computer systems leaves one wondering how long it will be before he sets up his own security and counterintelligence apparatus.

This is an engaging and informative book, and despite his justified pride in Bellingcat's work and its influence on legacy media—the *New York Times* and *Wall Street Journal* have adopted some of Bellingcat's geolocation

and presentation methods for stories on their websites, and other journalists have started to use illicitly acquired Russian data—Higgins mostly avoids slipping into self-congratulation.^a What remains unclear is where Bellingcat will fit into the information world. Is Bellingcat an intelligence agency for the people? Perhaps, but aren't the services in Western democracies working for their people, too, however imperfectly? Aren't the efforts of Western services to uncover the truth—efforts legally constrained by concerns for privacy and civil rights that do not limit Bellingcat—just as sincere? Higgins has high hopes for a future in which Bellingcat and its open-source work are at the forefront of a global fight against lies and disinformation, and for justice. As admirable as this is, our own experience has shown that idealism does not always work out the way we hope. Rather than alter the world of intelligence and save the wider world, Bellingcat likely will remain what it is today: a valuable contributor to the perpetual struggle to protect open societies, but far from the only player.



Untraceable (a novel)

While Bellingcat sought to establish the hard truth of the attempt on Sergei Skripal's life, the prolific Russian novelist Sergei Lebedev uses the nerve agent attack as a starting point for exploring Russia's practice of using the intelligence services for murder abroad.^b *Untraceable* begins with the use of an exotic poison to kill a former Russian intelligence officer who long ago defected to the West. Another defector, Kalitin, a chemist who developed nerve agents in a closed Soviet city, is called on to assist with the investigation. Learning this, the GRU dispatches Lt. Col. Shershnev and a technical assistant to kill Kalitin with a dose of Neophyte, an untraceable nerve agent that was the chemist's greatest creation. Alternating between the two, *Untraceable* tells the story of the hunter pursuing the quarry who, while always on his guard, has no knowledge of the actual looming threat.

This is an unusual, and unusually good, spy story. Lebedev uses only a minimal amount of dialogue and, even as the suspense builds, none of the action usually found in a spy thriller. Instead, he relies on the inner thoughts of his characters and flashbacks to explore what

a. For the spreading use of illicitly-obtained data in the media, see "How Investigative Journalism Flourished in Hostile Russia," *New York Times*, Feb. 22, 2021.

b. *Traceable* is Antonina W. Bouis' fourth translation of a Lebedev novel since 2016.

motivates them, how they cope with the moral quandaries of their work and pasts, and tell how each came to this point in his life. *Untraceable* is a thinking person's spy novel, working the same territory as *Darkness at Noon*, and one that leaves the reader with a lot to ponder. In the hands of Antonina Bouis, who has translated several of Lebedev's novels into English, *Untraceable*'s spare prose

makes for an easy read that still lets its sly sense of humor come through. After all, most of us have had operational assignments in which so many small things have gone wrong that we, as does Shershnev, began to wonder if they were all being orchestrated by the opposition or a higher power.



The reviewer: J. E. Leonardson is the penname of an analyst in CIA's Directorate of Analysis.

Anti-American Terrorism: From Eisenhower to Trump—A Chronicle of the Threat and Response, Volume I, The Eisenhower Through Carter Administration

Dennis A. Pluchinsky (World Scientific, 2020) 617, foreword, introduction, footnotes, photographs, appendix, index.

Reviewed by David T. Berg, PhD

There are few scholars better positioned to write an authoritative accounting for terrorism's growth, spread, and impact than Dennis Pluchinsky. He worked as a terrorism analyst in the US Department of State's Bureau of Diplomatic Security Threat Analysis Group/Division for 28 years, protecting US interests against many of the terrorist organizations highlighted in this volume. Pluchinsky was also twice selected for the Director of Central Intelligence Exceptional Intelligence Analyst Program and taught courses on terrorism and counterterrorism (CT) at five universities over 26 years in the Washington, DC, area. It is with this background that Pluchinsky provides a near exhaustive accounting for terrorist activity directed against US interests, personnel, and facilities from 1953 to 2020. The first in a four-volume treatise, this book highlights patterns, trends, and activities for terrorist organizations that began to emerge in the post-World War II era through the final days of President Carter's administration.

Terrorism scholar Bruce Hoffman notes that creating a unified definition of terrorism is in part difficult because its meaning and use has changed throughout history, adapting to the political discourse in which the term is used.^a So fraught is the debate about what activities constitute terrorism—there are almost as many definitions for terrorism as the number of authors that write about this subject in government and academic circles. Pluchinsky simultaneously acknowledges and attempts to avoid definitional controversy in his introduction. He writes: "Since there is no right or generally accepted definition of terrorism, this multi-volume work will use the U.S. Department of State definition of terrorism as it is an acceptable 'working' definition of terrorism." (xlvi) Pluchinsky notes the State Department definition is based on US Code Title 22, Section 2656f(d), in which terrorism is defined as

premeditated, politically motivated violence perpetrated against non-combatant targets by subnational groups or clandestine agents." (xlvi)

While the Department of State's definition appears to be a logical choice for Pluchinsky to address international terrorism issues, his definition of domestic terrorism may leave readers questioning the boundaries between terrorism and other forms of political violence such as insurrection, rebellion, treason, sedition, or rioting. In defining domestic terrorism, he borrows from the FBI website writing:

This term refers to the political terrorist activity carried out in the U.S. by individuals and/or groups inspired by or associated with primarily U.S.-based grievances and movements that espouse extremist ideologies of a political, religious, social, racial, or environmental nature. (xlvi)^b

The qualitative differences between these two broad operational definitions are quite important: if readers are to move forward in his text, they will to be able to discern the differences between them.

Any common understanding of terrorism should begin with the premise that a latent political structure exists in defining terrorism and therefore the actions we determine to be terrorist attacks are socially negotiated.^c At a surface level, political officials are elected or appointed to office, writing laws and leading institutions that have an anti-terrorism or CT mission focus. Moreover, a deeper analysis into the latent political structure can help explain why different agencies within the US government use distinct terminology to classify events that appear to be the same to casual observers, such as labeling some groups as "terrorists" while using terms like "insurgents,"

a. Bruce Hoffman, *Inside Terrorism*, 3rd ed. (Columbia University Press, 2017).

b. <https://www.fbi.gov/investigate/terrorism>. Citing Pluchinsky, accessed February 6, 2017.

c. Annamarie Oliverio and Pat Lauderdale, *Terrorism: A New Testament* (de Sitter, 2005).

All statements of fact, opinion, or analysis expressed in this article are those of the author. Nothing in the article should be construed as asserting or implying US government endorsement of its factual statements and interpretations.

“revolutionaries,” or “militias” for others. Negotiation over what constitutes terrorism often takes place in politically charged and contested space. Indeed, there is power in labeling someone a terrorist, especially when seeking to marginalize, disempower, or discredit them. Finally, acknowledging this latent political structure can serve as a heuristic device explaining why legal authorities, policy measures, and enforcement mechanisms vary greatly when discussing international terrorism vice domestic terrorism.

Many beginning their studies of terrorism are surprised to learn that there is no legal mechanism in US law for designating domestic terrorist organizations, partly because freedom of speech and assembly are constitutionally protected activities, including those with extremist beliefs. In fairness, Pluchinsky never intended for this book to wade into the nuanced debate between “realist” scholars who try to define terrorism in concrete terms and “idealist” scholars who view terrorism definitions as polemical constructs.^a He misses an opportunity in doing so, however, to explain directly to readers why “small left-wing terrorist” (110) groups like the George Jackson Brigade are treated with their own subsections, but other violent, politically motivated organizations like the Ku Klux Klan, which “murdered five African American workers in November 1979” (327) and committed other atrocities during the 1950s and 1960s, are not given similar treatment in his chapter on domestic terrorism.

Just as the meaning of terrorism has changed with time, so have the methodologies for tracking and documenting terrorist incidents within the US government. Pluchinsky adopts a positivist approach to studying terrorism that develops many discrete categories for terrorist groups and their respective activities. He provides the reader with a thorough typology and analysis for different terrorist organizations over the past six decades. His meticulous research instructs the reader how terrorist tactics, goals, strategy, and political engagement has evolved since the United States became a full-fledged superpower. The responsibilities for maintaining an accurate database have shifted from the CIA to the Department of State and were later contracted to the University of Maryland’s National Consortium for the Study of Terrorism and Responses to Terrorism (START). (lxxx) The author’s chronological presentation combining his research from

these disparate sources for lethal overseas terrorist attacks against Americans is detailed and thorough. Pluchinsky leverages information from CIA, the Department of State, other agencies within the US Intelligence Community, academic institutions, press reporting and policy institutes to verify his chronology. He notes that confirming every case in his chronology with at least two sources was often a tedious process. (lxxxv) The prodigious detail listing these attacks can overwhelm the casual reader, but it also provides a rich, encyclopedic accounting for global and domestic terrorist attacks targeting the United States and its interests.

One of the interesting trends to emerge during the 27-year time frame in this volume is the strong prevalence of what Pluchinsky describes as “left-wing terrorist” organizations conducting anti-American terrorism. According to Pluchinsky, a left-wing terrorist entity is “composed of Marxist, Maoist, and anarchist terrorists, terrorist groups, and insurgent organizations whose objective is to overthrow democratic and democratic-oriented governments.” (li) Terrorist organizations from this era often focused their rhetoric on anticolonialism or social injustices—real or imagined—as means to cultivate a heroic narrative and justify their violent actions. Pluchinsky’s findings strongly indicate that international and domestic terrorists from the early 1950s through the late 1970s often embraced communist ideology that targeted US interests accordingly. While support from communist nations like Cuba to violent extremist organizations during this period is a matter of public record, readers should be cautious in their judgments about the unanimity of communist state-sponsored terrorism. Sociologist Melvin Seeman argues that people lacking adequate voice or power to address grievances within their society can become alienated, ultimately separating them from the values, norms, and mores of their own culture and government.^b Turning to terrorist ideology is often a symptom for other underlying structural problems where adequate redress is difficult, problematic, or impossible. This principle applies regardless of the terrorist organization’s ideology.

CT policy has also evolved from the Eisenhower to Carter administrations based on the security challenges and political environment that each US president encountered. All administrations during this time usually considered terrorism as “a security nuisance to be occasionally

a. David T. Berg, *The Fear of Terrorist Attacks in the Southwestern United States: A Cross Sectional Analysis* (Arizona State University, 2010).

b. Melvin Seeman, “On the Meaning of Alienation” in *American Sociological Review* 24, no. 6 (1959): 783–91.

addressed” compared to the Cold War strategic issues they also faced. (405) Although terrorism was not the pressing national security issue for this era, Pluchinsky documents the evolution of US CT capabilities and provides the reader important context for the current national security architecture the United States maintains to combat terrorist threats. CT policy was mostly ad hoc during the Eisenhower and Johnson administrations until President Nixon expanded US government capacity for addressing terrorism. These efforts included establishing the Cabinet Committee to Combat Terrorism (CCCT) and the Working Group on Terrorism (WGT). Pluchinsky notes that while President Carter disbanded the WGT in 1977, this organization shaped future thinking in the US government on how to manage developing terrorist threats and coordinate them with stakeholder agencies. He writes:

Although flawed by inexperience and misconceptions, the CCCT and its WGT was a seminal organizational step in developing and coordinating U.S. counter-terrorism policy and strategy. Every subsequent presidential administration established a similar executive-level body to address the terrorism issue. (169)

CT policy continued to move incrementally under the Ford and Carter administrations, with President Ford

largely retaining Nixon’s official policies. President Carter would later discontinue many of these policies. He did, however, make a significant contribution in establishing a dedicated military unit specializing in CT operations following the disastrous mission to rescue US embassy hostages during the 1979 crisis in Tehran. Pluchinsky also documents the impact of investigations into illegal domestic security activities during the Nixon, Ford, and Carter presidencies, which set the stage for debates on CT policy weighing security, privacy, and IC responsibilities that still resonate today.

Pluchinsky’s first volume focusing on anti-American terrorism is a densely packed and comprehensive look at one of the most complex US national security challenges our nation faces. It reflects the evolving nature of terrorism that has changed with the politics, technology, and media during this tumultuous period in US history. The book is also a thorough accounting of how US policymakers attempt to find solutions to address this dynamic issue. A broad spectrum of terrorism experts, policymakers, and casual readers will undoubtedly find noteworthy facts about terrorist attacks that targeted US interests abroad and at home in this volume. Pluchinsky’s level of detail and strong qualitative methodology makes this work an essential desk reference for any serious terrorism scholar.



The reviewer: David T. Berg is a CIA targeting officer currently serving as a resident intelligence officer at the University of New Mexico. His work focuses on terrorism, counterterrorism, and national security issues.

Intelligence in Public Media

The Spy Masters: How the CIA Directors Shape History and the Future

Chris Whipple (Scribner, 2020), 377, illustrations, bibliography, index.

Reviewed by Thomas Coffey

The Spy Masters makes for good copy but poor history, even an informal one. A look at the CIA record through the lens of its directors, the book is a string of war stories that are snappy and interesting, yet grow tiresome by the end. Picture some shoot-the-breeze session that has gone on for too long, lost its point, and does not know how to end.

Chris Whipple takes the same approach to *The Spy Masters* as he did three years ago in a book about White House chiefs of staff.^a It is documentarian in form and a distillation of conventional wisdom on its topic. The chapters that cover George H. W. Bush, Stansfield Turner, James Woolsey, and John Deutch are nicely done, with the reader learning a lot in a short span. The photograph of Bush waiting on a train station platform in Philadelphia is priceless, showing an unguarded side to the usually formal and in-control former CIA director and president. It's moments like this that give *The Spy Masters* promise, especially when Whipple tells us in the introduction that he hopes to answer the following questions: "Who succeeds and fails as CIA Director?" "What is the proper relationship between a director and a president?" "What is the CIA mission?" "Is the world's most powerful agency a force for good in the world?"

Alas, Whipple fails to deliver on his promise, rarely asking the directors for their views on such important questions. Instead the book mirrors one big storytelling session on major CIA historical events, which is better recounted by lower level officers. In this respect, *The Spy Masters* is a missed opportunity to gain valuable insights, perspectives, and lessons learned from officers at the highest level. And so the usual tropes surface: Counterintelligence Chief James Angleton as a mole-hunting obsessive; (201) President Reagan as "someone who liked to watch TV more than actually read the PDB"; (292) President George W. Bush needing a "pretext to invade Iraq that [Director George] Tenet provided"; and how the WMD intelligence "books were

cooked." (204) In a CSPAN program about the book, Whipple rehashes the line about Bush White House officials unable to believe "a bunch of guys with beards in caves in Afghanistan would blow up the World Trade Center." Tired hyperbole like these only underscores how little new there is to say in *The Spy Masters*.

Accordingly, Whipple could have used some fact-checking of his own statements and of those former intelligence officers he interviewed. The CIA did not back the 1973 coup in Chile and so "did not have its fingerprints all over it." (45) Soviet defector Yuri Nosenko was not put in solitary confinement "at Angleton's insistence." Soviet Bloc Division had Nosenko put in detention; it was handling his case at the time. (31) Iran-Contra was not a "failed covert action program" but an illegal undertaking by NSC officials and some rogue CIA officers. (13) Spy Aldrich Ames was not arrested on his way to meet "an FBI agent posing as a Soviet handler." (163) He was going to the office to meet with his boss about a trip they were going to take. That was the ruse. The dispute between DNI Dennis Blair and CIA Director Leon Panetta was not over whether the DNI could name chiefs of station, but whether the DNI could designate other intelligence organizations in place of CIA as key to bilateral relationships and so name the chief liaison officer. (242–43) Even Whipple's little touches are suspect, as when he describes former Director John McCone after hearing of JFK's assassination, "grabbing his hat and racing to meet Bobby Kennedy." (45) There is no photograph of McCone having ever worn a hat.

The shoot-the-breeze aspect of *The Spy Masters* descends into the sophomoric. "The analysts will do whatever you want them to do," said a former intelligence officer. "If you tell them to walk off a cliff, they'll walk off a cliff. The ops guys will only do what you ask them to do if they believe you love them—if you believe that they are as great as they think they are." (14–15) A fun and exaggerated quote, but is it illuminating? Then

a. Chris Whipple, *The Gatekeepers: How the White House Chiefs of Staff Define Every Presidency* (Crown Publishing, 2017).

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there's the flippancy that Director William Casey never really died in 1987, with the former National Security Advisor and Deputy CIA Director Frank Carlucci wondering as the pallbearers walked by with the closed coffin, "how do we know he's in there." (134) Hard to make out how this furthers a historical account of CIA.

At least those remarks are silly, and meant to be unserious, even if they add little to the record. *The Spy Masters* includes downright nasty quotes, some unattributed. "As a former Ambassador put it, '[Director Mike] Pompeo is like a heat-seeking missile for [President Donald] Trump's ass.'" (284) Current Director Gina Haspel is compared to a prison camp commandant by a former senior CIA officer. "She'd get everything done and say, 'I was following orders. The President gave me an order.'" (319) How could one even substantiate such defamation? But the kicker belongs to a former DNI speculating on why Republican lawmakers did not go along with President Barack Obama's suggested policies to counter Russian election interference in 2016. "I think it was because he's black. No one overtly said that. But I think there was a lot of resentment among Republicans about that." (282) Whipple exercises poor judgment in whether to let a quote stand or to question its credibility. Or simply to use common sense in deciding whether someone is just saying something for effect.

These remarks come near the end of *The Spy Masters* and are of a kind with his coverage of the CIA's relationship with President Trump. The focus on the president seems disproportionate: Trump looms over the

introduction and is at the center of the last chapter and the epilogue. A rough look at the index suggests Trump receives nearly as much attention as Directors Helms and Tenet, even though Trump served about half the time of their tenures, was not interviewed for the book, nor has written any memoir on his White House years. And, of course, Trump was never a CIA director. Since the epilogue does not attempt to answer the big questions Whipple posed earlier, the Trump focus in the last part of the book perhaps reveals the point of *The Spy Masters*.

If so, it's a surprisingly ahistorical look. Take the daily presidential briefing: Questions over the content of the *President's Daily Brief*, who attends the briefing, leaks, receiving bad news, and the need to develop a personal relationship between the director and president have been issues of concern throughout administrations. The inside-the-briefing stories, many by unnamed intelligence sources and the hand-wringing about them show a lack of awareness on the part of *The Spy Masters*. It is these types of leaks in the book that historically contribute to testy briefing exchanges, for they undermine trust and damage many a relationship between director and president.

In the acknowledgments section, the author suggests only one former CIA officer read the entire draft. Still, the question becomes how many former directors, attributed former CIA officers, and the slew of unattributed ones had a sense of what *The Spy Masters* was about and where it was headed as opposed to Whipple's originally stated intentions in the introduction.



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