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New Paradigms in Intelligence Analysis

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The Editor's Desk

We are delighted to offer you an issue of *American Intelligence Journal* dedicated to that phase of the intelligence cycle which probably employs more professionals, and frustrates more consumers, than any of the other phases—analysis. Many consider analysis the most critical step in crafting a reputable intelligence product, the step in which most of the missteps have occurred that led to faulty intelligence or—dare we use the term?—intelligence failures. Some view intelligence analysis as almost a profession unto itself, unencumbered by those other nodes in the cycle which are essentially process-oriented, such as collection and dissemination. Of course, some experts claim the intelligence cycle is a totally outdated concept in the 21st century—too linear, too stilted, too artificial—and should be relegated to the trash heap of history. I'll steer away from that dispute for the time being.

Then there is the oft-repeated debate about whether intelligence is an art or a science, a debate that probably has no discernible correct answer. Those who argue intelligence is an art are usually the analysts, since they believe analysis is elevated to a higher plain and requires more cognition, judgment, and intuition than the other activities included in the cycle. Far be it for me to come down on one side or the other. Although I held a couple of billets while on active duty in which the word "analyst" was part of my job title, I really performed very little original analysis. I was more an "action officer" compiling data from other analysts and packaging it for my bosses, first the J2 of SOUTHCOM and then the G2 of the Army, as they traveled or in turn briefed their own big bosses. Currently at the National Intelligence University I teach a course called "Social Analysis: The Spectrum of Conflict." For several years it was a core course for all master's-level students in the entire University, but now it has been reworked as just a program requirement for those in the College of Strategic Intelligence. Those in the S&T Intelligence School decided they did not need such a deep dive into conflict generated by humans suffering from relative deprivation. It is basically a sociology course requiring critical thinking and research into academic theories but not a whole lot of what most people would consider intensive, constructive analysis.

The theme we have chosen for this issue of *AIJ* is "New Paradigms in Intelligence Analysis." It was suggested by NMIA board colleagues as the logical way to follow up two of our recent semi-annual symposia, one in 2012 which explored "Identity Intelligence" and one in 2014 which examined "Intelligence Analysis in the 21st Century—Tools, Tradecraft, and Challenges." DIA officials were instrumental in providing subject matter experts for both these events, and several DIA analysts volunteered to produce articles for this issue. One of the reasons we are getting this issue out much later than planned is that a few of the authors—always overly busy with their daytime jobs—requested more time to polish their manuscripts and get them cleared by pre-publication review officials. I am confident we have assembled a strong group of offerings written by some of the best and brightest analysts the IC has to offer. By the way, Identity Intelligence has become such a hot topic that the National Intelligence University's School of Science & Technology Intelligence has decided to offer a pilot elective course with that title starting in 2015. The flier advertising the course defines Identity Intelligence as "the intelligence resulting from the processing of identity attributes concerning individuals, groups, networks, or populations of interest."

Leading off this issue, as he has done masterfully on occasions in the past, is former DIA Director and NMIA board member emeritus LTG (USA, Ret) Pat Hughes. The general asked me if he could offer some insights about "paradigms," and less about "analysis" per se, i.e., what has changed in our intelligence environment that requires us to be more agile and forward-looking than in the past, when the world seemed to be a more predictable place. Naturally, I concurred, and the result is a thought-provoking essay in which the author dares to challenge today's analysis with tomorrow's puzzles and mysteries.

One of the most commonly heard terms in the lexicon nowadays is "big data." There have been scores of conferences, symposia, and webinars wrestling with how to handle the big data that have become a big challenge for an information-overloaded IC. At the aforementioned NMIA symposium that focused on analysis in the 21st century, one of the panels discussed "Big Data Usage Benchmarks – Analytical Approaches Outside of the IC." Another presentation the same day dealt with "Big Data and the Need for Information Environments." Yet another panel covered "Service Perspectives of Big Data – Potential and Limitations."

THE EDITOR'S DESK

AIJ continues the discussion with one of the NMIA writing award-winning papers from the Air Command and Staff College, which we like to highlight whenever the authors are willing to permit their papers to be published in this forum. Maj (USAF) Brant Reilly ably tackled the topic in "Doing More with More: The Efficacy of Big Data in the Intelligence Community."

An exceptional group of DIA analysts accepted my invitation to contribute to this issue. A handful of them crossed the finish line while a few others are still working on their manuscripts, needing more time to flesh them out or get them cleared for release. Ben Anderson delves into the "Psychology of Alternative Analysis," a practice ODNI has been pushing ever since its establishment and requiring of all analysts to avoid the pitfalls of groupthink that often plagued one-sided analysis in the past. Marty Khan, who has since moved his DIA perch to AFRICOM, examines the age-old dilemma that Sherman Kent wrote about in the middle of the last century, i.e., how far intelligence analysts should cross over into the policy arena when informing decision-makers. His article, titled "Intelligence Analysts Not Providing Options for Consideration to Policymakers: An Anachronism Whose Time Has Passed?" suggests that times have changed, decision loops have tightened, and perhaps the old paradigm of assiduously separating intelligence reporting from policy advice may need to be relooked. Kelly Davidhizar turns over some new ground on the classic "art vs. science" debate with her illuminating piece on "Building Analysis: An Alternative to Art or Science." Yet another DIA analyst, Puong Fei Yeh, decided to write a historical piece that looks back 100 years, "The Role of the Zimmermann Telegram in Spurring America's Entry into the First World War," which is timely as we commemorate that great "war to end all wars." Amazingly, the last surviving U.S. veteran of that conflict, Army CPL Frank Buckles, just passed away in 2011 on his farm in West Virginia at the age of 110.

One of my colleagues at NIU, David Belt, currently my department chair and a newly minted PhD from Virginia Tech, turned a portion of his doctoral research into an enlightening article titled "An Interpretive Sociological Framework for the Analysis of Threats." Another faculty member, who teaches in the NIU Reserve Program on weekends, CDR (USNR) Kevin Riehle, shares his CI expertise with us by offering "A Counterintelligence Analysis Typology." Kevin is one of those valued repeat authors of *AIJ* and, as is often the case, we welcome back a few others. LT (USN) Jason Gregoire, a recent NIU graduate, writes about "The U.S. National Security Pivot to Asia," and Dr. Robert Hoffman teams with some colleagues in examining "Propositional Diagrams for Intelligence Sensemaking." Bill Streifer, who has provided us excellent historical treatises in the past, shares yet another, the intriguing "Two CIA Reports: Hungnam, North Korea." The ever-prolific Erik Jens, an NIU faculty member and legal scholar who has reviewed several books for the *Journal*, moves for the first time into the "Profiles in Intelligence" section with "The 'Great Gouzenko': Political Intelligence and Psychological Factors in the Defection that Triggered the Cold War." We are delighted to offer a second helping in the "Profiles" section of this issue, a personal account by attorney McKay Smith of his grandfather's witnessing of unspeakable war crimes perpetrated by the Nazis in occupied France.

A new name in the pages of *AIJ* but certainly not new to publishing on national security topics is Joshua Sinai, who examines early warning intelligence analysis in the Middle East. In keeping with our quest to have international representation, Israeli scholar Yair Neuman and his co-authors explore a novel methodology for personal profiling by analyzing former Egyptian President Morsi's speech before the UN General Assembly. Of course, Morsi, democratically elected from the Muslim Brotherhood as one of the unintended consequences of the Arab Spring, has since been deposed. Staying in that troubled region, Joshua Kameel, a recent college graduate and one of last year's NMIF National Military Intelligence Scholars, discusses whether the Iraq War was "bad intelligence or bad policy."

This issue offers several other excellent articles dealing with analysis. NGA's Ronzelle Green came up with arguably the catchiest title of the bunch, "A Scrum Approach to Integrated Intelligence." Ric Craig partners with one of his AMU faculty mentors on "Predictive Threat Analysis of American Espionage," and John Hoven, a recently retired economist with the Department of Justice, has caused some raised eyebrows with his "Locally Nuanced Actionable Intelligence: Qualitative Analysis for a Volatile World." Dr. Hoven presented his paper at last summer's IAFIE conference and invited criticism, a good way of testing the waters for novel approaches to intelligence analysis. Melonie Richey provides an enticing piece on a topic receiving quite a bit of attention these days, anticipatory intelligence, with her "From Crowds to Crystal Balls." Robert Kodosky, a history professor, has written an intriguing article, "What's in a Name? Waging War to Win Hearts and

Minds," and Herschel Campbell picks up on a controversial subject we have debated in past issues—drones—in his "Unmanned Aircraft, Privacy, and the Fourth Amendment."

Whenever possible, we welcome opinion pieces that stir up controversy and question the common wisdom. CPT (USA) Charles Harrison does that nicely in looking at the current state of his service in "Army Intelligence: Where Are We Now?" As usual, we have several excellent books reviewed by some equally outstanding reviewers. For example, one is by the inaugural ODNI Historian Michael Warner, who is now writing new history with the nascent U.S. CYBERCOM. While on the subject, I have quite a few new books on my shelf awaiting an eager reviewer sticking out his or her hand, and the books aren't getting any newer the longer they sit here. If you think you might be interested, please contact me and I'll tell you what's available. If you produce an acceptable review, you get to keep the book. I would like to expand our stable of reviewers; we have some old-timers who have turned out a bunch of reviews over the years, but we need new blood and fresh faces. I often advise my students that one of the best ways of breaking into serious writing gradually is to do a couple of book reviews before biting off a bigger task with full-blown feature articles. Most of our reviews are short, in the 700-900 word range. I would like to take a moment and thank our departing Associate Editor, Book Review Editor, and NMIA board member Kel McClanahan, who has contributed mightily to this *Journal* for the last five years or so. Kel, a national security attorney who did yeoman duty for our issue on "Intelligence and the Rule of Law" in 2010, is moving on to other pursuits. We'll miss him.

The next issue of the *Journal* will concentrate on "Denial and Deception," and just about all the promised manuscripts have now been submitted. It will offer a fascinating set of articles and book reviews, and I have enlisted David Moore of NSA, a veteran trainer and repeat author in these pages, to help me with the procurement and editing of that special issue. David and I will join forces in producing the "Editor's Desk" next time. The two issues after that will bear the themes "Intelligence Ethics and Leadership" and "Intelligence in Peace and War." The latter will hopefully attract quite a few articles commemorating the fact that 2015 is a multifaceted anniversary of warfare: it is the 150th anniversary of the end of the Civil War, the 70th anniversary of the end of World War II, and the 40th anniversary of the end of the Vietnam War. I'm already lining up authors who want to write about the role of intelligence in those and other conflicts that have tested the mettle of our business in supporting both commanders in the field and policymakers in government. If you are interested in contributing, please contact me at AIJEditor@nmia.org or call me at (202) 231-8462. I would love to hear your ideas about topics for articles, books for review, or ways to make this publication better.

Bill Spracher

Interested in publishing an article in the *American Intelligence Journal*?

Submit a manuscript for consideration to the Editor <aijeditor@nmia.org>

New Paradigms – Old Wisdom

by LTG (USA, Ret) Patrick M. Hughes

Ah, Love! Could thou and I with fate conspire to grasp this sorry scheme of things entire! Would not we shatter it to bits — and then re-mould it nearer to the heart's desire!

— Omar Khayyam (1050-1123)

LEADERSHIP

Leadership – in the context of operations in Afghanistan and Iraq (and throughout the Middle East) – has come under some criticism. The current approach to accepting leadership by the contemporary "soldier" has also come to the attention of those who observe such professional-cultural conditions. In both directions (from leadership to the led, and from the led to leadership), the common thought seems to be that there is something wrong with the current practice of military and non-military governmental leadership. If you talk with younger civilians, officers, and NCOs, they'll be happy to inform you that the biggest part of the problem may be in the leadership style and practices performed by older leaders, many of whom do not understand the open and flexible approach that younger people would appreciate in place of the structured and restrictive methods that they see foisted upon them by seemingly uninspired leaders. Indeed, some of the young-led believe the leaders of the past have quite clearly failed – so why, they ask, should they emulate failure? Instead, why not try newer approaches to leading and accomplishing – without the questionable baggage associated with past forms and practices?

Predictably, older leaders think younger people are untried, unproven, and arrogant in their belief that they somehow know a better way. Instead, the proven leaders think some structure and some control are vital to mission success. They see the idea of describing what is required and then allowing the younger group to determine how and what to do to reach the stated goal…as fraught with both professional risk and personal angst.

These conditions are generalized and certainly do not fit every person or every case. However, common interaction in which participants who are willing to tell it like (they think) it is, seem to indicate some level of friction around this characterization. Say it isn't so…but maybe the reader should speak to those who fit into the young-led category...and listen to their views. Or, maybe the reader should speak to those who lead now…and listen.

What makes the disgruntlement and disenchantment of contemporary intelligence practitioners worth being concerned about is that we are at something of an organizational and functional turning point after so many years of warfare.

The current era of discontent is not new in its basic form. Older readers will know that it has happened many times before. What makes the disgruntlement and disenchantment of contemporary intelligence practitioners worth being concerned about is that we are at something of an organizational and functional turning point after so many years of warfare. History tells us we may not get the preparation for or the manner of prosecution of the next war right if we don't take some time now to review the past, be concerned about the uncertain present, and carefully plan and conceive now about the possible, even probable, but fully unknown future.

In the military intelligence context – there are any number of "professional leadership" issues that deserve to be explored. Some say the critical skill – analysis – has fallen into the morass of youthful inexperience and indecision or all-too-rapid decision-making, while others believe analysis to be performed poorly by managers and seniors, while younger minds are restricted by the elders. Collection of intelligence is frequently discussed in technical terms as if that function were solely dependent on electro-digital-mechanical devices. Another area of dispute is the question: Who is responsible for what? The younger generation seems to find fault in what it sees as the absence of clarity of responsibility and the dearth of spine in policy, while the older folks seem to be happy in their understanding that if they just leave some

things alone and don't seek hard clarity, they will have greater flexibility and possibility as a result.

Tell me and I'll forget; show me and I may remember; involve me and I'll understand.

— Chinese Proverb

Across every level and discipline of intelligence, similar concerns are voiced and emotions and beliefs have formed, that – at least on the part of the younger members of the MI community – disparage some (not all) of the established methodology. They argue instead in favor of reinvigoration and redesign that will incorporate their ideas and their methods in a way that will provide them with convincing participation in the entire intelligence endeavor. They want to be in on every facet and feature of the system and its elements…which they will surely inherit.

A former fighter pilot, speaking to his intelligence counterpart who had just failed to tell him an important detail about an ongoing operation, put it succinctly: "If you want me to be in on the landing, I have to be in on the takeoff."

The lesson is that – within the limits of intelligence application and appropriate disclosure – the right people have to be told about what you know, what you don't know, and what you think. This applies not only to decision-makers and non-intelligence customers; it applies directly to interaction between and among intelligence professionals, so that each is informed according to his/her role and requirements. To do anything else is to sow the seeds of organizational and professional disaster.

PEOPLE

A man may be so much of everything that he is nothing of anything.

— Samuel Johnson,
The Life of Samuel Johnson*, Vol. 4*

In regard to "new" people, we are on the cusp of tremendous change – similar perhaps to that which occurred in the past in the aftermath of earlier wars, especially after the Vietnam War and to a lesser extent after DESERT SHIELD/DESERT STORM. Good people will have to find new work, valorous soldiers will have to adapt to civilian occupations, and many will be put on a path toward a future in which they have no real interest. Such is the way that drawdowns, reorganization, and restructuring evolve, especially after the surge to conflict. We are in the midst of that dynamic now.

The critical – vital – requirement for those who will lead the U.S. Intelligence Community, and specifically the military intelligence community, into the unknown future is to make sure that, in this swirling cauldron of change, we select and retain the right people to do the work of intelligence. There is likely nothing else as important as this, and one must ask at this point: Who is setting the standard, who is putting forth the measure of merit, and who is vetting and approving the selection and retention of this most valuable of intelligence resources – the intelligence "soldier" and the intelligence practitioner? The answer is not immediately clear.

THE THREAT

What has been called the Long War is likely to be many years of persistent, engaged combat all around the world in differing degrees of size and intensity. This generational campaign cannot be wished away or put on a timetable. There are no exit strategies. To paraphrase the Bolshevik Leon Trotsky, we may not be interested in the Long War, but the Long War is interested in us.

— Former Secretary of Defense Robert Gates, at the U.S. Military Academy at West Point, April 2008

An added dimension to the challenges that face the contemporary intelligence practitioner is the evolving "revolutionary" changes forged by the *techno-info era* that affect not only the way we live and work but also the way we conduct warfare and certainly the work of intelligence. In the best light, a hopeful, positive change may be...less war…? However, that pesky measure of wishes and dreams, history, tells us we should not rely on that hope.

Here are some ideas and thoughts about what may be the set of problems we have to deal with in the future. Of course, they may be wrong.

In the worst light, we are going to continue to be threatened by state and non-state actors and by criminals who engage in crime with national security implications, who also have access to and capability to use technologies and information in their efforts to act against us. Some of these threats – especially those from non-state entities – will be surprising in their sophistication and capability. This is in part the result of broadly available technologies and the lack of control that can be imposed over them. Nevertheless, at the basic level, enemies exist (in the world) to our society and our way of life, and to our allies. We must be realistic about this condition.

As we transition from the early years of the 21st century into the mid-years, we are likely to have globally distributed adversaries and competitors that will be more diverse and ambitious, although they may not present large-scale conventional threats. Then again, they may indeed present a non-traditional threat that has the effect of the large-scale "conventional" wars of the past. The nature and manner of warfare and the conditions in which that warfare will be conducted remain a critical intelligence question that the new intelligence practitioners will have to answer. It will be a fundamental mistake if we prepare (mentally and functionally) only for counterinsurgency and low-intensity conflict, believing that our adversaries will forego larger conflicts because they believe them to be too costly or risky.

We should also never forget the lessons of recent years – that even a small group or a single event can have global effect and significant repercussion. This is a net effect of global interconnection. The instability we are in the midst of now – in which the world community struggles to prevent or minimize potential conflict caused by violent fanaticism, geopolitical domination by force, adverse economic conditions, internal instability resulting from political dogmatism, ethnic and cultural disputes, religious differences and attendant zealotry, resource scarcity, population pressures, nation-state and non-state imperatives, proliferation, complexity in the convergent forces of change, and numerous combinations of these motivating forces and pressures – is almost overwhelming even to advanced social and professional practitioners.

We are now in an era of convergence and emergence.

Since the turn of the century we have passed through part of a period of great transition – a transition which continues and includes an increase in speed (tempo) of all events and activities, a reduction in available time between events, changes in the nature of space and distance, and technological changes that have enhanced the effect of actions and events. Together these changes in conditions and the resulting circumstances extant have formed a more complex operational security environment.

We are now in an era of convergence and emergence. Several evolving conditions are now *converging and* some new conditions are *emerging* – especially new geopolitical realities and new technologies. The result seems now to be more intense and dreadful than we had thought it would be. Whatever happened to the idea that we would "globalize" ourselves into a more civil and peaceful order in the world? The degree to which such diverse and complicated forces of change bear on the work of intelligence – so that we can understand and act in time – is another critical element of our professional endeavors.

If trends hold, technology will save us from some calamities…but not all. Global competition for place and resources will intensify. Information will multiply and become more vital to national, organizational, and individual success. Beliefs and societal systems will be (are being…) challenged by evolving change.

Big war may be less likely but, if it occurs, it could be more costly and disruptive than ever before. Relationships will be more important than ever. Communication and meaning will be critical in every case. Environmental change may cause broad net effects unlike anything we have previously seen. Civil disorder and intra-nation strife may also be more prevalent.

It is obvious that we are connected to the global condition in many ways – the connections we have through transportation, telecommunications, and cyberspace being merely a few examples. Our future security is dependent to some significant degree on our reasonable and prudent management of that circumstance.

In this evolving environment, several critical uncertainties can be highlighted that pose professional challenges to U.S. intelligence and specifically to military intelligence.

- Root causes of conflict and the motivation that sustains them.
- Shifts in regional power and their effect on stability.
- Capabilities proliferation and their application in warfare.
- Viability of nation-states and the net effect of diminishment or expansion.
- Very advanced technology and its application.
- Unconventional warfare trends – especially the potential for the use of weapons with mass and complex effects (WMCE).
- Unimpeded access to high-demand, low-density resources and attendant competition among people and political entities.
- The rise of complex urban environs and the potential for conflict in these densely populated zones.
- The recognition that in nearly every context some form of asymmetric and asynchronous condition will occur.
- Everything else under the sun…

NEW PARADIGMS AND OLD WISDOM

The point of this writing is to set forth some possibilities where even in the context of "new paradigms" there are some enduring truths (wisdom) that have proven the test of time and deserve consideration by the youthful emerging leaders of today – who soon enough will be the elders of tomorrow's military intelligence structure and soon enough will be responsible for the success and failure of their good work.

> *Some come and leave, fulfilling a single purpose; others, for a time or a season to teach us by sharing their experiences; and last, a select few who participate forever with relationships that endure through eternity.*
>
> *— Jaren L. Davis*

In something of an attempt to connect with contemporary culture, with apologies to David Letterman, here are the Top Ten "Best 'Old Wisdom' Ideas" that the new wave of MI leaders can consider to achieve their lofty "New Paradigm" goals:

1. Always tell the truth.
2. Communicate rapidly, clearly, and concisely.
3. Technology cannot do everything.
4. Intelligence is an intellectual pursuit.
5. Time is of the essence.
6. There is no substitute for area expertise.
7. Systemic approaches often make good sense.
8. Don't rearrange the deck chairs.
9. See the future in a realistic way.
10. Believe in yourself.

> *There are many truths, some valid for one, some for another. Things are not what they seem… It is a lesson we must learn and relearn because we keep searching for certainty and certainty does not exist.*
>
> *— Harrison Salisbury, 1989*

1. Always Tell The Truth. The reader may think this is unnecessary to put forth since, by definition, honorable members of the Intelligence Community will tell the truth. That is mostly right. Unfortunately, history tells us two important things about the idea of truth: it is frequently hard to tell what the truth is, and intelligence truth – that truth that emerges out of the complicated intelligence endeavor – is sometimes tainted by outside influences. This is not just a result of political pressure or professional bias. It can be a very personal and individual result of a well-meant wish, or a hope, or a guess, or a thought that is expressed in such definite terms that it becomes someone's reflection of what they believe to be the truth – but often is not. There are all sorts of issues bound up in the idea of truth – reason, empirical evidence, absolute incontrovertible fact, deeply held belief, quick judgment, flawed thinking, and outright lies. One can only speculate on the reasons for, or the causes of, mistaken views or inaccurate analysis. One can only ponder, without solution, the reasons why – on one or another issue – a usually reliable source or a much admired intellect will fly off the track and pronounce something as true when it is isn't.

Part of the problem lies in the way in which intelligence information is communicated. Intelligence truth is seldom fixed in time and, like most other complex conditions, it can and will shift and change so that one minute you think you know the truth and the next minute your perceptions are contextually wrong. Qualifiers often help, but some leaders see weakness or indecision in such quibbling. To say that something might be so, or could be so, or maybe will be so is a far cry from their expectation that their intelligence provider should say what will be. This expectation is foolish at best and dangerous at worst. What young (and sometimes volatile) minds should be trained to provide, in the absence of absolute truth, is their best version of their belief, placed in context, and expressed with appropriate zeal or moderation, as the case warrants.

If you don't know – say so. If you do know – don't be slow. Communicate!

This is questionable advice in many ways, but it has the redeeming merit of meeting a reasonable expectation of the general approach to analytic judgment. For example, the young intelligence professional might say that there is a 60% chance of an event occurring, in his/her view. The leader receiving this information may then ask the intelligence professional for a best guess or best professional opinion – often the same thing – of what will happen. If the intelligence professional falls willingly into this trap and states directly that something will happen, the probability that he/she will be wrong is high. True enough – he/she may also be right. It may be a lucky guess or a reflection of superior knowledge or even simply the finest effort by an exceptional intelligence professional, or all of these in some measure. The point is, the "truth" in intelligence terms deserves to be qualified and must evolve in time and condition before it becomes absolutely true. It is seldom a "slam dunk," at the outset.

Perhaps the best description of how to communicate intelligence to a decision-maker or warfighter was put forth by the former Chairman of the Joint Chiefs of Staff, General (USA) Colin Powell. GEN Powell is reported to have given the following guidance to his J2:

Tell me what you know. Tell me what you don't know. Always tell me which is which.

This dictum from the Chairman was modified later by a mischievous intelligence practitioner who added the following:

If there is time, tell me what you think. Answer questions with aplomb.

The point of the addition was to include the intelligence professional in the thinking (reasoning) process and to provide the potential (if there is time) for interaction that may also provide some insight and belief and may contribute to decision-making in some meaningful way.

As the reader contemplates these exhortations, one may ponder the idea that trust is the primary factor in the relationship between decision-makers and warfighters and their supporting intelligence professionals. Absent trust – on a continuing basis – the "truth" will be hard to communicate. Absent trust – a relationship in which the intelligence professional will be allowed to voice an opinion in any meaningful way – the truth will be scarce at best. Trust between the served and the serving, in the intelligence context, is the bedrock for success.

Consequently, advice to the inheritors of a long and mostly distinguished military intelligence function on behalf of our nation is always to tell the truth, as you know it to be at the time, and place it in context. Qualify it so that it represents your best professional judgment and is representative of what you really believe without outside influence or some other form of improper motivation. Truth, after all, is fleeting.

The goal always has been and remains today, to find the truth and by that lamp of knowledge to see the way…

> *The single biggest problem in communication is the illusion that it has taken place.*
>
> *— George Bernard Shaw*

2. Communicate rapidly, clearly, and concisely. In finding and knowing what is "true," the modern intelligence practitioner is often faced with a key decision: Who should they tell, and when should they tell whatever it is they know.

Who should you tell whatever it is you know? The intelligence professional will immediately want to consider the effect of classification, compartmentation, and the infamous "need to know," caveats that often are controlling and restrictive in regard to the communication of intelligence. Those concerns are a reality of the work of intelligence; they must be considered and, wherever possible, honored and complied with. Of course, in the context of military intelligence, there is always a chain of command. Whenever any other option seems unlikely to be right, choose your chain of command.

When should you tell whatever it is you know? Perhaps the greatest consideration is to be timely in communication and to communicate as directly and succinctly as possible. Time is always the biggest issue since, especially in the contemporary context, things happen with alarming speed and change with the wind. Thus, the lesson for the new generation is, quite simply, don't delay. Once you have achieved synthesis out of the analytic endeavor, or once you have received a defining piece of input from whatever source, the worst thing you can do is to withhold that information from your associates, your leadership, and those you support.

It is especially egregious if you deliberately withhold information for some parochial reason or some imagined or perceived reference to the old and fundamentally wrong idea that, in the Intelligence Community, specific knowledge is power, and can be used as a source of power if one controls it and provides it to those who can broker the power of the information into some form of greater influence or broader leverage. This methodology has been used in the past to achieve some form of political or professional power or profit for organizations or for individuals, and it remains a reprehensible approach to the work of intelligence.

Therein lies a lesson for the new generation: don't make this mistake. After all, the information is not owned by any person or organization but rather it has been produced out of shared resources and is ostensibly for the greater national good. Isn't that true?

Instead, the "new" ideal – one that can be facilitated by technology – is that "intelligence is power, and shared intelligence is greater power." This is a much better alternative, but in the work of intelligence we cannot share – nor should we share – outside the controlling boundaries set in place, usually for good reasons, which guide us in whom we can share intelligence information with. Ideally, any information that is developed within an excessively restricted construct will be recognized, especially if recommendations to communicate (to share…) are made by the analyst or the leader of the intelligence effort. Ostensibly the intelligence will then be constructively released into a larger body of people who will be able to use that information. With very few exceptions, even the most sensitive bits and pieces of information from the most delicate and fragile of sources can find their way to a larger and more utilitarian audience if presented in the right way by controlling authorities.

Assuming the information one wishes to communicate is complicated, the intelligence practitioner then has an immediate task at hand: to make it simple, clear, and as uncluttered and unencumbered as possible, without changing its fundamental elements of truth. This too takes time (and skill), but it is vital that this be done before the information is passed to others. The result of passing excessive detail and extraneous information, especially when the key bits of information are therefore not

clear, is never good. If a supporting entity wants more detail or more explanation, he/she can and will ask for it and, assuming the restrictive considerations mentioned above are taken into consideration, this greater body of knowledge may then be provided. However, the critical point here is, in the first and most timely instance, the intelligence provided should be clear, direct, and placed in its operational context, if possible.

The critical objective is to get the right information to the right people in the right time for action.

> *A rock pile ceases to be a rock pile the moment a single man contemplates it, bearing within him the image of a cathedral.*
>
> *— Antoine de Saint-Exupery*

3. Technology cannot do everything. The contemporary intelligence professional may be very much a technologist – a necessity of the modern age. The marvels of technology are well-known, and seemingly some new capability or some incremental improvement appears on the horizon every day…or every hour as some have suggested. One cannot help but place great faith in the technical capabilities that intelligence systems represent. We can snatch a specific conversation out of trillions of utterances because of a defining characteristic. We can see – often with continuing virtual presence – most of the earth, and often beneath the earth, beneath the sea, and in the atmosphere and in space and in cyberspace. We can see the chemical and biological interior of almost everything. We can discern truth from lies and lies from truth. We can measure almost anything from a long distance. We can know – with exceptional certainty – what exists where, at any given time, assuming that we focus on the place or the activity. The camera lens and the sensor head are ubiquitous. We can keep track of more information in more ways and with greater relevance than ever before. All of this – and more – is miraculous indeed. For those of us who have seen the transition in intelligence from an essentially manual and analog endeavor to the current set of fantastic capabilities provided by digital and micro technologies in all their many forms, the use of the word "miraculous" is appropriate.

Miraculous it is…but there are still many demands on the intelligence practitioner that require personal intellectual capability, that require judgment, and that require one to step outside the technology realm in order to apply thoughtful consideration, to achieve insight, to sense the human element, to take advantage of history and the long view found in detailed knowledge, to make decisions and inform leaders, and to plan and take actions to anticipate the future.

One can admire the spy in this regard. While the technologists are busy finding out everything about everything, the spy will endeavor to steal that which becomes known to other humans and in the process the spy will, among other things, help to provide an estimate of the enemy and its intent and exploitable weaknesses, whatever they may be.

There are many ways to do this, some as old as history can record. The central feature of the human intelligence (and counterintelligence) endeavor in the work of intelligence is that through human interaction – and in the modern context, often assisted and amplified by applied technologies – the spy and the counterspy can know the enemy's belief, its plan, its ideas, and perhaps even the alternatives to each of those if, in their original form, they should prove to be untenable. Technical support can help, of course, but in most cases, the human element of any condition is key. Once the human condition is penetrated and assessed, then intelligence truth may become more viable and may allow the decision-maker and the warfighter better to see and anticipate the way forward, to their advantage.

Or not. One caveat in this appeal to the value of the human element in the work of intelligence is that sometimes – just as in the realm of technical intelligence – humans can be the source (sometimes the best source), of deliberately false and misleading information specifically designed to deceive. Sometimes the human condition also provides information that is merely the product of flawed thinking and inadequate understanding. Sorting all this out is the stuff of reasoning, insight, and analysis, and perhaps even the stuff of great intellect. It is never easy.

This may seem simplistic to the reader, and in concept it is. It is the doing of this that is hard, in part because any human interaction is cluttered with emotion and infused with the stuff of relationships and circumstances that are often passion-filled, compelling, abstract, and ever-changing.

In the past few years military intelligence has had a reawakening to the merits of human intelligence and the synergy of cooperative association with counterintelligence. Some see this as a violation of the unwritten rule that only a few "others" should engage in these particular intelligence endeavors and that ideally they should be kept separate – but that is foolhardy. Surely the idea that military and non-military (including law enforcement and homeland security) human intelligence and counterintelligence endeavors can be complementary and can amplify each other in the process, when legal and appropriate, is a modern functional approach that trumps the old parochialisms and narrow distinctions of the past.

Personal valor is involved. To do the work of HUMINT/CI requires that some form of interactive relationship with others, often undependable and uncertain others, or even fully hostile others, is necessary. Exposure is required, and with it comes the possibility of greater danger. Thus, the idea that military intelligence people can do most of their work in the protected confines of camps and facilities – even far removed from the most likely places for violent conflict – is a fundamentally false notion. The work of intelligence is dangerous in nearly every field setting, but it is most challenging when people must go in harm's way to gain the information they seek.

One specific HUMINT/CI-related effort has almost never been the subject of argument or dispute. That is the need for intelligence about the surroundings and immediate threats to the extended and deployed force. That is clearly a military intelligence mission, albeit one that non-military intelligence organizations and activities can make contributions to given the constant need to protect the force. Looking back on our recent history in Iraq and Afghanistan, this continues to be a pressing mission requirement.

Technology seemingly has changed everything, and at the same time has changed very little in the context of societies and their fundamental beliefs. In some cases, the adaptability provided by technology has strengthened the nature of singular ideas or has merely become a tool to further radical ideas or zealotry.

The idea that technology has – or will – foster greater globalization and attendant understanding and tolerance has yet to be realized. Instead, some technologies that were developed for specific worthwhile purposes have been adapted for ill by those who wish to do so. This is familiar – it has happened throughout history – but in the cases of weapons with mass and complex effects and the march of sophisticated technologies with strategic impact, it takes on a more sinister cast.

Technology – even miraculous technology – is no substitute for the old but necessary human aspects of the work of intelligence. Rather the modern idea can be that both technical and non-technical approaches can be supporting and valuable. As is often the case, it's not either-or; it's all.

> *In theory, there is no difference between theory and practice. But, in practice, there is.*
>
> *— Attributed to Jan L.A. van de Snepscheut, Yogi Berra, and others*

4. Intelligence is fundamentally an intellectual pursuit. Intelligence people (our most valuable resource) are often given credit for being basically smart. Whether or not this credit is always deserved is debatable – but that given credit reflects the expectation of others. People who do the work of intelligence in the U.S. government are indeed "smart," in the classic sense. However, sometimes smart people lack essential common sense; they lack a good grounding in culture, language, and history; and they lack the personal motivation to continue to develop their minds, notably in the pursuit of their profession. This may be painting a broad group with the same brush, but there is enough evidence of this in the author's experience to communicate with concern the topical idea – intelligence is fundamentally an intellectual pursuit. Those who pursue it as a life's endeavor should be above average in intellect and in intellectual achievement.

Sometimes smart people lack essential common sense; they lack a good grounding in culture, language, and history; and they lack the personal motivation to continue to develop their minds, notably in the pursuit of their profession.

At its core, the work of military intelligence often involves some form of expertise or capability that sets one apart from others. Over the past 50 years or so, the idea of intelligence generalists has slowly eroded to the point where there aren't many "generalists" left – almost everyone can and does do something, or even three or four "things," very well. Most are willing to accept a primary and secondary "specialty" designation that effectively defines the practical expertise of an intelligence person and in so doing may place that person in something of an "expertise box" – one that is hard to get out of, assuming the "expert" in the box would like to do that.

The tracks that lead to "generalization" are often – not always, but often – synonymous with command. You can still be an expert or a specialist and follow the command track, thus stepping outside the confines of the expertise box. Not everyone has that option and few are actually prepared for the breadth and depth that command, and in many cases senior staff, demands. Even fewer are good at it even when placed in command or in a demanding staff position. We have had, of course, especially in military intelligence, a professional education system that is designed to train and educate the selected few in the art and science of command, while also providing the necessary technical skills and functional training needed to assure their viability as intelligence professionals and specialists. This construct has worked fairly well, and indeed many intelligence people have risen to senior ranks along both tracks – command and professional skill.

The intelligence profession is a representative group of people in which broad and deep capabilities reside, some of which are esoteric and not understood by the uninitiated. All require some measure of intellect and some working ability at a fairly high level in basic functions like reasoning, speaking, writing, and understanding. These beginning capabilities are usually formed in high school (or in some cases earlier), and in university study. They can then be polished and focused according to the needs of the military in occupational specialty training and advanced functional skill training, and during the continuing professional education process, and of course through professional "hard knocks" life experience.

This circumstance gives rise to the realization that selection, vetting, and recruitment into the Intelligence Community is a vital step in ensuring the vitality and viability of the intelligence profession, and similarly it is critical that those found wanting at some point are kindly thanked for their effort and shifted to other work. These observations are not meant to be elitist so much as to highlight the requirement for personal intellect and cognitive skills that will be up to the professional demands of the function of intelligence in the modern age. This is a continuing absolute requirement.

One of the most interesting and challenging authors about the many internal functions of intelligence is retired U.S. Army Brigadier General Wayne M. "Mike" Hall. He has described numerous elements of intelligence in his books, but perhaps the most insightful and utilitarian of them is his 2009 work, *Intelligence Analysis: How to Think in Complex Environments*. In this book Mike Hall communicates, among many salient ideas, the thought that military intelligence practitioners can never stop learning and seeking knowledge. While they may not fully understand every occurrence and every event that comes to their attention, they can – because they must know how to think – find a way to know what they need to know…in what is arguably an information-rich and imposingly complex set of conditions and circumstances…probably never so demanding as now. This is unlikely to change; hence, the admonition to the younger group of intelligence professionals is to prepare and sustain yourselves intellectually in this context. It will never be simple; it will always be more challenging than it was.

> *We must not confuse the present with the past. With regard to the past, no further action is possible.*
>
> *— Simone de Beauvoir,*
> The Ethics of Ambiguity*, 1947*

5. Time is of the essence. How fast do you have to be in the 21st century to be relevant? The answer may not be entirely realistic, but the right answer is that you have to be as fast as you can in every feature of the intelligence process. There are good reasons for proceeding into the immediate future with this in mind. It is unimaginable that things will slow down. They are likely to speed up.

The old guard understands this – it has seen the problem evolve from the snail's pace of the multiple copies of carbon paper to the mimeograph machine and the press-to-talk analog voice radio, and on to the speeding digits of today's "smart" computation mechanisms and the fact that nearly everything spoken or imaged or sensed is preserved somewhere in some way for later reference. This abundance of information, out of which we can fairly rapidly analyze and finally synthesize intelligence, is a far cry from the "old days" in which the primary reference points were a person's memory and a notebook…or maybe a back-channel message sent over Kleinschmidt teletypewriters (clickety-clack), at 40 words a minute…and a large wall map with colored pins and strings depicting relationships and links. Things have certainly changed for the better.

The problem is not with the elders in this case; it is with the youngsters. If you, dear reader, have grown into the profession of intelligence during the information technology revolution, you may assume the speed of the here and now and perhaps you take it for granted. This is a mistake in at least two ways. One is that we should always press for improvement and increased capability in this area. Another is that, even though we have these impressive capabilities now, we should understand the possibility that we will not always have them in every imaginable contingency. We should have at hand a mix of alternative capabilities in the event that we need them. This implies that we will need more time or, put another way, more time will be taken to achieve collection, analysis, and synthesis goals. The last thing we should do is take any of this for granted.

The pressure of time and the demands that require attention in order to succeed in time are a fact of Intelligence Community life, affecting everyone to one degree or another. Time is fleeting, but we are all working with the same available time. It is what we do within a given time span that sets us apart from others.

A critical point in understanding the essence of time is that, absent action, time is a measure by which we apportion energy – nothing more. It is acting, in time, that saves us from disaster and propels us into the future. The decision-maker and the warfighter understand this all too well. Their expectation is that, in every facet of the intelligence endeavor, the intelligence practitioners will do the right thing as fast as they can while ensuring that what is done is appropriate and efficient and accurate. This is a design for angst and frustration, but it is necessary to the condition of war. Without this sense of urgency and this expectation of quickness, all is for naught. Once again, embodied in this

construct are the important elements of interpersonal trust and confidence, and the shared view that action in time is the precursor to success.

The message for the new leaders of intelligence is to apply the idea of action in time to everything they do – and take nothing about the various elements of the current system of intelligence functions for granted. One of the vital elements of intelligence leadership is the management of time.

> *True intuitive expertise is learned from prolonged experience with good feedback on mistakes.*
>
> *— Daniel Kahneman*

6. There is no substitute for area expertise. As the reader will know, one sure way to place yourself in the expertise box mentioned in item 4 above is to become a Foreign Area Officer or Non-Commissioned Officer, or civilian. In the past this was a form of deliberate career truncation. Things have improved, and today many "foreign area experts" have a very good chance of reaching the senior ranks, assuming they perform well throughout their assignments. A few will rise to general officer, to the Senior Executive Service, or to Command Sergeant Major because they have the critical expertise needed in a few specific places, or because they are just plain very fine "soldiers" and "experts" across the breadth and scope of their professional duties.

To get down to brass tacks, the issue of whether or not an officer, civilian, or NCO is truly expert in a given area is based on a set of criteria that is hard to compromise on. Have they formally studied the topical area? Do they have extensive experience in the area, and especially have they served in a given area in recent months and years and ideally in a variety of conditions? Do they speak, read, and write the language? Have they achieved the academic and professional certifications necessary to be thought of as "area experts"? Have they demonstrated an affinity for the work of foreign area officers and have they had the appropriate ancillary training to be effective in their role of military assistance and support, and as an "ambassador" from the United States military – part of the country team? Does their family support their FAO work in their given area of expertise? Do they have the right personality and cognitive characteristics for this work? There are more questions than these, but it should be obvious that a person who is truly deserving of the designation of a foreign area expert is someone who has very special qualifications and abilities. Not everyone can achieve this status.

True expertise in a given area or region or place in the world is vital to our national security capability. These features of expertise cannot be duplicated by technology, nor can they be reduced in either merit or measure. One is either qualified or one is not.

The point of this description is to say that the younger entrants into the world of intelligence need to be as well-prepared and as well-developed along their career path as they possibly can be. Those who possess or can develop the skills necessary to be foreign area experts should be nurtured, guided, and rewarded for their efforts, and conserved as valuable resources. We may not need every one of them at this moment, but we will surely need them in the future. History tells us that.

There is no substitute for doing the academic and preparatory work, and there is no substitute for achieving true expertise. Once the "experts" have been forged, they are a mighty tool for our country's benefit.

> *Discovery consists of seeing what everyone has seen and thinking what nobody has thought.*
>
> *— Dr. Albert Szent-Gyorgyi*

7. Systemic approaches often make good sense. Some who read through this article will remember various iterations of the "intelligence cycle." Some will have only a vague idea about such a concept. A few will have no idea what the term even means. Sadly, the latter condition is favored by some of the younger crowd as a follow-on to their *laissez-faire* approach. Even sadder, the older crowd, often because of mismanagement and misunderstanding, did not see the systemic approach through to fruition – instead they opposed various theories and designs as if they were inflexible and compelling only by fiat.

Included in the idea of "systems" – especially in the military intelligence structure – is the construct of "military doctrine," including principles and strategies that are viewed as generally viable and dependable. These doctrinal precepts have great power only when they are fully understood and applied appropriately. However, they are often seen as confining or restrictive, and in contemporary times they have been described as needlessly limiting without discernible purpose. This is usually the perception of those who are working as hard and as fast as they can – with great confidence that what they are doing is the right way to do it. This is probably, on balance, both admirable and questionable. One hopes that the estimation of correctness is right, but one hopes that some reference to past experience, to lessons learned, and to systemic constructs which may help guide and focus effort are also conscious choices to be made by the valiant and brilliant intelligence practitioner.

The value of systemic constructs can be debated on their design, impact, and relevance to events. All systemic approaches are not inherently good. However, it is equally plausible that without some form of systemic structure, without some rules, without some limits, the result is likely to be chaotic. This is especially true if you are interacting with and depending on a far-flung enterprise with different organizations, different structures, and different cultures, and it is also especially true if you are trying to achieve inter- and notably intra-organizational synergy. It is even more urgent if you are fighting a war. Simply put, the right systems and systemic constructs are required to achieve collective goals.

This is an old idea, but may gain new currency for some if they stop to think it through. Would anyone expect every facet of the operation of a complicated machine – an easy example would be an airplane – to be operated without reference to in-depth references and practical step-by-step checklists? Probably not. The "system of systems" approach applied in the work of intelligence is similar in that no one person can know every detail, every functional attribute, or every nook and cranny of the enterprise. Are there any readers who profess to know the technical characteristics, operating parameters, and capabilities of every sensor, source, and method available today in the U.S. Intelligence Community – without reference to some form of informational assistance?

There are many policies, procedures, and tasks that beg systemic description and can benefit from a generally understood manner and method to make things efficiently and effectively work right. Hence, in trying to gain competence and understanding of the systems of intelligence, shouldn't we have and make reference to the doctrinal base and the graphic representations, written descriptions, and audio-visual presentations that explain, elucidate, inform, and guide us in our actions? In this light, one idea stands out from numerous others – the idea that there actually is a construct which describes the major elements of the intelligence endeavor and orders them in a logical and understandable systemic way.

An example (Figure 1) is shown below – merely to illustrate the idea:

A feature of this set of ideas is that intelligence system descriptions can and will be changed – along with changes in every element of the functions and disciplines of intelligence themselves. Consequently, if a new gizmo is applied to function X resulting in condition Y which translates into a new achievement Z, then change the doctrinal base and change the descriptive context of the systems and references that apply. The last thing we should do is bemoan, without action, the evident shortcomings of the old system constructs and fail, in the process, to make

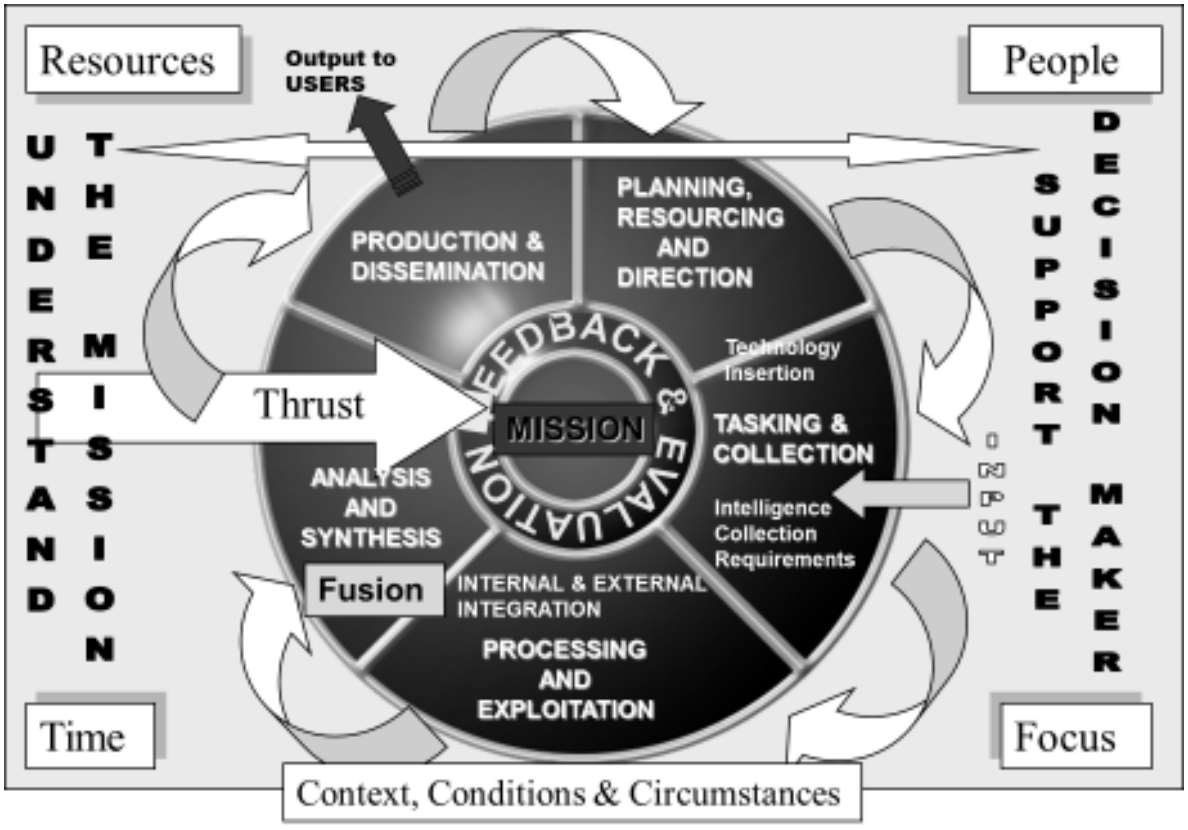

Figure 1

reference to the doctrinal base because one or some of its features are no longer up to date.

These ideas have no long-term shelf-life. They represent a constant requirement for review, updating, changing, and adjusting to the current capability and the contemporary circumstances. This is often described as a function of the "schoolhouse," and of the "holders and developers of doctrine." They certainly have a voice in such change, but every practitioner, every innovator, every imaginer, every inventor, every person who applies a new idea, or a new technology or a new procedure or method, should refer their activities to the engines of doctrinal and functional change and to the adjusters of the systemic approaches so that the entire community can make best use of the tools at hand, whatever their description.

> *Change is the law of life. And those who look only to the past or present are certain to miss the future.*
>
> *— John F. Kennedy*

8. Don't rearrange the deck chairs. This is, of course, an allusion to the choices available to the captain and crew of the Titanic as it was about to sink. There is only so much one can do, and doing something that will make no difference is sometimes the worst choice of all.

The world is in turmoil, or at least major parts of certain areas in a few regions. "The sky is falling" – it has been for at least 25 centuries according to Buddhist scripture. Henney Penny (AKA Chicken Little) is a latecomer to the idea that things are going to hell in a hand-basket.

The truth is: things are in terrible shape in a few places but the rest of the world struggles on. It is important to keep it all, somehow, in perspective.

If indeed things are seemingly or actually going from bad to worse, then it's not the time for unnecessary administrative change or restructuring or the dreaded reorganization that seems so popular in certain quarters. Every new leader or commander, at every level, seems to have the solution to whatever ails us – often taking unnecessary steps and making irrelevant changes during a period of high anxiety or even near-disaster. Whether this is implicitly bad or good is debatable and largely circumstantial, but in the intelligence profession the trend has been – and the impetus continues to be – change (sometimes for the mere sake of change). There is even an acerbic joke about this phenomenon: "What's the best way to earn a Meritorious Service Medal? Answer: Make a change."

Of course, some changes are not only necessary but brilliant – and some even "change" the essence of doctrine or the manner of professional activity in some fundamental way. These are not the changes one should avoid; they should be embraced. It is the leader, at every level, who has to make this decision and determine whether or not a proposal for change is worth the time and energy and disruption attendant to the change. Once again, we are back to leadership – the glue that ties almost all of what we do together.

Wise men often counsel due consideration and patience, and making hay while the sun shines. They may voice numerous old aphorisms that revolve around the central idea of making do with what you have and actually leading, commanding, and directing without redesigning the proverbial wheel. Younger people may counter with the thought that things are going from bad to worse, and change holds the possibility of correction and solution to whatever ails us. Both avenues of thought may at some point converge, and it may be both desirable and vital to make a change. The point here is to carefully consider the timing and the nature of the change, and to avoid unnecessary change when the chips are down and the fate of an activity rests on the edge of the abyss.

In making change it behooves the leader responsible for it to get those who will absorb the impact of the change on-board ahead of the final decision and its implementation. This probably seems to most as Leadership-101, but recent observations indicate there has been, for some time, a propensity to make preparations for change in secret and to forget the simple idea that almost every change will affect others in some way. To remind, as the fighter pilot told the intelligence officer, "If you want me to be in on the landing, I have to be in on the takeoff." It is apparent that occasionally we have crashed on landing.

With apologies to Niels Bohr, Danish physicist (1885–1962), and numerous others to whom this idea is attributed: "Forecasting is risky business, especially about the future."

9. See the future in a realistic way. The "future" is composed of many parts, central among them the human condition in a given place and at a given time. Much of the future will be driven by a regional mix of political, economic, and cultural conditions and probably by competition if not warfare. Sometimes the nature of future conditions may be perceived so narrowly that true comprehension may not be possible. Some wags have likened the evolution of the future to an illusion, where what you observe happening may indeed not be what is actually happening at all. It is only later that, after the dynamics of transformation and the realization of resulting circumstances, we may begin to appreciate the actual turn of events. One enduring truth is that people – notably people in leadership positions – can and will change their mind.

It is important for the intelligence practitioner to understand and appreciate this concept of uncertainty about the future since there may be no greater cognitive danger than to believe you can know the future simply because you have seen the past and are now living in the present. The future has its own path to follow, one that unfolds as we move along it. It is not marked well and is often circuitous. There are no maps or guides. There is only the sure eventuality that it will not be what we expected.

It is foolhardy to specify here what the future may or may not be exactly like, since none of us can foretell the future. Nevertheless, in the context of warfare, one can describe some potential (even probable) features of the future that are worth contemplation and study by the younger inheritors. The value of these few potential characteristics of the future – if there is any value – will reside in the thoughtful consideration of them in a continuous manner by the best analysts and the most effective of developing leaders.

The future is likely to include the following postulations:

Very dynamic, non-linear, ever-changing: so much so that only constant detailed observation and thorough study of every facet of the future as it appears on the horizon will be enough to understand what could, what might, what may happen – but never what will happen. That is a perception beyond the scope of the intelligence endeavor.

Multinational–transnational–global: not disconnected from these larger constructs so that it can be thought of merely as "local" or, in military terms, "tactical." Almost no action, no pronouncement, no event can be isolated and minimized in the age of pervasive virtual presence, hyperactive social media, and universally available rapid transport, unless perhaps there is no interest in whatever the action or pronouncement or event was. Rather, even the most mundane and seemingly unimportant event can take on proportions far beyond those that may seem to make good sense.

Interconnected and interdependent: very few actions can be considered in their singular context. Nearly everything is "networked" or related or connected in some way.

Distributed – containing circumstantial synergy: where the interconnected and interdependent nature of almost everything will potentially be cumulative or additive in some way. Even what seem to be singular events on the surface are likely to produce some effect in another construct, amplifying the idea of synergy.

Functional – and sensitive to perturbation: most actions will have some application toward and will be affected by a larger set of effects and considerations. One cannot rely on the concept of simple equilibrium.

Haves and have nots continue: to a point where there is a likelihood of violent societal friction over the circumstances of one group when compared to the circumstances of another group in the same or similar social order and culture. One would hope that this possibility will not occur in advanced democratic societies where a variety of checks and balances, and well-intentioned governance, are in place to avoid the probability of friction between groups…but even in the best of nation-states with the most inspired societal conditions we must assume the potential exists for those who have less than others to seek change. Bullets are often of little use in such eventualities.

Developing "world" culture continues: in which some discriminators and points of difference between social orders and cultures, to include language, popular entertainment, and some fundamental lifestyle ideas, begin to blend and become less divisive and more inclusive. In some genres of music and movies, for example, this has already occurred. Many people now speak some of the new *lingua franca* – English.

Linguistic and cultural blending occurs: as follow-on to the ideas of interconnection and interdependency and the developing globalization movement, which has long been predicted to drive social change. The expected broad amalgam of elements of a common global culture has not yet occurred – and may never occur – but the idea and the potential for some forms of globalization still seem to have credibility.

Moderation of nation-state identity occurs: as another manifestation of globalization, where the idea of being a citizen of a single nation-state begins to fray as people become more mobile and less anchored to a single culture. The potential for this change seems clear, but the depth of change and the meaning of such a change are uncertain at best.

Rise of alliances and coalitions to compete: so that in order to generate collective competitive conditions, economically, politically and geo-culturally, some nation-states and non-state actors band together formally and informally to achieve greater collective power and leverage than they could otherwise achieve by themselves. The logic of this idea seems compelling, but danger lies in the evolution of such assemblages when they begin to take on antithetical views and pose themselves against others.

Individual identity precisely defined: so that the individual is so well determined and delineated in a variety of ways that he/she cannot move or migrate or matriculate or make a change without notice, and his/her mobility between social distinctions, while still possible, is more controlled. This idea has been the stuff of science fiction in the past, but modern forensics of all types, and the surging capability to know so much about each person, make the idea of reliable personal identification in nearly every circumstance a reality, with consequences at which we can only guess.

The advent of aging populations with different goals: is a noteworthy trend in many advanced nations. This phenomenon is the source of strong but variable political and social viewpoints, complicated by many factors and circumstances. The effects of an aging population and their attendant demands on the social support structure are worth contemplating, but other features of this condition are also important. In democratic societies, and in some areas in which radicalization has occurred, the rise of an aged group as a force for political and cultural change may be as powerful as any other parallel force or source of power.

Futuristic vectors and retro subcultures: a naturally occurring division between those who seek the future and those who are more comfortable in making reference to the past. While not a well-defined source of friction between groups, this is yet another noteworthy evolution in some societies.

The rise of new sciences: in which fundamental sciences are paired with new technologies and theories, and through this paring – in a variety of interactions and forms – the resulting "new" sciences may help us solve the most demanding of questions and the most challenging of conditions. They may also pose "new" threats we have yet to understand or deal with.

A condition in which many threats to security are criminal in nature: a developing condition in which the role of organized militaries – and specifically military intelligence – will be debated. This too has largely been the stuff of science fiction (with the notable exception of the very real activities of drug cartels and contraband smugglers), but a variety of threats including those associated with weapons with mass and complex effects (WMCE) compels the consideration of using [military] intelligence resources to combat what are arguably primary "criminal" threats to our way of life.

It is one thing to describe what may be, but it is another to make recommendations about what we need to do in order to prepare ourselves. For the younger generation, here are a few ideas for you to use or modify or reject as you see fit, but they are born of some experience and they are given freely for your consideration.

We need:

Imagination and original thinking – aided by a thorough understanding of what is possible…and impossible…but could be done if only…

Better practical understanding of complexity and complex conditions…including focused national Intelligence Community effort to determine the right applications for the science and theory of complex systems…

Training for key intelligence personnel that will prepare them for the evolving and potential future…

Tools, processes, and policies that will assist with handing future conditions…

Technologies that will meet future needs…

Facilities and mechanisms to support this vital work…

A future orientation that will provide us with the foresight to meet the next challenges…

The best minds and the greatest of human spirits to develop the capability this nation and others will need in the future…

> *Success cannot be advertised, failure cannot be explained. In the work of intelligence, heroes are undecorated and unsung, often even among their own fraternity.*
>
> *— Dwight D. Eisenhower*

10. Believe in yourself. It is the nature of the work of intelligence that not everything can be known or understood, notably even by the functionaries and magnates who oversee it. The important idea here is that the powerful ability and the significant responsibility of the individual cannot be understated.

One can find examples of the influence and importance of each individual intelligence person in many descriptions and histories of the work of intelligence. Interestingly, some of the more negative examples underscore the power and impact of failed patriotism and the rise of treachery and deceit. Recent examples include several convicted spies and some recently accused of espionage (in its new forms) but not yet found innocent or guilty, from a variety of the primary intelligence and security agencies. Espionage is as much an act of war as a man with a weapon.

The true patriots – the honorable and dependable vast majority of the Intelligence Community – are harder to use as public examples since the details of their work must often be kept secret. There is no doubt that those who labor in the intelligence vineyard every day and who keep the secrets, who follow the law, who voice their concerns, who form opinions, and who believe in what they are doing are among the finest of our citizenry and examples for others to emulate.

In few other professions are there so great the personal responsibilities for maintaining security, for keeping secrets, for conducting oneself within such sensitive boundaries, and for being devoted to the principles and values of our nation. The effort spent to acquire, vet, and maintain such people – professional intelligence practitioners – is but one example of the importance and confidence the government and the citizenry place in them.

If you, dear reader, are one of them, you should be both proud of yourself and pleased with what you represent. You should have – in an appropriate way – a belief in yourself as a worthy servant for those who depend on you and for the nation, the system, and the family that has produced you.

This is not about arrogant self-service. It is about personal sacrifice, and personal and collective achievement; at its very heart lies the true nature of this work – to keep our nation and its people safe from harm and free to engage in their lives.

For those reasons, have faith in yourselves, in this work, and in the institutions that support it. Believe in the basic precepts and ideals that we hold dear. Believe that you, and others like you, are both valuable and vital to the continuation of our nation in all its many forms. Believe too that what you do is a matter of trust and confidence that has been placed specifically in you – be very proud of that indeed.

In the end, we are only as strong as the weakest of our parts, including the people who hold so many of the links together. It is appropriate for any who serve as intelligence practitioners to ensure the viability of each and every person in this noble work.

War is the great auditor of institutions.

— Corelli Barnett

Conclusion: A modern observation may be added that contemporary warfare, of all kinds, has been, and may be, persistent and continuous. Thus, the thought may be that the auditing of our institutions is constant and necessary to our future security. This also supposes an audit of our people – with all the stress and strife that implies – but it is necessary. For those who pass through this harsh time of personal and professional estimation, we can only say thank you for the sacrifice and the devotion to our nation that this embodies.

This article is representative of the premise that there is a problem in our professional community that at least in part can be attributed to the differing views of those who have been at work in the business of intelligence for many years and those who have more recently arrived on the front steps, ready to slay every intransigent dragon and ready to move every intellectual rock away from the pathway to progress. If no such issue between the generations exists, then perhaps the reader will gain some ideas and some views quite apart from that premise. If such frictions and divisions as alluded to here do exist, then it is the author's greatest wish that some of the ideas and thoughts herein will help to begin the process of reconsideration and reconciliation as we make the great sweeping change from what has been the "longest period of sustained warfare" to whatever the future holds – stronger and more capable than ever – and with a military and civilian intelligence structure that is better because of its understanding that it must be a collective team rather than separate parts of a similar endeavor. Our country deserves the best that we can give it, and this article is written with that hope and that intent in mind.

The author accepts full responsibility for everything put forth herein…

All my best thoughts were stolen by the ancients.

— Ralph Waldo Emerson

LTG (USA, Ret) Patrick M. Hughes was the 12th Director of the Defense Intelligence Agency from 1996 to 1999. Prior to that, he was Director, J2, for the Joint Chiefs of Staff, CENTCOM J2, Commanding General of the Army Intelligence Agency, and Assistant Deputy Chief of Staff, Intelligence, on the Army Staff. From 2003 to 2005 he served as Assistant Secretary for Information Analysis in the newly established Department of Homeland Security. Now fully retired from the Army and government service, he heads his own consulting firm and travels often from his home in Florida to the Washington, DC, area to provide expert advice and assistance to the Intelligence Enterprise. He is a former President of the National Military Intelligence Association and served for many years afterward on the NMIA Board of Directors; he is now a Board Member Emeritus.

Doing More with More:
The Efficacy of Big Data in the Intelligence Community

by Major (USAF) Brant C. Reilly

SUMMARY

As a result of the National Security Agency (NSA) bulk data collection programs disclosed by Edward Snowden in June 2013, many Americans negatively associate the concept of bulk data collection with an invasion of privacy. This connotation of equating bulk data collection (i.e., big data programs) to a loss of privacy has hindered the big data movement and guided legislative discourse more toward the constitutionality of the programs rather than the possibilities offered by big data analytics. Furthermore, the media attention is focused more on privacy issues than the possible benefits to society that big data may provide. This article avoids debating Fourth Amendment privacy issues while acknowledging and understanding privacy concerns are essential to developing big data programs that can survive the political environment. The intent is to reduce the stigma associated with big data by providing insight into its intricacies, how big data is used in the Intelligence Community, and an analysis of the efficacy of the big data programs used by NSA that challenges general conclusions of the January 2014 New America Foundation report characterizing the programs as ineffective.

INTRODUCTION

The 9/11 Counterfactual

Saudi Arabian-born Khalid al-Mihdhar made multiple calls throughout 2001 to an al-Qa'ida safe house in Yemen. The content of seven calls was recorded by the National Security Agency (NSA). Regrettably, NSA did not know that al-Mihdhar, a known terrorist, was the person calling the safe house nor did NSA know the origin of the call. NSA analysts assessed the caller was overseas but, in fact, al-Mihdhar was living in San Diego, California.[1] On September 11, 2001, al-Mihdhar joined four other hijackers on American Airlines Flight 77 and crashed a Boeing 757 into the Pentagon. Ten years later, a classified Top Secret report on NSA's bulk collection programs claimed that the current programs could "close the gap that allowed al-Mihdhar to plot undetected within the United States while communicating with a terrorist overseas."[2] The report infers the 9/11 attacks could have been thwarted had the current bulk collection program been in place.

On the contrary, former senior executives from NSA believe the theory of bulk data collection preventing another 9/11 is "unproven and highly unlikely," and NSA actually "had enough information to prevent 9/11, but chose to sit on it rather than share it with the FBI or CIA."[3] Furthermore, one of the executives, William Binney, believes NSA officials are "making themselves dysfunctional by taking all this data."[4] The idea the 9/11 attacks *could* have been prevented may be valid, but the idea the attacks *would* have been prevented presupposes the appropriate agencies would have received the information collected. The second questionable assumption required to prevent the attacks is that the applicable agency would have actually acted on the intelligence in a timely manner. As Mr. Binney suggests, even today more information does not equate to more action.

Just because the Intelligence Community (IC) collects more information than it can process, however, it does not mean collecting less information is the answer.

Just because the Intelligence Community (IC) collects more information than it can process, however, it does not mean collecting less information is the answer. The IC, and specifically NSA, can mitigate the dysfunction by developing new methods of analysis as opposed to reducing data ingestion. Critics who argue bulk data collection needs to be curbed are fighting the tide of an information revolution that will alter how the IC analyzes information. This mass quantity of data is known as "big data," a term coined in the mid- to late 1990s and credited to John Mashey, a Silicon Graphics scientist.[5] The big data revolution proposes more data is better, no matter how sloppy or how much data exists. The question is not how much to collect, or even what to collect. The issue is how to process big data to provide a presentation of information that meets the needs of the analyst.

Background

As a result of the NSA bulk data collection programs disclosed by Edward Snowden in June 2013, many Americans negatively associate the concept of bulk data collection with an invasion of privacy. This connotation of equating bulk data collection (i.e., big data programs) to a loss in privacy has hindered the big data movement and guided legislative discourse more toward the constitutionality of the programs rather than their effectiveness. In addition, the privacy context of the leaks has heightened social awareness of data collection not only by the government but also by the commercial sector. As a result, media attention has primarily focused on privacy issues and is less attentive to the efficacy of NSA's programs and the overall benefits to society of big data analytics. The little attention that has been given to the efficacy of NSA's programs (e.g., a January 2014 New America Foundation, or NAF, report) typically characterizes the programs as ineffective. Unfortunately, this one word "assessment" is usually the depth of knowledge consumed by the general public. Even when looking beyond the initial assessment, the context of the report is clouded by political pretext and an implied assumption that if the intelligence is not decisive then it is not effective. This article attempts to reduce the stigma associated with big data by providing insight into its intricacies, how big data is used in the IC, and an analysis of the efficacy of the big data programs used by NSA that challenges general conclusions of the NAF's January 2014 report.

Thesis

As mentioned earlier, the collection capabilities of the IC are such that much more information is gathered than can be processed. This gap in capability for processing big data is limiting the analytical output that should be contributing to national security. Therefore, material resourcing for the IC should include efforts to improve big data analysis while concurrently educating intelligence professionals on how big data can legally enhance their mission. In addition, leadership in the IC must find the courage to modify security policies that enable more information sharing between organizations in a post-Snowden environment that is fostering more restrictive security policies to mitigate future security leaks. Material resourcing of bigger storage, faster processing power and, most important, intelligent software will improve the IC's ability to provide the best product based on the available information. The importance of educating the IC on big data is that each organization within the IC can harness it in different ways. In other words, the way NSA processes and presents big data is different than the way the National Geospatial-Intelligence Agency (NGA) does it. Consequently, every organization within the IC has a vested interest in learning how big data works best for it. Now is the time to harness the creative power of the masses to brainstorm socially safe solutions to the big data analysis problem before organizational inertia develops a model that will be difficult to change in the bureaucratic infrastructure of the IC.

Methodology

While constitutional considerations are important for policymakers, an apolitical analysis of big data's technical merit deserves equal attention. Therefore, this article avoids debating Fourth Amendment privacy issues while acknowledging and understanding privacy concerns as essential to developing big data programs that can survive the political environment. The method of research is to understand big data concepts and explore the efficacy of big data so that people can be better informed when discussing the pros and cons of big data analytics. To frame the discussion, big data, metadata, and other relevant concepts are defined. Next, current examples of big data usage outside the Department of Defense (DoD) and within the disciplines of the IC (e.g., signals intelligence, geospatial intelligence, etc.) are explored. The article culminates in a case study of NSA's big data programs investigating the efficacy of the programs, with consideration given to the constraints on NSA, the technology used, and human factors, such as how information is shared.

Privacy is the price one pays for indulging in the technological conveniences of the 21st century.

THE WORLD OF BIG DATA

There is hardly any part of one's life that does not emit some sort of "data exhaust" as a byproduct.[6]

— Craig Mundie, Senior Advisor to CEO at Microsoft

Privacy is the price one pays for indulging in the technological conveniences of the 21st century. Given that someone using an iPhone may transmit over 100 fragments of data just from one phone call, text, or running an application, people must understand they are creating a treasure trove of electronic behavioral data for exploitation by the commercial and government sectors.[7] Reducing an electronic footprint costs time and money, and most people conclude it is not worth the effort.[8] For example, if someone wants to mask his/her location and activity using The Onion Router (TOR) encryption software, browsing times are

slower. If someone wants a private email account (unlike Gmail, Yahoo! Mail, etc.), it must be purchased. People willingly put their data into the ether, but the question is who uses the data and how.

What enabled the arrival of big data is the "datafication" of information as opposed to its "digitization."[9] The difference between the two terms is that datafication is about translating information such as geographic position (latitude, longitude, elevation), "likes" on Facebook, or a person's unique sitting position (using pressure points throughout a seat) into data sets, while digitization can be likened to scanning a picture into a computer.[10] While more than 98 percent of information is in a digital format, it is the datafication of much of the digitization that has prompted the big data movement.[11] Personal electronic behavioral data is just one form of data that exists in the big data environment. Medical data, environmental data, and electronic intelligence (ELINT) data are just a few more examples of other types of data considered part of the big data landscape. It is also important to note "big data is distinct from the Internet" as the Internet is a means to share information while big data is about processing information.[12] The implication is the relationship between the Internet and big data allows all types of information to be searched and analyzed, which advances research possibilities in all fields of study. For the IC, this means learning how to datafy information, such as an individual's pattern of life. Using big data is a powerful tool to analyze intelligence problems. Big data is not a new concept within the IC. The challenge is realizing the potential of big data analytics across all the IC disciplines.

Another aspect of big data is that it "helps answer what, not why."[13] The concept is something with which ever-curious intelligence analysts must come to grips. The human psyche always wants to probe why, but that is not the value of big data. If the answer to a question needs to provide the "why," then big data may not be the appropriate source for analysis. This is not to say it cannot contribute to reasoning why, but the real significance is revealing the "what" through correlation. One way this concept has been put to use is in maternity wards. Doctors monitored 16 vital signs of infants using 1,000 data points per second while the babies where in their first days of life. Using these data, the doctors were able to predict oncoming medical problems before the infants showed any outward symptoms.[14]

Of course, one must be cautious about using big data as a predictive measure because acting on a correlation could produce negative outcomes. A commonly cited example in literature on the subject of big data is the futuristic movie *Minority Report*, in which people are arrested based on their propensity to commit a crime. Put differently, Cukier and Mayer-Schoenberger posit that big data correlation requires human analysis because "if Henry Ford had queried big-data algorithms to discover what his customers wanted, they would have come back with 'a faster horse.'"[15] Big data does not obviate the responsibility of people to use their creativity and intuition to optimize the way advanced technology is employed.

A final peculiarity of using big data is that it does not need to be pure and orderly, because the amount of data is so large that erroneous data has very little impact on the accuracy of the result for which an analyst may be searching.[16] This is much different from the days when taking small samples of data required the information to be controlled and pure to draw a valid conclusion. The result is that consuming mass amounts of data can be done in a more indiscriminate manner and one can save time by avoiding the requirement to scrutinize the small amount of data used in analysis.[17] This assumes the entity collecting the data has the material and human resources to process the data, which is one area where the IC is lacking. To bridge this gap, the Intelligence Advanced Research Projects Activity (IARPA) is crowd-sourcing intelligence through initiatives such as the Good Judgment Project that solicits thousands of people to research and predict global events.[18]

Another consideration of using big data is how to store and search the data. Required storage capacities are reaching levels that are indescribable using the average person's vocabulary of megabytes, gigabytes, and terabytes (see Figure 1). In some cases, petabytes (1,000 terabytes), exabytes (1 million terabytes), zettabytes (1 billion terrabytes), and yottabytes (1 trillion terabytes!) are now required to handle big data. In fact, NSA has built a data facility in Utah that may be able to handle up to a yottabyte.[19]

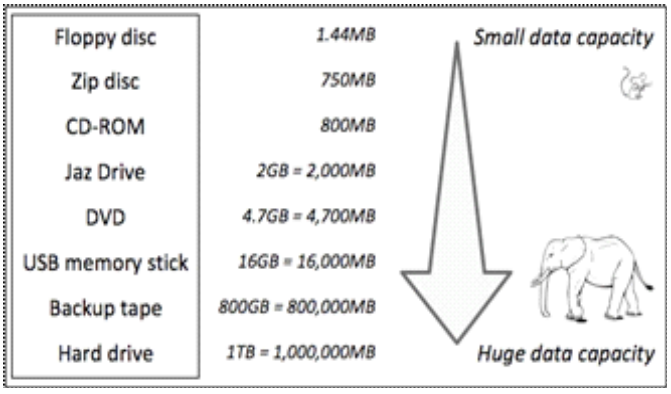

Figure 1. Evolution of Storage Capacity.[20]

To search the data, a concept called "metadata" was developed. Metadata is information attached to data that describes the data. For example, the Microsoft Word document used to write this paper has associated metadata

that allows someone to search for specific information such as topic keywords or author name (see Figure 2).

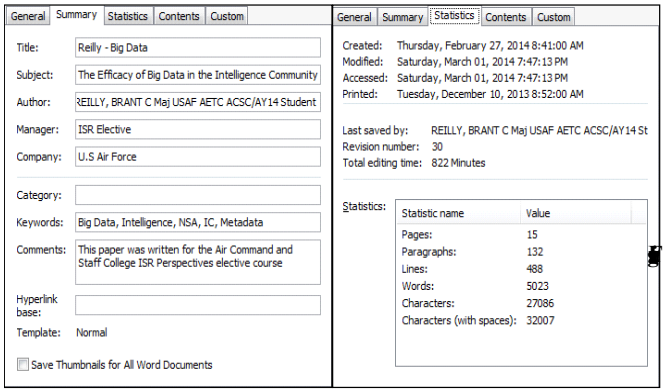

Figure 2. Microsoft Word Metadata.

A problem with metadata is that, even though there are standards published by the National Information Standards Organization (NISO), not everyone follows them. Therefore, when it comes to information sharing in the IC, all the agencies must use a common metadata standard to optimize search. In addition, intelligence analysts must populate as many of the metadata fields as possible to make the file searchable. For example, if someone creates an .MPEG video file and names the file "Russians.MPEG," the file is useless in a data search because the only associated data is the type and title of the file. As NISO advocates, the reason why metadata standards are so important is that they facilitate discovery.[21]

BIG DATA IN THE INTELLIGENCE COMMUNITY

> *We're looking for needles within haystacks while trying to define what the needle is, in an era of declining resources and increasing threats.*[22]
>
> *— David Shedd, former Acting Director of DIA*

Big data presents a world of opportunity to the IC for finding the needles within haystacks, but there are many challenges that must be overcome to harness the big data beast. Namely, the IC collects more data than it can process, must adapt to executive and legislative policy changes regarding data collection rules, needs to establish and use metadata standards that are compatible, and must find a way to navigate policy barriers (e.g., compartmentalized classified data) that limit information sharing within the IC.

Critics of the IC's ineptitude use the 2013 Boston Marathon bombing, the attempted 2010 New York City Times Square bombing, and the 2009 botched attempted by an "underwear bomber" on a commercial aircraft as examples of intelligence failures. It is a fact these attacks were not thwarted; hence, the question everyone asks is how could they have been prevented? There are three parts to the issue that will inform an answer.

> (1) What information (e.g., personal exhaust and not just digital) was produced by the people executing the attacks?
> (2) What information was collected?
> (3) What information was analyzed by the IC?

Answering the above questions serves the following three purposes:

(1) Learning what type of information the actors involved in the attacks produced provides a guide to future methods of collection (e.g., if actors are using non-traditional forms of communication it should influence how the IC collects in the future).
(2) Knowing what type of information was collected discloses the capability of the IC to collect certain types of data and may also reveal shortfalls in intelligence sharing and/or the ability to act on intelligence.
(3) Assessing the analysis in each case reveals the analysis capacity and effectiveness of the methodology. In other words, this will expose technical, educational, and policy shortfalls that can be improved or modified.

Therefore, where does big data factor into the above inquiry? Big data helps predict human preference and behavior. One needs to look no further than the data brokers such as Google, Amazon, Facebook, Acxiom, and Experian to understand that companies are willing to shell out big dollars for big data to help target their product based on customer preference.[23] Most of these data come in the form of SIGINT (signals intelligence) as Internet and telephone communication traffic falls into this category. Within the IC, NSA is the SIGINT authority while agencies such as the Department of Homeland Security (DHS) and the Federal Bureau of Investigation (FBI) also exploit SIGINT. However, SIGINT is not the only intelligence exhaust that can be collected. In addition, there are 14 other organizations within the IC that deal with the other categories of intelligence including HUMINT (human intelligence), GEOINT (geospatial intelligence), MASINT (measurement and signature intelligence), and OSINT (open source intelligence).[24]

One illustration of predictive analysis is DHS's Future Attribute Screening Technology (FAST) system. This product assesses the physiological attributes of individuals

to identify potential criminals. Using cameras and measurement devices it inputs "vital signs, body language, and other physiological processes" to make an assessment on the future actions of an individual.[25] Also, consider the fact there is now facial recognition that can search a database of 30,000,000 faces per second to find a match.[26] In any case, privacy advocates are having a field day with the disclosure of FAST as its utilization on the public can be likened to something as intrusive and unreliable as a lie detector. Nevertheless, it is interesting technology that demonstrates an application for big data in the IC.

Not only is big data suitable for predicting future events but a less controversial use is solving past crimes. For example, a jewelry heist of over $100,000 in Chevy Chase, MD, was solved using surveillance cameras (GEOINT) in combination with data from the suspects' cellphones (SIGINT) that provided location. The FBI was able to correlate the camera footage with the subpoenaed phone records that divulged the location of the suspects' phones throughout a police chase that ended in the suspects getting away.[27] Once the suspects were arrested on a later date, the FBI was able to prove that the suspects in custody were the personnel they chased previously because the suspects still had the same cell phones.

The predictive power and post-event analysis capability of big data needs to be incorporated into the analysis process for all organizations within the IC, not just agencies like the FBI and NSA. Even military services can use big data for applications such as indications and warning analysis. In addition, the current paradigm of big data analysis using statistical algorithms, computer memory, and processing power is one that leaves the human analyst as the limitation. Therefore, artificial intelligence is an area for continuing research that, when combined with big data sets, could unleash an entirely new ability for analysis. Considering how artificial intelligence is *teaching* a computer to think like a human, many see this as dangerous or technically impossible. Regardless, artificial intelligence research is a capability worth pursuing.

THE NSA'S EFFICACY USING BIG DATA

> *All those digital bits that have been gathered can now be harnessed in novel ways to serve new purposes and unlock new forms of value. But this requires a new way of thinking and will challenge institutions and identities.*[28]
>
> *— Kenneth Cukier and Viktor Mayer-Schoenberger*

When assessing NSA's efficacy in using big data, one must consider the constraints and capabilities of the organization. Documents that can inform this assessment include Presidential Policy Directive (PPD) 28, the NAF's report titled "Do NSA's Bulk Surveillance Programs Stop Terrorists?" and the Presidential Policy Review Group's report "Liberty and Security in a Changing World." Additional supporting information can be found on DNI's Tumblr website, http://icontherecord.tumblr.com, and other miscellaneous news outlet websites.

PPD-28 outlines guidance for organizations such as NSA which are involved in SIGINT collection activities. Whether or not this policy is a good one is outside the scope of this research; the purpose of reviewing PPD-28 is to identify constraints and other implications imposed by the directive. To begin, NSA is required to assess the possibility of using public or otherwise available information before executing a SIGINT collection mission.[29] If it is determined that SIGINT collection is necessary, the policy is that SIGINT can be collected only for counterintelligence or a foreign intelligence purpose.[30] When it comes to bulk collection, NSA is constrained to collecting data that protects against espionage, terrorism, weapons of mass destruction threats, cybersecurity threats, threats to U.S. or allied armed forces, and transnational criminal activity.[31] In general, all data can be retained onlyfor up to five years unless it "is in the national security interests of the United States"—the omnipresent loophole.[32] A major implication for NSA and big data programs is the President has directed that within one year he would receive a report from the IC assessing the feasibility of developing "software that would allow the IC more easily to conduct targeted information acquisition rather than bulk collection."[33] This program could end up being controversial as privacy advocates will probably be willing to sacrifice capability for reduction in collection, and this request by the President is an example of the stigma against bulk data collection. An alternative suggestion could have been to anonymize the data as opposed to reduce the amount because reducing the data pool renders big data analytics impotent.

When it comes to evaluating the performance of NSA contributing to national security, and specifically counterterrorism, there is a tension among former NSA employees, current NSA administrators, and the January 2014 report by the NAF. Former NSA employees claim that NSA had ample capabilities prior to 9/11, could have stopped 9/11, and it was senior-level mismanagement which led to the shortfalls in the agency. On the other hand, the then-NSA Director, General (USA) Keith Alexander, testified before Congress that the NSA programs helped "prevent over 50 potential terrorist events in more than 20 countries around the world."[34] The NAF categorizes senior U.S. government officials' statements that the NSA bulk collection programs prevent terrorist attacks as "overblown and misleading."[35] Specifically, the report asserts that NSA's bulk collection of telephone and email communication had

"no discernible impact on preventing acts of terrorism."[36] William Binney offered a third perspective when he wrote, "NSA's bulk collection is more hindrance than help in preventing terrorist attacks."[37]

With so many perspectives, it is difficult to resolve which side is right. Like most situations, the truth is somewhere in between. The NAF report offers the most comprehensive and statistically detailed source. This report examined 225 cases of individuals charged with an act of terrorism since 9/11 who also reflected similar ideologies to al-Qa'ida. This is a fair sample size to examine and a good analysis of NSA's counterterrorism capabilities, but it looks only at terrorism—there are five more mission areas identified in PPD-28 that authorize SIGINT collection where NSA might play a significant role.

The bottom line of the NAF report is that NSA's bulk collection program (Section 215 of the USA PATRIOT Act and Section 702 of the FISA Amendments Act) contributed to 6.2 percent of the 225 cases used in the report.[38] Notably, NSA made a contribution to 21 percent of the terrorism cases, but this percentage was not part of NAF's assessment because warrants were granted before NSA collected the data. Framing the effectiveness in terms of *warranted* versus *warrantless* underscores the reason there is a misperception that big data is ineffective. The NAF report does not really assess the role of bulk data collection in the fight against terrorism. Instead, the report evaluates the role of *warrantless* bulk data collection, which does not tell the entire story.

Finally, the NAF report claims that "the overall problem for U.S. counterterrorism officials is not that they need the information from the bulk collection of phone data, but that they don't sufficiently understand or widely share the information they already possess that is derived from conventional law enforcement and intelligence techniques."[39] Evidence that the IC is collecting the right information, but not using it properly, is illustrated by a scene involving Richard Clarke and George Tenet. Clarke, a former member of George W. Bush's National Security Council, accused Tenet of personally withholding intelligence from the FBI that would have been instrumental in foiling the 9/11 attacks.[40] While this vignette is subject to the memories and motivations of those witnesses to the scene, it is fair to assume that hoarding of information for political gain does occur. In addition, the security stovepipes that exist create additional barriers that limit collaboration and cross-cueing intelligence sharing which could have synergistic results.

CONCLUSION

Does the NSA collect any type of data on millions or hundreds of millions of Americans?

— Senator Ron Wyden

No, sir.

— James Clapper, Director of National Intelligence, Testimony to the U.S. Senate on March 12, 2013[41]

The only thing holding back the dominance of big data analytics within the IC is politics. Whether it is members of the IC doing a poor job advocating requirements, analysts getting blocked from accessing information, or privacy advocates stifling collection, politics plays an undeniable role in determining how big data will factor into future intelligence operations. The capacity for big data to produce an effect previously unattainable has been demonstrated, but critics are quick to point out that big data, specifically bulk metadata collection by NSA, has not been decisive in preventing terrorist attacks. Whether or not big data analytics are decisive in intelligence operations is irrelevant. Like any other capability or instrument of power, big data analytics is not intended to be decisive, but it is an important capability that when employed in conjunction with other capabilities provides an edge to the IC. This edge enables the IC to fulfill its mission of delivering critical information to senior U.S. government decision-makers and warfighters.

NSA must take the lead in harnessing the power of big data and share its practices with other elements of the IC. Furthermore, the IC must lobby for advances in technology that facilitate the ability to analyze big data. To overcome policy hurdles, these programs must be socially safe with respect to privacy rights. Finally, leaders in the IC should lobby for policy that does not limit the collection, but instead imposes limits on how the data are used, as this may appease privacy advocates. The limit of potential for big data applications is unknown; thus, barring collection could limit societal development. While the senior leaders of the IC struggle with politicians regarding policies that constrain data collection, the rest of the IC must acquaint itself with the concept of big data, seek methods to exploit its value, and lobby superiors for the materials and procedures to maximize the value big data brings to the IC.

Just as many societal advances in the past have emerged from Department of Defense programs, the IC has an opportunity to develop new ways of processing data that could contribute to other fields in new and exciting ways. Big data turns traditional research on its head because data collection has gone from "clean to messy, some to all, and

causation to correlation."[42] Policy that closes the doors for exploration in the field of big data analytics limits the possible societal benefits of the information age and negatively affects U.S. national security.

Notes

[1] Ronald Weich, Assistant U.S. Attorney General, letter to the House and Senate Committees on Intelligence, February 2, 2011, http://www.dni.gov/files/documents/2011_CoverLetters_Report_Collection.pdf.
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[Editor's Note: Maj Reilly's outstanding work earned him the 2014 NMIA writing award at ACSC, located at Maxwell AFB, AL.]

Psychology of Alternative Analysis

by Benjamin B. Anderson

Have you ever felt uncertain about an agency assessment or disagreed with a majority view? How did you feel? More importantly, what did you do? This article examines the cognitive challenges analysts experience when they arrive at a conclusion distinct from the majority consensus. In particular, it examines the psychological barriers of producing alternative analysis products. After discussing various psychological experiments conducted by academic institutions, we examine how their findings may apply to how the Intelligence Community (IC) approaches alternative analysis. We use the 2003 Iraq weapons of mass destruction (WMD) issue as a case study.

ALTERNATIVE ANALYSIS REQUIRES CREATIVE ANALYSTS… BUT WHO ARE THEY?

One of the most consistent findings in educational studies of creativity has been that teachers dislike personality traits associated with creativity. Research has indicated that teachers prefer traits that seem to run counter to creativity, such as conformity and unquestioning acceptance of authority.

– Erik Westby and V.L. Dawson, Creativity*: Asset or Burden in the Classroom?*[1]

What we've seen is that people who are the most successful here, who we want to hire, will have a fierce position. They'll argue like hell. They'll be zealots about their point of view. But then you say, "Here's a new fact," and they'll go, "Oh, well, that changes things; you're right."

– Lazlo Bock, Senior Vice President of People Operations for Google[2]

Creative individuals generally have a mixture of characteristics that run counter to the norms of an established system. Psychological research indicates creative individuals are typically risk takers, non-conformists, persistent, flexible, hardworking, independent, willing to defy convention and authority to explore new ideas and, when facing failure, they prefer to reformulate problems than give up.[3, 4] The IC has made strides in its ability to embrace creativity, but it still has far to go.

Recent History of Alternative Analysis

As a result of the "analytic failures" associated with Iraq's weapons of mass destruction (WMD) programs in the early 2000s, senior IC leadership emphasized the need for, and institutionalized, alternative analysis. The 2005 WMD Commission Report declared, "We must stress the importance of fostering a culture of alternative analysis throughout the Intelligence Community…Alternative analysis should be taught in the very first analyst training courses as a core element of good analytic tradecraft."[5] In 2007, the Office of the Director of National Intelligence published Intelligence Community Directive (ICD) 203: *Analytic Standards*. ICD 203 identified alternative analysis as a core element of analytic tradecraft and defined it as "rigorous, systematic analytic consideration of differing viewpoints, explanations for observed or reported phenomena or possible future outcomes."[6]

The IC is increasing the number of alternative analysis products it publishes; however, these products remain few and far between among analytic publications. Alternative analysis requires time and management support, but these are too often deemed luxuries in today's environment of reduced resources and competing demands. As a result, many analysts will never publish an independent alternative analysis product during their careers. Additionally, not all intelligence topics require alternative analysis products and can be adequately addressed by alternative statements within authoritative products, furthering perceptions of a decreased need to publish such products. However, some topics could benefit from multiple alternative analyses, but time and interest continue to be problematic.

While many analysts may never publish alternative analysis, they do more frequently engage in such discussions. Nevertheless, few of the alternative analysis arguments they examine reach the consumers who may be most interested in hearing those arguments. Often, these interested consumers are left to discuss alternatives with their trusted colleagues

without support of the IC. Furthermore, many analysts change accounts so quickly that their depth of knowledge on a subject is often insufficient to adequately identify alternative arguments. If the IC succeeded in more frequently publishing alternative analysis products, it could more actively support its consumers[7] while they examine alternative interpretations of intelligence issues.

CONFORMITY AND COGNITIVE DESIRE TO AVOID PERCEIVED RISKS

When given a chance to follow the majority or minority point of view, most people opt for the prevailing view. This is, of course, an adaptive strategy in most situations. Yet, evidence shows that people often choose to follow others even when that means abandoning the truth, and this is especially the case when…backed by an authority or someone who seems to be in charge.

— Barry M. Staw, Professor,
University of California, Berkeley[8]

Most people seek acceptance by their peers. By seeking this acceptance, people may knowingly make decisions contrary to the evidence before their own eyes in order to "fit in." This phenomenon has been described in various psychological experiments throughout the years. We will examine a classic psychological study from 1951.

The Asch Conformity Experiment

Look at the figure below. Can you identify which line on the right is the same length as the line on the left? The answer is simple. It is line B. However, if you were in a group and six people before you said the correct answer was, in fact, line C, would you still answer B? Statistically, there is a good chance you would deny the evidence of your own eyes and answer in unanimity with the group.

[A]Of course, this assumes all consumers want to read alternative analysis—something which is not necessarily the case.

In 1951 Solomon Asch, a professor at Swarthmore College in Pennsylvania, devised a psychological experiment that has since become a classic study of group conformity. In his study, Asch recruited college students for a "vision test." In addition to these students, Asch recruited seven confederates to assist in his experiment. The other students did not know Asch recruited confederates. In each experiment, all of the confederates and only one unsuspecting college student participated at a time. They sat in rows and the unsuspecting student was placed second to last in the final row. Asch then showed cards one at a time to the group; each card was similar in design to the above figure but each card had lines of differing lengths with only one line that matched the model line.[9]

Asch asked each person, starting with the six confederates, one at a time to verbally identify which line on the right matched the length of the line on the far left. In each case the confederates deliberately gave the same incorrect answer (such as line C above). The unsuspecting student could clearly see the lines and in most cases believed that the answers given by the previous students were incorrect. Nevertheless, the unsuspecting student frequently gave in to the group consensus and conformed to the majority view. In other words, the subject denied the evidence of his own eyes and yielded to group pressure. Asch's experiment illustrated that one-fourth of the unsuspecting students gave incorrect majority-determined estimates from eight to twelve times (twelve was the highest possible number of incorrect majority-determined answers). One-half of the unsuspecting students gave incorrect majority-determined estimates between one and seven times, while only one-fourth of the unsuspecting students gave consistently accurate answers.[10]

In Asch's control group, he found that 95% of subjects demonstrated accuracy in their estimations of the length of the lines while only 25% of the subjects in the experimental groups demonstrated error-free responses, reflecting the enormous influence a group majority has on an individual's responses. Asch stated, "The far-reaching compliance of persons with group demands was referred to a psychological tendency to 'uncritical acceptance' of group ideas and evaluations. General observation and controlled studies seemed to support the conclusion that the fundamental social-psychological process was that of conformity."[11]

After conducting the experiment, Asch interviewed the non-confederate students, told them the true purpose of the experiment, and asked why they gave the answers they did. A few of their responses were:

"They must be right. There are [more] of them and one of me."

"I know they're wrong but why should I make waves?"

"I felt the need to conform…Mob psychology builds up on you. It was more pleasant to agree than to disagree…It takes a lot of nerve to go in opposition to them."

"If so many people say one thing, it is bound to influence you."

"It is hard to be in the minority."[12]

The implications of this experiment on the production of alternative analysis in the IC are stark. An intelligence assessment of any sort will never be as cut-and-dried as the measurement of a few lines on a card. An analyst must face a community of his/her peers, often stand alone in their midst, and outspokenly claim there are other plausible hypotheses that may be receiving inadequate attention.

...statistically speaking, there are probably fewer analysts willing to defy a majority consensus even when they themselves do not believe in the argument.

Of his test subjects Asch concluded, "A substantial proportion of subjects yielded once their confidence was shaken. The presumed rightness of the majority deprived them of the resolution to report their own observations."[13] Based on Asch's findings, statistically speaking, there are probably fewer analysts willing to defy a majority consensus even when they themselves do not believe in the argument. Furthermore, the probability that an analyst would pursue an alternative analysis on a presumably "established" issue, let alone succeed in publishing, is quite low when faced with such opposition and an inherent desire to conform to the rest of the group.

PROSPECT THEORY

Imagine you had to decide between two financial options. The first option you could choose has a 50% chance of gaining $1,000 (versus a 50% chance of receiving $0), and the second option has a 100% certainty of gaining $500. Which option would you choose?

A: (1,000; .50) vs. (0, .50)
B: (500; certain)

Prospect Theory is an economic theory of behavior when assessing risk. Daniel Kahneman received a Nobel Memorial Prize for developing this theory. His findings have shown that people are risk-averse when assessing gains and risk-seeking when assessing losses. Thus, in the problem above, the vast majority of people (84%) chose option B which they assessed to be safe and certain.[14]

Prospect Theory and Standard Intelligence Problems

We may be able to compare Kahneman's work to decision-making in how analysts determine whether to pursue alternative analysis within the IC; however, a pure application of the theory would be an imperfect cost-benefit comparison for our purposes. As such, we should expect some variation in potential rewards. For example, Kahneman's standard reward of zero could actually result in a limited positive outcome if it is inaccurate but yet well received by consumers, or it could result in a negative outcome if it is inaccurate and poorly received by consumers. Below is an example of how an analyst may view the value of pursuing alternative analysis when dealing with a typical problem set.

Option A: Pursue Alternative Analysis (1,000; .50) and (0 ± 100; .50)
Option B: Pursue Projects Perceived as More Productive than Alternative Analysis: (500; certain)

Option A offers a high reward if accurate, but also has an equal probability of a reward between +100 and -100. However, Option B offers certainty that the immediate reward will be a significant positive result because it will be time perceived well spent on other projects deemed to be more productive while avoiding any potential embarrassment of being wrong and non-conformist in front of peers by publishing an alternative analysis. Alternative analysis is by nature non-conformist and, as Asch pointed out, if people believe themselves to be a minority, they desire to avoid embarrassment and will often prefer denying the evidence of their own eyes rather than experience potential embarrassment in front of the majority opinion.[15] Even though Kahneman's Option A assumed a 50% chance of a $1,000 reward, only 16% of subjects chose that option. This presents an even greater problem when analysts are determining whether to pursue alternative analysis since, by definition, the authoritative analysis already ruled the alternative hypothesis has less than a 50% chance of accuracy, thus less than 50% chance of reward. In some problem sets, the chance of accuracy could be perceived as lower than 10%. Thus, some of the 16% of subjects who originally chose Kahneman's Option A[16] may switch and choose Option B when facing such stark odds. With those kinds of statistics, we start to understand why analysts publish so few alternative analysis products.

PROSPECT THEORY AND SIGNIFICANT INTELLIGENCE SHORTCOMINGS

Controversy is only dreaded by the advocates of error.

– Benjamin Rush[17]

Now imagine you had to choose between two new options: Option A, in which there is a 10% chance of losing $1,000 and a 90% chance of losing $500, versus Option B, which offers certainty of no loss. Which option would you choose?

Option A: (-1,000; .10) and (-500; .90)
Option B: (0)

Only a confused individual might select Option A because Option B offers certainty of no loss, whereas there is guaranteed loss in selecting Option A.

Now imagine how this might apply to whether an analyst should pursue alternative analysis of an issue that might expose serious intelligence shortcomings. Option A to pursue alternative analysis offers a net loss because either (1) it will expose intelligence shortcomings and policymakers will be upset and analysts will be embarrassed, or (2) it will not expose intelligence shortcomings, but it could create the *perception* of shortcomings which also has negative consequences on organizations and individuals. However, Option B to not pursue alternative analysis ensures no immediate losses with only the possibility of a loss in the future if such an intelligence shortcoming actually occurred. Quantifying the effects of exposing real or perceived analytic shortcomings is difficult and would vary based on individual situations. Below is a general illustration of the dilemma:

Option A: exposes shortcomings (-1,000; .10) or creates perception of possible shortcomings (-500; .90)
Option B: No possibility of real or perceived shortcomings exposed (0; certain)

Because people are by nature risk-averse, we should expect most analysts to select Option B. The exception may be when another analyst has no perception of, or concern over, potential blowback from challenging an assessment. Such an analyst may be more willing to pursue such analysis; nevertheless, He/she may struggle convincing those around him/her to publish an alternative view when those responsible for ultimate publication see the result as a net loss. Furthermore, the fear of being perceived as a whistleblower (when being a whistleblower may not be the intent at all) or the fear of failing to back a group consensus contributes to analysts' aversion to publishing alternative analysis on sensitive subjects. This does not bode well for implementing the WMD Commission Report's recommendation that alternative and contrarian analysis should be "licensed to be troublesome."[18] The reality that we too frequently choose the safest paths ensures more mediocre rather than exceptional analysis, but who can blame us when the riskier choice has a net loss for analysts? As discussed earlier, creative individuals tend more often to be risk-takers; thus, they may not perceive an Option B at all. They may simply perceive only Option A because they are by nature more willing to defy consensus to arrive at what they perceive to be the truth of the matter.[19]

...creative individuals tend more often to be risk-takers...

The IC strives to reduce uncertainty in its assessments in order to provide policymakers and warfighters the highest amount of confidence that they are acting on accurate information; however, alternative analysis does just the opposite. It strives to *increase* uncertainty and expose potential flaws in the authoritative analysis and subsequently provide that information to the very customers acting upon the authoritative assessments. Publishers of analysis are then faced with a dilemma. Should they publish an alternative analysis that increases uncertainty in authoritative assessments, thus potentially, and unnecessarily, increasing doubt in the minds of their customers as to the quality of the "bread and butter" authoritative assessments? Or should they suppress alternative analysis in favor of "not confusing the customer"?

Alternative analysis should be a practice in which risks are allowed and common, but ultimately the risk to the entity which produces the analysis is that it appears to be non-conformist and an unnecessary troublemaker. In other words, it is measuring a line differently than all others who have previously agreed how long that line is.

COGNITIVE DISSONANCE THEORY

Man 1: "*Why do you smoke? You know it's bad for you.*"
Man 2: "*My father smoked and lived to be eighty. I've smoked for twenty years and I'm still doing fine.*"
Man 1: "*But you're an M.D.!*"

The theory of cognitive dissonance has generated enormous amounts of research since Leon Festinger originally hypothesized it in 1957. He explains it has two basic premises as follows:

- "The existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance."
- "When dissonance is present, in addition to trying to reduce it, the person will actively avoid situations and information which would likely increase the dissonance."[20]

Cognitive dissonance theory explains how we often process information that runs counter to what we believe. For example, in the anecdote above, the smoker is actually a medical doctor. He has been through years of medical school and could easily have been practicing medicine for several years and advised others to stop smoking due to its harmful effects. However, he has rationalized away his dissonant beliefs.

When someone is presented with information that goes against what he believes, cognitive dissonance begins to take effect. At that moment, he is holding contradictory views within his mind and his mind does not like dissonant information. Festinger offers the following:

> *The presence of dissonance gives rise to pressures to reduce or eliminate the dissonance. The strength of the pressures to reduce the dissonance is a function of the magnitude of the dissonance. In other words, dissonance acts in the same way as a state of drive or need or tension. The presence of dissonance leads to action to reduce it just as, for example, the presence of hunger leads to action to reduce the hunger. Also, similar to the action of a drive, the greater the dissonance, the greater will be the intensity of the action to reduce the dissonance and the greater the avoidance of situations that would increase the dissonance*.[21]

If people actively avoid situations and information that increase dissonance, then analysts may be avoiding publishing alternative analyses that would not only increase dissonance in them but would increase dissonance in customers. Some customers may not appreciate equivocal analysis on highly important issues; however, we should not shun analysis simply because it causes us mental stress. Nonetheless, there is much incentive to avoid publishing anything that increases dissonance.

Now imagine you are an analyst and had worked on an issue for several years. You are well-respected, highly intelligent, and formed the baseline assessment for your organization, an assessment with which other U.S. intelligence organizations agree. Then one day another analyst presents you information you previously discredited that says a great deal of your work over the past several years is inaccurate. What would you do? The answer is not straightforward.

Coping Mechanisms for Cognitive Dissonance

If there is dissonance between two elements, a reduction of dissonance may be achieved by modifying one of the elements, though there are multiple methods for modification depending on the elements involved. These coping mechanisms that reduce dissonance include modifying the environmental element to gain support of others who hold similar beliefs, modifying the cognitive element (one's own beliefs) to fit the new information, or adding new cognitive elements (new sources of information) that support your beliefs while avoiding those that cut against them.[22]

Modifying Environmental Elements to Reduce Dissonance

Modifying environmental social elements could more commonly be referred to as a "group think" response. For example, if an analyst presents a manager with analysis that is dissonant from the agency's published assessment, the manager may simply reach out to a few trusted colleagues who share similar views as the manager to gain social support for his/her beliefs.[23]

Modifying Cognitive Elements to Fit the Discordant Information

Changing one's mind in light of new and compelling analysis is something for which the IC prides itself. It is a sign of integrity, honesty, objectivity, and intellect. It is also something that can be hard to do because, as Richards Heuer noted, "Once the analyst is committed in writing, both the analyst and organization have a vested interest in maintaining the original assessment."[24] If an analyst changes a belief on an issue to attain consonance in one area of analysis, then a whole host of new dissonances may arise in other areas of analysis as a result of the first change, thus further incentivizing alternatives for discounting the dissonant information.[25] The fear is, "That cannot be right because everything this suggests makes things we have said on other aspects wrong, and that's unlikely."

Adding New, Possibly Unrelated, Cognitive Elements to Reduce Dissonance

The last of the primary coping mechanisms is, when faced with dissonant information that cannot be eliminated, to add new cognitive elements to reduce the magnitude of dissonance. For example, a smoker may actively seek out information that is critical of studies which indicate smoking is bad for one's health while avoiding information that supports the idea smoking is bad for one's health.[26] In the IC we might use sources of evidence that, while perhaps

imperfect, still support our original beliefs while we simultaneously avoid new dissonant arguments and information. Another example would be to dismiss analysis with the following logic: "It is not the source of information that is problematic; it is the analyst who analyzed it," or "the analyst's concern is overstated."

Cognitive Backfire: When Corrective Information Not Only Fails to Change Misconceptions, It Strengthens Them

> *False facts are highly injurious to the progress of science, for they often endure long...*
>
> – Charles Darwin[27]

> *It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.*
>
> – Mark Twain[28]

One of the studies that branched from Festinger's theory of cognitive dissonance is that of a "backfire effect" when corrective information not only fails to change a misperception but actually reinforces the misperception. In 2006 Brendan Nyhan and Jason Reifler, researchers from the University of Michigan and Georgia State University, respectively, conducted experiments to identify to what extent corrective information influences belief changes. They explain that there is an important distinction between being *un*informed and being *mis*informed. They further state that it is especially important to determine whether misperceptions, which distort opinion and debate, can be corrected.[29] They defined misperception to include both false and unsubstantiated beliefs about the world.[30] This is especially important when, in the IC, we too must engage in analytical debate. In other words, to what extent can we as intelligence analysts avoid a cognitive "backfire" that reinforces misperceptions even when confronted with evidence to the contrary?

Part of Nyhan and Reifler's studies examined whether political ideology had an effect on subjects failing to change their political misperceptions when presented with corrective information. Nyhan and Reifler focused on controversial political issues such as the Iraq war, whether tax cuts promote economic growth, and stem cell research. Their subjects were college students. In each experiment, subjects were randomly assigned to read an article with or without factual corrections after a false or misleading statement. After reading the articles, they were asked factual and opinion questions. Nyhan and Reifler found that some subjects did revise their beliefs when presented with corrective information, but they also found "corrections fail to reduce misperceptions for the most committed participants. Even worse, they actually strengthen misperceptions among ideological groups in several cases…The backfire effects that we found seem to provide further support for the growing literature showing that citizens engage in 'motivated reasoning'."[31]

Nyhan and Reifler's findings may have unique bearing on intelligence analysts as well, though not necessarily referring to their political ideology in the workplace. For example, consider an analyst who has published an authoritative assessment saying X arrived at that conclusion because he/she actually believed it to be accurate after dismissing other hypotheses determined to be unlikely. Therefore, if presented with corrective information emanating from another hypothesis, the analyst might not change his/her beliefs at all because he/she already had a higher degree of commitment to the prior analysis due to a personal equity in it. This is reflective of a finding by Richards Heuer when he said, "As a general rule, people are too slow to change an established view, as opposed to being too willing to change. The human mind is conservative. It resists change."[32] Moreover, "impressions often remain even after the evidence on which they are based has been totally discredited."[33]

...analysts who are the most committed to the analysis—those who wrote it—may be the most likely to experience backfire and become even more committed to it even when presented with corrective information.

Thus, the implication, if this study can be applied to the IC, is that analysts who are the most committed to the analysis—those who wrote it—may be the most likely to experience backfire and become even more committed to it even when presented with corrective information.

IRAQ: A CASE STUDY IN CHALLENGES OF PUBLISHING ALTERNATIVE ANALYSIS

The 2005 WMD Commission Report brutally criticized the Intelligence Community's inability to accurately assess the status of Iraq's WMD programs and recommended frequent production of alternative analysis as one of several measures to avoid future analytic shortcomings.[34] We will now examine how psychological and cognitive barriers interfered with the IC's ability to produce alternative analysis of Iraq's WMD programs.

Asch Experiment Applications

The Asch Experiment revealed findings beyond classical "group think" and explored how individuals are motivated to conform to a group even when the evidence of their own eyes clearly contradicted the findings of a larger group. The task was simple—identify which of three lines matched a standard fourth line—but when a group of individuals answered first and answered incorrectly, the test subject very frequently conformed to the group consensus in his answer.[35] In the case of Iraq, assessments had been piling up for years that culminated in the production of the 2002 October National Intelligence Estimate (NIE). In essence, members of the IC had been measuring the length of lines for several years and had determined that a particular line matched the hypothesis that Iraq was reconstituting its WMD programs. Any analyst who could have been doubtful of the conclusions in the NIE undoubtedly would have felt an overwhelming urge to conform to the rest of the Community. The WMD Commission even stated the following:

> Over the course of 12 years the Intelligence Community did not produce a single analytical product that examined the possibility that Saddam Hussein's desire to escape sanctions, fear of being "caught" decisively, or anything else would cause him to destroy his WMD. The National Intelligence Officer for Near East and South Asia noted that such a hypothesis was so far removed from analysts' understanding of Iraq that it would have been very difficult to get such an idea published even as a "red-team" exercise. An intellectual culture or atmosphere in which certain ideas were simply too "unrespectable" and out of synch with prevailing policy and analytic perspectives pervaded the Intelligence Community. But much of the conventional wisdom that led analysts to reject even the consideration of this alternative hypothesis was itself based largely on assumptions rather than derived from analysis of hard data.[36]

Even if an analyst disagreed with the conclusions, the desire to conform and the expected difficulty in publishing such an alternative view would have been overwhelmingly difficult to impossible. In essence, the attitude may have been reflective of Asch's subjects when they said, "They must be right. There are [more] of them and one of me." "I know they're wrong but why should I make waves?" "I felt the need to conform…Mob psychology builds up on you. It was more pleasant to agree than to disagree…It takes a lot of nerve to go in opposition to them." "If so many people say one thing, it is bound to influence you."[37]

Prospect Theory Applications

An essential element of Prospect Theory is that of being risk-averse when assessing gains.[38] Pursuing alternative analysis on rapidly changing issues is generally less risky for analysts because all the policymakers and warfighters involved generally recognize how a dynamic situation quickly changes assessments. However, for more strategic long-term assessments such as those described in the 2002 Iraq WMD NIE, challenging key strategic-level assessments into which money, policy, and defense pivot can be perceived to be dangerous for analysts if wrong. For example, the WMD Commission Report stated key information regarding Iraq's WMD programs emanated from a source known as "Curveball"; however, after publication of the October 2002 NIE, but before Secretary of State Colin Powell's February 2003 address to the United Nations, the IC learned of important information casting doubt on the reliability of Curveball's information, but it did not provide that information to policymakers.[39] It then begs the question, why not? It is because it is a net loss to publish such information. For example, imagine how much money, Intelligence Community assets, and policy/defense resources were tied up in the 2002 NIE. If anyone dared to publish information casting doubt on the reliability of those assessments they would either (1) eventually expose analytic shortcomings which would create an uproar in the policy and defense community, or (2) it would create the *perception* of possible shortcomings. In both of these outcomes huge amounts of money and resources would or could be affected, and what analyst wants to be responsible for rocking such a large boat, potentially unnecessarily? Perhaps analysts deferred and did not publish anything because there would not be any potential perceived analytic shortcomings at that time, with the possibility that no analytic shortcomings ever occurred anyway. Thus, the cost-benefit ratio may have appeared something akin to the options described below:

> Option A: Exposes shortcomings (-1,000; 10%) or creates perception of possible shortcomings (-500; 90%)
> Option B: No perceived shortcomings (0; 100% outcome for immediate future, with possibility of no analytic shortcomings exposed at all in the distant future)

Cognitive Dissonance Theory Applications

Cognitive Dissonance Theory explains how we process information that runs counter to what we believe. It motivates people to reduce dissonance and achieve consonance.[40] When analysts received information casting doubt on the reliability of Curveball, they still had analysis on which they thought they could rely that would lead them

to perhaps similar conclusions. Thus, discordant information on Curveball was discounted because that information still matched other information they possessed. Festinger writes, "The presence of dissonance gives rise to pressures to reduce or eliminate the dissonance. The strength of the pressures to reduce the dissonance is a function of the magnitude of the dissonance."[41] Highly discordant information regarding Curveball, who was a key source, would be highly dissonant; thus the pressure to reduce that dissonance would also be high. The WMD Commission Report cut to the heart of the issue when it stated:

> That is not to say that [the Intelligence Community's] fears and assumptions were foolish or even unreasonable. At some point, however, these premises stopped being working hypotheses and became more or less unrebuttable conclusions; worse, the intelligence system became too willing to find confirmations of them in evidence that should have been recognized at the time to be of dubious reliability. Collectors and analysts too readily accepted any evidence that supported their theory that Iraq had stockpiles and was developing weapons programs, and they explained away or simply disregarded evidence that pointed in the other direction.[42]

This is classic cognitive dissonance theory. When presented with information that undermined its analysis, the IC avoided discussion of it, and it was too willing to find confirmations of its conclusions in other evidence that was of dubious reliability.

Alternative analysis has the odds stacked against it.

CONCLUSION

Alternative analysis has the odds stacked against it. The Asch Experiment, Prospect Theory, Cognitive Dissonance Theory, and other factors support the conclusion that dedicated alternative analysis faces significant hurdles. In addition, most analysts may never publish any alternative analysis products during their careers. As such, it seems there is still much progress to be made in ensuring alternative analysis arguments reach customers.

In addition to the psychological barriers in producing alternative analysis, there are also procedural hurdles. There is good vocal support for alternative analysis within tradecraft teams but, as one analyst recently remarked, "I just don't think there's an appetite for alternative analysis [outside of dedicated tradecraft teams]." This lack of analytic interest is highly problematic. It is this lack of interest that somewhat contributed to an errant 2002 NIE. Facilitating the production of alternative analysis to reduce procedural and psychological hurdles would alleviate part of the problem. New understandings are not generated from the core of what we know; they are generated from the edge of what we know. Changes in analytic lines cannot and will not occur unless arguments are allowed to go forward that discuss the fringe concepts of what we know and what we do not know.

The Intelligence Community cannot force creativity and initiative; it can only foster an environment in which they can thrive.

In conclusion, the Intelligence Community cannot force creativity and initiative; it can only foster an environment in which they can thrive. These findings suggest that, if the IC is going to successfully confront the challenges before it, it must be a much more vocal advocate of alternative analysis while simultaneously pursuing methods to reduce psychological and procedural barriers to its production.

[Author's Note: The views expressed in this article are those of the author and do not reflect the official policy or position the Department of Defense, or the U.S. government.]

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Intelligence Analysts Not Providing Options for Consideration to Policymakers:

An Anachronism Whose Time Has Passed?

by Marty Z. Khan

INTRODUCTION

Intelligence analysts have a fiduciary responsibility to support policymakers and military commanders and help them succeed.[1] However, to help policymakers succeed requires imagination—a thinking challenge—to build trust and add value to a partnership. All intelligence analysts know the sensitivity of this partnership to avoid politicization or infringing on the policymakers' domain. Nonetheless, sacrosanct it must remain, but the Intelligence Community (IC) must explore opportunities to help policymakers. To be relevant, intelligence analysts should provide options for policymakers' consideration, not make recommendations, and avoid being policy-prescriptive—this paradigm is an anachronism whose time has passed.

Remaining relevant, but neutral, is not an easy goal. Intelligence analysts must have a deep understanding of what policymakers want to accomplish, and the context in which policymakers operate.[2] Equally, it would benefit the intelligence analysts to know the officials for whom they work or support. The analysts could gauge better on presenting all possible views on any issue to help the official construct the most comprehensive solution. Some do but, unfortunately, many do not. Moreover, those who do and interact with policymakers rarely share information with junior and mid-level intelligence analysts.

In the realm of policymaking, intelligence analysts operate in complex organizations between layers of bureaucratic hurdles.

In the realm of policymaking, intelligence analysts operate in complex organizations between layers of bureaucratic hurdles. The Congressional Research Service reported in September 2013 that it is now publicly acknowledged intelligence appropriations are a significant component of the federal budget—over $78 billion in Fiscal Year 2012 for the national and military intelligence programs.[3] Within the parameters of organizational rivalry and bureaucratic hurdles, analysts must use discretion to compete for policymakers' time. Credibility and trust are attributes that give an analyst an advantage to get access to policymakers. However, organizational culture pressures analysts to meet production quotas and deadlines, which can become impediments to establishing and nurturing working relationships with policymakers.

This article examines intelligence analysts'[4] and policymakers' responsibilities and the benefit of analysts providing options for consideration (not recommendations) in their intelligence products. Considering intelligence analysts' closeness to some key information, providing options for consideration would require analysts to think more deeply and critically about what could be done to solve or mitigate the risks to the intelligence question studied.

POLICYMAKERS' UNIVERSE

In the American political system, policymaking is the domain of elected and senior appointed officials. The Executive Branch has the distinctive and exclusive responsibility to make policy, as directed by the President. If a policymaker fails, he or she will be held accountable, not the intelligence analyst. In cases where the matter has been reported negatively in the media markets and tarnishes the Executive Branch's reputation, it is the policymaker who will likely lose his or her job, not the intelligence analyst. Martin Petersen, a former senior CIA officer, noted every intelligence product must be rooted in a strong understanding of the audience for which it is written. However, this relationship is not automatic; it requires "a great deal of effort."[5]

Policymakers operate in a universe largely characterized by competing personalities and agendas. In such an environment, an official will have an agenda to advance or a goal to achieve, as directed by elected officials in the Executive Branch. Specifically, in the national security arena, political ideology and philosophical beliefs with respect to a particular policy likely will entail numerous personalities, and the principal policymaker generally will rely on his or her own professional contacts and instincts to make a decision. While intelligence analysts have a supporting role, the

policymaker would more than likely lean more toward his or her own agenda because of the political dimension of policymaking. As such, an intelligence analyst who lacks credible collaborative links would be of no use to the policymaker. In turn, the policymaker would use other sources (i.e., open and personal professional contacts) to get alternative perspectives on key intelligence-related issues linked to his or her policy portfolio.

Policymakers deal with uncertainty, driven by self-interest and the need to take action. Therefore, policymakers need facts to see that something is not working on narrowly focused aspects of key policy issues. The resolve to succeed is a powerful force that drives the policymaker to make decisions, essentially taking the role and responsibility as the "super" senior analyst for his/her portfolio.[6] Making decisions with incomplete information, lack of facts, and contradictory assumptions are some of the challenges policymakers face. If intelligence analysts understand policymakers' challenges, they would become more valuable to the policymakers. However, all this requires imagination, i.e., critical and creative thinking. Moreover, the challenge for intelligence analysts is to overcome organizational hurdles established by managers, who lack foresight and initiative to reach out to policymakers.

Policymakers and intelligence analysts are part of the same team, with the policymaker the principal sanctioned authority responsible for making policy. Policymakers want to make sure the IC is not working in a vacuum and that intelligence analysts know what is on policymakers' minds, what questions they want answers to, or what they should be paying attention to.[7] Not knowing what a policymaker wants, or what is on his or her mind, poses a risk in answering a wrong intelligence question.[8] Yet, if the right question is occasionally answered, the assessments do not always reach the policymaker in a timely manner. Layers of redundant organizational reviews, intended to make the product better for the policymaker, sometimes add little value and delay getting the product to the policymaker.

Policymakers need information to make decisions. The information, however, must be timely, accurate, and relevant. Considering new technologies that enable the dissemination and diffusion of information, the IC nevertheless must compete with media outlets for policymakers' time. Busy policymakers use what little time they have to inform national media outlets, which make the "IC no longer the exclusive, or even a privileged, provider."[9] Without a recognition that intelligence analysts and policymakers are members of the same team, direct communication, feedback, and careful tailoring of support will remain elusive.[10] The sheer volume of intelligence products overwhelms policymakers, forcing them to continue to rely on other sources, and widening the distance from intelligence analysts. Thus, making the argument for intelligence analysts to seek a close partnership with policymakers and making the use of intelligence in policymaking a shared responsibility is necessary, especially since analysts have access to all-source intelligence.

Policymakers want to leverage all-source intelligence—opportunity analysis—to help establish policies or develop new ones.

Policymakers want to leverage all-source intelligence—opportunity analysis—to help establish policies or develop new ones. Robert Bowie, a former CIA Deputy Director, noted that in order for intelligence analysts to produce results you [the intelligence analyst] have to get much closer to policymakers, and the IC must not produce literature, but results.[11] Moreover, Richard Haass, a former Department of State official, advised that helping the policymaker succeed requires analysts "to persistently, and if need be, annoyingly press to get close to policymakers and peer over their shoulders to see what is on their agenda." He also noted that, when one sees something missing from that agenda, "Then you [the intelligence analyst] must market your product and impress upon policymakers why they should pay attention to it."[12] Thus, the failure of communication between intelligence analysts and policymakers diminishes the value intelligence analysts can add to policymaking.

[Editor's Note: Haass is now President of the Council on Foreign Relations in New York City.]

INTELLIGENCE ANALYSTS' UNIVERSE

Intelligence analysts have access to specialized all-source information that is immensely useful to policymakers for making decisions. In the IC's world of complex bureaucratic organizations, the focus is on exceeding production goals, key metrics for measuring performance. Considering intelligence analysts write assessments for policymakers, and policymakers look to the IC for facts, it is even more important for analysts to understand the full range of policymakers' needs. Not understanding policymakers' needs risks analysts becoming irrelevant.

The IC has remarkable resources at its disposal for collection and analysis. However, the IC's layers of bureaucratic reviews and administrative processes stymie creative thinking and delay production of intelligence assessments. Quite simply, understanding the policy and decision-makers' processes is important for intelligence professionals

to produce products of value for policymakers. Nevertheless, when analysts are not following the policy and political debates on what is in the country's national interests, resources are wasted. Consequently, instead of producing products linked to formalized lists of intelligence requirements, analysts should produce to meet the policymakers' current needs. In addition, when analysts understand such needs, they can refine collection efforts—through intelligence evaluations—to more focused policy requirements and, therefore, maximize the utility of the IC's resources.

Sherman Kent...warned of the dangers of analysts getting too close to their policymaking and action-taking clients.

Intelligence analysts have the charge to convince each policymaker that they are committed to providing quality analytic support. To achieve this, the analyst would have to learn about the policy world, and get close to the individual policymaker to find out what he or she needs.[13] For example, former Ambassador Robert Blackwill noted analysts should find out who counts—the five or ten mid-level officials who have the most influence on more senior decision-makers—and cultivate relations with them.[14] Moreover, he stressed analysts should learn as much as possible about policy officials, study them as they would foreign leaders, and read everything they have written on the subjects in their policy portfolios.

THE INTELLIGENCE ANALYSTS AND POLICYMAKERS' RELATIONSHIP

The relationship between intelligence analysts and policymakers is grounded in historical institutional positions, primarily, so as not to influence policy. Sherman Kent, an influential personality who made his mark in establishing standards and expectations in conducting intelligence analysis, while at the Central Intelligence Agency warned of the dangers of analysts getting too close to their policymaking and action-taking clients.[15] Kent's concern was that analysts could lose their independence. However, distance and the lack of interaction result in a gap in which analysts are "cut off from feedback and other guidance essential for making [substantive] contribution"[16] to their respective organization's mission. The need to maintain independence has endured. However, it is now a weakness—a failure of communication between intelligence officers and policymakers—that continues to undermine the effectiveness of intelligence analysts to support policymakers.

The analyst-policymaker relationship has clear parameters for the analyst. Kent noted, "Intelligence is not the formulator of objectives…drafter of policy…maker of plans…carrier out of operations. Intelligence is ancillary to these; …it performs a service of function. Its job is to see that the doers are generally well-informed…to stand behind them with the book open at the right page, to call their attention to the stubborn fact that they have been neglecting, and—at their request—to analyze alternative courses with indicating choice."[17] Despite these parameters and the importance to maintain independence, Kent noted that ignored intelligence is "useless," and thus, analysts have to [use] "every effort to obtain guidance from their customers." Further, Kent stressed, "Intelligence cannot serve if it does not know the doer's mind; it cannot serve unless it can have the kind of guidance any professional man must have from his client."

How can an analyst maintain independence and still try to get guidance from the policymaker? He/she should find the right balance or equilibrium to maintain independence, objectivity, and integrity. Kent, however, warned that the danger of losing objectivity and integrity creates risks to the credibility of the analyst-policymaker relationship. Thus, finding the right compromise requires intelligence analysts' imagination in a relationship where they use discretion to be creative, to be relevant, and to help the policymaker. However, often organizational culture can impose stumbling blocks to prevent initiatives in creativity.

The need for the IC to work together was highlighted by the Senate Select Committee on Intelligence. In its declassified report, Review of the Terrorist Attacks on U.S. Facilities in Benghazi, Libya, in September 2012, the Committee recommended it is imperative that the State Department, the Defense Department, and the IC work together to identify and prioritize the largest gaps in coverage for the protection of U.S. diplomatic, military, and intelligence personnel.[18] However, working together would require the IC's senior leaders to continue to implement the Committee's recommendations and set the tone for such interactions throughout their respective organizations.

AVOIDING POLITICIZATION

Avoiding politicization in intelligence analysis is a key principle for preserving independence, objectivity, and integrity. Always a serious allegation, politicization can be difficult to prove when it occurs, and an analyst must avoid the perception that one purposefully intended to undermine the policymakers' goals. Agreeing to a subjective viewpoint would be necessary to prove the allegation of politicization, but that, in and of itself, would be

difficult to prove because all analysts strive to avoid politicization and not to be embroiled in policymaking disputes.[19]

Charges of politicization are serious, and every effort should be made to be as objective as possible. Writing assessments is an uncertain science and art, and even the best and most experienced analysts can miss critical aspects of an intelligence problem because of a lack of facts.[20] Nevertheless, the urgency to produce assessments of value and to be relevant can influence an analyst and thus cause one to lose his/her objectivity. It is therefore even more important for analysts to understand a policymaker's concerns and avoid infringing on the policymaker's domain. Showing a commitment to his or her profession will require the analyst to sell a product to an individual or organization that may be embroiled in policy disagreements. An analyst should be well informed on such disagreements to the greatest extent possible in order to avoid taking a certain policy position and give the impression of politicization. Ambassador Blackwill noted from his experience that a close professional relationship encouraged frankness—not politicization.[21]

THE ARGUMENT FOR PROVIDING OPTIONS FOR CONSIDERATION

Policymakers need intelligence analysts to provide them facts and objective assessments in a timely manner to make decisions. However, to be effective, an analyst must be inspired and resourceful to get "close" to the policymaker. Not knowing what the policymaker's concerns are, or what the policymaker is trying to accomplish, would quickly result in an analyst's product not getting the attention it deserves, considering the resources expended.

...when the policymaker is perceived as a client the analyst should see his or her role in a different context, one of which is to understand the policymaker's world.

As a profession, intelligence production is not done in a vacuum, but with guiding principles to ensure quality and usefulness to the client, the policymaker. To be useful to a policymaker, an analyst must now compete for the policymaker's time and attention, as the IC is no longer the exclusive source or provider of information.[22] Josh Kerbel and Anthony Olcott argued in *Studies in Intelligence* that the proper distance between the analyst and the policymaker is an important element in the dynamic of the analyst-policymaker relationship. How an analyst understands the relationship will guide the production of intelligence—Kerbel and Olcott reasoned that the relationship should be one where the analyst is "synthesizing with clients, not analyzing for customers."[23] This is an important distinction, in that when the policymaker is perceived as a client the analyst should see his or her role in a different context, one of which is to understand the policymaker's world.

How an analyst sees or understands his or her audience will guide the preparation of intelligence products. Each professional analyst should know his or her audience, the intelligence question that is being answered, what message will be articulated to the policymaker, and present the facts to tell a story. To do this, however, an analyst must think deeply and answer four questions[24] with respect to the intelligence question or problem being analyzed: (1) *What is going on? (2) Why is it going on? (3) What does it mean? and (4) What can be done about it?* These questions are framed to place important responsibilities on professional intelligence analysts to follow and understand policy and political debates. Furthermore, to remain independent and objective, the analyst must remain outside the policy and political process, but not be ignorant of it.[25]

The National Commission on Terrorist Attacks upon the United States (9/11 Commission) severely criticized the IC, specifically noting it had failed in imagination, policy, capabilities, and management.[26] The Commission's findings reverberated throughout the IC, but changing a culture in intelligence production to be imaginative and more relevant to the policymaker is not easy. As the Commission noted, change is essential for the IC to be relevant. The IC comprises complex organizations with internal power bases, which seek to protect self-interests—for survival. Power bases with self-interests generally lack the motivation and foresight to innovate because an entrenched organizational culture acts to protect their interests and processes, thus making innovation to benefit policymakers more problematic.

At his nomination hearing to be the Director of National Intelligence before the United States Senate Select Committee on Intelligence (SSCI), Lieutenant General (USAF, Ret) James Clapper, Jr., addressed the issue of intelligence and policymaking. On July 20, 2010, former U.S. Senator Christopher S. Bond (Republican from Missouri), Vice Chairman of the SSCI, asked Lt Gen Clapper his views on policymaking, for the purposes of voting with respect to the disposition of Guantanamo prisoners. Clapper stated he did know the exact mechanics of how those meetings work, but noted as a general rule he did not believe intelligence should be in a "policymaking" role. He stated intelligence should support policy…it should provide the range of options for policymakers, but did not believe intelligence—other than for intelligence policy, but not broader policy—should be involved. Bond pressed Clapper further to get his views on whether he would or would not hesitate if the intelligence

agencies' conclusions pointed to a different direction than the ultimate policy decision, and whether Clapper would share his honest assessments with the oversight committee in the Senate's confidential deliberations. Clapper answered in the affirmative, stating he would do just that.[27]

Options for consideration should be presented as opportunities for the policymaker to reflect upon, assuming he or she sees any value in them.

Assuming a working relationship between the analyst and the policymaker, providing options for consideration are essentially opportunities to make the intelligence product useful to the policymaker. The options would give the policymaker additional information to deliberate as he or she reflects on the best course of action to protect the United States' interest, as directed by the President of the United States. As an analyst studies an intelligence problem, he or she accesses all-source information that generally would not be readily available to the policymaker—the policymaker would not have the time to do so, and is not required to do so. However, in an oversight position, the policymaker would expect an assessment to answer the question, *"What can be done about it?"* To answer this question, the analyst would need a clear understanding of the root cause of the problem analyzed. However, this would require some professional maturity and imagination to understand not only the problem analyzed but all possible branches of issues or potential issues linked to the initial problem.

Options for consideration should be presented as opportunities for the policymaker to reflect upon, assuming he or she sees any value in them. Presented in the final section of an assessment, options can be an opportunity to build or strengthen the link between the analyst and the policymaker. More importantly, though, the options when presented can be possible avenues to show what could be done to mitigate problems if certain conditions exist. For example, to mitigate condition A in country B, then options for engagement with country B's neighbors could be considered. A high degree of trust will be required by the policymaker, even though the options are merely for consideration. Considering the challenges to avoid politicization and not to be viewed as intruding in the policymaker's domain, an analyst would have a challenge in thinking how not to be too optimistic in one's options for consideration.

CONCLUSION

The relationship between intelligence analysts and policymakers is critical for success. To make the best possible decision, a policymaker needs facts, what assumptions should be made, and what is not known. This, however, requires some degree of trust. Here much could be done, individually (intelligence analyst) and collectively (through the IC senior management), to nurture a relationship and encourage more communication to understand what the policymaker wants to achieve, and whether intelligence products are of any value to the policymaker.

Intelligence analysts have access to all-source information to add value and to be relevant to a policymaker. Nevertheless, the volume of information (to include intelligence products) available to the policymaker essentially gives the policymaker choices. Hence, an analyst must take the initiative to sell his or her product. Knowing what the policymaker wants to achieve gives the intelligence analyst opportunities to correctly answer questions and prepare products that are of value. Policymakers will not look to engage with intelligence analysts unless they are convinced there is some benefit from such interaction.

Learning about the policy world is needed, but staying clear from being policy-prescriptive is required. Options for consideration will require the analyst to be imaginative and to think deeply about issues and their implications. Indeed, while an analyst strives to answer an intelligence question, which is a slice of many interlinking functional and transnational issues, the need for options for consideration is even more important, rather than churning out an intelligence product to fill a production quota, and one that likely will not be read by the policymaker.

As a member of the policymaker's team, analysts should go beyond the customary way of answering the intelligence question. Analysts should think about the policymaker's concerns, ask what could be done to mitigate any identified risks or challenges, think about the possible outcomes of actions taken on specific issues, and identify what the policymaker should pay attention to. If all relevant options for consideration have been included or packaged in an intelligence product, this could add trust in the system and provide opportunities to the policymaker to consider in the realm of policymaking.

[Author's Note: I hereby acknowledge and thank Regina McDowell and Josh Kerbel for their insightful suggestions on earlier drafts of this article.]

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[16] Jack Davis, "Improving CIA Analytic Performance: Analysts and the Policymaking Process," The Sherman Kent Center for Intelligence Analysis, Occasional Papers: Vol. 1, Issue 2 (September 2002), URL: https://www.cia.gov/library/kent-center-occasional-papers/vol1no2.htm (accessed June 16, 2014).

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[20] Richard A. Best, Jr., "The National Intelligence Director and Intelligence Analysis," Congressional Research Service (CRS) Report for Congress, Order Code RS21948, Updated December 3, 2004, 5.

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Building Analysis:
An Alternative to Art or Science

by Kelly N. Davidhizar

In the debate on whether intelligence analysis is more of an art or a science, the arguments of both sides have merit; however, the answer is not so cut-and-dried. This article compares intelligence analysis to architecture—a tangible example that uses both art and science to create a time-honored discipline. To change how intelligence professionals think about their discipline has implications for all elements across the Intelligence Community.

The discussion of intelligence as a discipline being an art or a science has been drawn out across many pages of academic journals and theses over the years. The answer to the debate has implications that could ripple across the entire U.S. Intelligence Community (IC). Deciding whether we are artists or scientists would impact how new analysts are recruited and how they are trained, how current analysts are taught to refine their craft, how we deliver our products to our customers, whether they be warfighters or policymakers. Defining intelligence as an art or a science would have repercussions for how intelligence analysis can be improved. Consequently, which is it—does intelligence analysis rely more on "subjective, intuitive judgment" (an art), or more on "structured, systematic analytic methods" (a science)?[1] Perhaps *the answer* is not so black and white.

THE SIDES

In a 2012 article, Stephen Marrin examined the debate through a summary of a series of e-mail messages between members of the International Association for Intelligence Education (IAFIE) discussing the "art vs. science" topic; in this article Marrin provided the views of specific members and weighed the merits of their arguments.[2] Presented here is an encapsulation of those arguments.

Those who take the perspective that intelligence is a science argue that the scientific method is the basis for intelligence's analytic methodology. In instances where the scientific method is employed, practitioners are taught to "use good reliable data, and validate it if possible."[3] This is exactly what intelligence analysts are taught to do: use the best reporting available and evaluate the reliability of that reporting, corroborating it if possible. In addition, analysts are encouraged to use structured analytic techniques to add further rigor in developing judgments.

According to Josh Kerbel... the IC has characterized its work as more art than science.

While this comparison seems sound, opponents of the scientific argument say that intelligence is not a science because it cannot be replicated as experiments in the hard sciences can be.[4] Further, William Odom noted that "there is no set of 'rules' or principles that, if followed, guarantee effective results."[5] However, the most damning counter-argument to the intelligence-as-a-science view is that analysts start out often working with biased information; raw intelligence reporting is collected "opportunistically rather than according to some master research design" without a way to measure how representative that sample truly is.[6]

Those who have the intelligence-as-an-art view argue that intelligence analysis requires a "skill in pattern recognition acquired from experience."[7] In other words, good analysis relies on a skill that cannot be codified and standardized—a hallmark of that which is inherently scientific. According to Josh Kerbel, now DIA's Chief Methodologist, in his 2008 article on the IC's struggle to find its voice, the IC has characterized its work as more art than science. Numerous articles, and the IC itself, refer to the "analytic tradecraft" or the "tradecraft of intelligence." Kerbel notes that "tradecraft" is defined as "practice skill in *art* or trade" (emphasis added).[8] In this way, the IC has self-identified analysis as an art form, rather than a scientifically-based method. National security historian Richard Immerman plainly states that "intelligence is an art, not a science; there is a difference between a puzzle and a mystery."[9] In Immerman's terms, the metaphor of using artfulness to solve a puzzle is

easily applied to intelligence analysis: analysts have bits of information that make up a picture; it is their job to analyze those pieces, evaluate their shape, and see how each one fits with the others in order to realize what the picture is. With this in mind, it is also easy to see how intelligence analysts must have some form of creative, artistic inclination. Conversely, the argument can be made that the sciences are about solving puzzles, leading us to the opposition to intelligence as an art.

Naturally, the opponents of this view have aired their concerns. One claims that understanding how "artistic" intelligence is judged to be "good" or "correct" is a fundamental problem with the standing that intelligence is art. As with more traditional art forms—music, painting, dance—who decides what is good, the artist or the audience?[10] The same could be said of intelligence framed in art: do we the analysts and our managers decide whether we are doing well or is that for our consumers to decide? In this instance, the decision of who is the judge varies based on why we are judging the goodness of our craft. In the case of managers, it is for metrics and performance evaluations; in the case of our customers, life-and-death or national policy decisions ride on how well we have done. Another problem is the limit of imagination, a trait necessary to label intelligence analysis as an "art." Following this line, Richard Posner implies that intelligence analysis is, indeed, not an art: "Imagination is a very scarce resource, and also a highly imperfect one, because thinking about things that have not happened is inherently more difficult than thinking about things that have."[11] If there is a limit to imagination and what it can do, does that then mean there is a limit to how much art can go into intelligence analysis?

WHAT IS *THE ANSWER*?

It is evident from the limitations of the arguments outlined above that intelligence cannot be neatly defined as either an art or a science. *The answer* likely lies somewhere in between—or neither—as Marrin posited in his 2012 article.[12] Without directly entering the debate, Mark Lowenthal argues for a more moderate path between art and science, saying analytical standards (scientific) are needed while also recognizing there is analysis that relies on the analyst's "gut instinct" (artfulness). However, Lowenthal does note that standards run the risk of "becoming an intellectual straightjacket" on those "gut" feelings.[13]

The answer likely lies somewhere in between art and science in a place other professions—such as that of the architect—have resided for centuries. An architect must understand engineering and physics to design strong, sound structures; however, that same individual must craft his building with an eye to the aesthetic. Families want homes that are safe and structurally sound, but they generally want a dwelling with curb appeal, too.

An intelligence analyst, like an architect, must blend scientific principles with artistic feeling. Our judgments must be sound, yet appealing enough to garner readership among the vast array of information available to intelligence consumers. In the case of the analyst, the science comes in the form of structured analytic techniques and analytic rigor; the art is the gut feeling, the intangible understanding of a problem set. Judgments built only on scientific methods or structured analytic techniques often lack insight that comes only with experience. Conversely, judgments built only on gut feelings are indefensible and impossible to verify. The reality is that both are necessary to provide customers with holistic, well-informed assessments.

THE IMPLICATIONS OF *THE ANSWER*

As noted at the outset, finding an answer to the "art vs. science" debate has implications for our entire profession. While not exhaustive, these examples demonstrate the ways a blended paradigm for intelligence analysis could benefit various aspects of the profession:

- Recruitment of new analysts: Those wanting to be intelligence analysts are already a self-selecting group of thinkers and writers. By accepting our profession as an amalgam of art and science, we will better appreciate the need for diverse thinking in our workforce. In doing so, we will ensure the next generations of analysts are a heterogeneous mix of individuals from a variety of backgrounds and experiences who look at the shifting landscape of threats and problems in different ways.

By adopting an identity that blends art and science, we could begin to move away from text-only products to richer, more interactive products.

- Training of new analysts: Not only does the content of what we teach new analysts need to change, but so does the way it is presented. As we realize what being both scientists *and* artists means for our craft, the requirements for imbuing new hires into that craft will change. For example, new-hire training should include not only analytic writing and critical thinking courses, but also seminars on creative thinking and writing. Further, this heterogeneous pool of thinkers will learn the craft in as many varied ways as there are

backgrounds. Granted, this is likely the case now, but the aggregate differences will increase as we begin recruiting analysts with more varied backgrounds.

- Presenting analysis: To our customers—be they warfighters or policymakers—how we present our assessments is the outward expression of our Intelligence Community. Those assessments need to be presented in a manner that not only best encompasses the data but is in a format the customer is most likely to use. By adopting an identity that blends art and science, we could begin to move away from text-only products to richer, more interactive products. This evolution in production has begun, driven by advances in technology and adoption of mobile, touch-screen devices.

- Measuring performance: Currently, performance metrics are driven by that which can be quantified—number of finished products, number of reports, number of readers. However, the shift in thinking about intelligence as an art and a science would help move performance evaluations from quantity to quality. The comments a customer makes on a product or how he/she used it to make decisions could carry more weight in an analyst's evaluation. Further, in a blended paradigm, analysts could be rewarded for their incorporation of creativity and insight into analytically rigorous products.

As the threats and the environment in which we operate change, we will need to continue to change how we are postured, how we function, and how we think of ourselves as a Community. The disagreement in the literature over whether intelligence analysis is an art or a science may never be resolved, but the acceptance that *the answer* to this debate is not a binary choice would move the discussion in a more meaningful direction. Further, answering this one question and shifting how we think about ourselves as professionals and our profession likely will not drastically alter how we operate as a Community, but it will give us a new paradigm that can serve as a foundation for how we understand the problems we study.

[Author's Note: The views expressed in this article are those of the author and do not reflect the official policy or position of DIA, the Department of Defense, or the U.S. government.]

Notes

[1] Marrin, Stephen, 2012, "Is intelligence analysis an art or a science?" *International Journal of Intelligence and CounterIntelligence* 25, no. 3: 529.
[2] Ibid., 530.
[3] Ibid., 531.
[4] Ibid., 532
[5] Odom, William E., 2008, "Intelligence analysis," *Intelligence and National Security* 23, no. 3: 326.
[6] Marrin, Stephen, 2012, "Is intelligence analysis an art or a science?" *International Journal of Intelligence and CounterIntelligence* 25, no. 3: 533.
[7] Ibid., 533.
[8] Kerbel, Josh, 2008, "Lost for words: The intelligence community's struggle to find its voice," *Parameters* 38, no. 2: 103.
[9] Immerman, Richard H., 2011, "Transforming analysis: The intelligence community's best kept secret," *Intelligence and National Security* 26, nos. 2-3; 179.
[10] Marrin, Stephen, 2012, "Is intelligence analysis an art or a science?" *International Journal of Intelligence and CounterIntelligence* 25, no. 3: 534.
[11] Posner, Richard A., 2007, "Thinking about catastrophe," in *Blindside: How to anticipate forcing events and wild cards in global politics,* ed. Francis Fukuyama, 7-19. Washington, DC: Brookings Institution Press, 9.
[12] Marrin, Stephen, 2012, "Is intelligence analysis an art or a science?" *International Journal of Intelligence and CounterIntelligence* 25, no. 3: 536.
[13] Lowenthal, Mark M., 2013, "A disputation on intelligence reform and analysis: My 18 theses," *International Journal of Intelligence and CounterIntelligence* 26, no. 1: 36.

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An Interpretive Sociological Framework for the Analysis of Threats

by Capt (USN, Ret) David Belt

ABSTRACT

The strategic-level assessment of the world's complex threats in which humans are involved, along with the formulation of successful containment strategy, requires that we know them in terms of all of the factors that caused their emergence and growth, and that we understand how these factors function. The conceptual tools that help us in this regard are provided in no small part in the form of the theoretical frameworks derived from formal empirical research and peer review in the social sciences. These sociological models have been formulated and are going through a perpetual process of refinement and contestation by social scientists for the analysis of every kind of social phenomena, including conflicts, extremist movements, rogue regimes, and so on, as well as the discourses that produced and sustain them. For this reason, it only makes sense that security professionals who are involved in analyzing the world's threats in which humans are involved add these formal sociological frameworks and concepts broadly to our analytical toolkit.

In this article, I will introduce the basic interpretative sociological framework and a few more specific ones, then make the case for why we need to use and even combine these and other specific frameworks for our analyses of the world's complex threats. Finally, I offer an expanded conceptual framework that security professionals can readily put to use to that end in our assessments and even strategic-level estimates.

INTRODUCING SOCIOLOGICAL FRAMEWORKS

Simply put, social analysis is the analysis of things in the social or human realm. There are two forms or levels of social analysis: practical and formal. At the practical, official level, security professionals conduct social analysis to give the policymaker, strategic planners, and operational leadership the necessary understanding of situations, key individuals, groups, social movements, states, networks, conflicts of every kind, and the eventful and durable or patterned aspects of the environment that shape these kinds of social action and organization. At the formal level, sociologists conduct social analysis to deepen our understanding of specific phenomena and the broader categories to which they belong, and to develop and refine the middle-range theoretical models that describe the factors involved in their emergence and growth, and how these factors function. In other words, a sociological framework—also known as a "conceptual framework," "theoretical framework," "sociological model," and so on—is simply a formal description of a social phenomenon's causal factors and their function; such models are developed and refined by researchers who have empirically examined various similar cases of social phenomena or practice.

The presence of agency introduces a huge measure of unpredictability to the world, as seen in the emergence of a Hitler who singlehandedly created a second world war, a Gorbachev who dismantled the foundations of the Soviet communist system, a Sadat who risked his own life to make peace with Israel, or a young Tunisian street vendor whose self-immolation stunned his world and sparked the Arab Spring.

A sociological framework that gathers wider consensus and use over time typically does so because various researchers working from diverse fields and on diverse social phenomena have used them and found them to yield greater insight or explanatory power than other approaches. In this way, a sociological framework can become an ontological commitment, or paradigm, or a philosophical proposition regarding how the world works, or why people and groups do what they do.

At this early point, it is important to note that our approach to the social phenomena that we classify as threats is necessarily different from the more familiar scientific method

approach to the physical world for one simple reason: *the presence of "agency."* A term that we will examine in more detail later, "agency" entails the volitional, intentional, and substantially free actions of humans. The presence of agency introduces a huge measure of unpredictability to the world, as seen in the emergence of a Hitler who singlehandedly created a second world war, a Gorbachev who dismantled the foundations of the Soviet communist system, a Sadat who risked his own life to make peace with Israel, or a young Tunisian street vendor whose self-immolation stunned his world and sparked the Arab Spring.

The things of the social world that we consider threats are unpredictable because of the aggregate strategies of myriad self-interested and historically- and culturally-embedded individual agents, the contingent streams of unique historical events that shape their dispositions and action, and the heterogeneous nature of the various subcultures, mass-level emotions, apparatuses of power, and so on that function as their resources. For this reason, sociology broadly does not attempt to establish laws, as positivistic physical and biological sciences do. Instead, it proceeds more humbly with the development and refinement of middle-range theoretical models, which illuminate what factors are typically involved in the emergence and growth of some social phenomenon, and how they typically function.

EXAMPLES OF SOCIOLOGICAL FRAMEWORKS

The most basic sociological framework that enjoys a wide consensus among sociologists is the interpretive, or hermeneutical, one. The interpretive approach examines two categories of causation: (1) the role of agents, such as individuals, groups, and states; and (2) the role of the surrounding environmental contexts that shape, constrain, and enable the agency involved.

The dominant work within the interpretive approach has been Pierre Bourdieu's "theory of practice," which examined both the objective socio-historical contexts in which social action emerges and makes sense, as well as the subjective dispositions and strategies to advance self-interest and accumulate economic, social, and cultural forms of capital.[1] Bourdieu's "relational" approach to any social phenomenon meant, in his editor John Thompson's words, "locating the object of investigation in its specific historical and local/national/international and relational context."[2] In his own words, Bourdieu urged that all social analysis "take account of the social-historical conditions within which the object of analysis is produced, constructed and received."[3] In other words, in this hermeneutic approach, we understand what a group's or state's leader says or does not merely by the detached text, discourse, or action itself—what Bourdieu criticized as an "internal analysis"[4]—but by situating that text/action/strategy within the socio-historic conditions from which it emerged and makes sense to its producers and consumers/adherents.

...the interpretive approach examines both the micro- and macro-level factors that come to play in producing the threat in question.

This basic interpretive approach enjoys a wider and more contemporary interdisciplinary consensus. The basic interpretive paradigm was a key component of social philosopher Michel Foucault's genealogical method, which examined the practices or "strategies of domination" or "tactics and strategies of power" on the one hand and the "historically situated systems of institutions and discursive practices," or "network of power," on the other.[5] In the words of widely-cited social theorists Mustafa Emirbayer and Jeff Goodwin, social action is shaped by a duality of human agency, situated in and "deeply structured" by "environments" of action, such as "the societal (network) and cultural environments."[6] Other oft-cited sociologists and historians, such as Anthony Giddens and William Sewell, have also elaborated on how all "practice" is comprised of or shaped at both the level of agency on the one hand and structural and historical factors on the other.[7] Sewell, for example, argued for a more interdisciplinary interpretive framework for all social phenomena that emphasizes not only agency and structure but also the role of historical events. In Sewell's terms, this interpretive model assumes that social phenomena are not subject to general laws, but are path-dependent, involve different causes which are contingent, are specific to the context, and ultimately involve creative agents. Accordingly, the model that he advocates using involves three categories of causation: (1) preexisting structural conditions (cultural, social, demographic, economic, etc.); (2) conjunctural, eventful, and transformational conditions or trends (such as the generalized mood of society at the time, elite alignments and solidarities that form the opportunities for politics that emerge, etc); and (3) strategic or volitional actions of the elite agents involved, both individuals and groups.

From this introduction we can see that the interpretive approach examines both the *micro*- and *macro*-level factors that come to play in producing the threat in question. At the micro level of analysis, we examine the interests, dispositions, discourses, and strategies of individuals or identifiable groups of actors, such as a coalition of movement or regime elites. At the macro level, we examine

the broader contexts, structures, or eventful historical conditions in which these actors are situated, and which shape, constrain, and enable their practice.

A more specific conceptual framework for social movements is the more widely-cited one set forth by McAdams and colleagues, which examines a synthesis of the micro-level cultural or identity framing and resource mobilization strategies of the movement elites, along with the macro-level structure of resources and opportunities that either constrain or enable the movement.[8] This framework of cultural framing, resource mobilization, and political opportunities was used successfully by David Romano in his examination of the Kurdish nationalist movement.[9] This more interpretive, synthetic approach to social movements will be discussed in greater detail in the expanded conceptual framework that I will offer in a moment.

Conceptual frameworks also can be used to produce estimates, or to estimate the future state or trajectory of a threat.

Another more specific theoretical framework is the one for radicalization or violent extremism developed by UK government-funded researchers and outlined in that nation's strategic Channel Program. This model was successfully used by the Quilliam Foundation—a London-based think tank comprised mainly of former Muslim extremists—in their examination of *Radicalisation on British University Campuses*.[10] Guided by this framework, Quilliam described the radicalization in terms of four factors, namely: (1) the crisis of identity and belonging, or other personal trauma that these Muslim students in Britain were experiencing; (2) their political grievances, for which in their minds there seemed to be no reasonable non-violent solution; (3) their exposure to an ideology that legitimized violence through a compelling narrative that satisfactorily addresses grievances in self-serving, preservationist terms; and (4) the socialization, or exposure to people or groups who directly and persuasively articulate that ideology and then relate it to selected parts of a person's broader situation and identity.

Conceptual frameworks also can be used to produce estimates, or to estimate the future state or trajectory of a threat. Had Quilliam wanted to estimate the future support for radicalized groups within the Muslim population, it could have described the four components of radicalization not at the micro level—again, the level of individuals or single groups—but rather in their macro or mass level. For the factor involving political grievances, for example, the analysis would expand beyond the grievance of an individual or small group and instead describe the "grievance structure" or the more durable senses of injustices and humiliation carried by wider populations of Europe's Muslim youth.

Analysis of Muslim discourse could have readily produced the categories of such a grievance structure. Such a discourse analysis would have probably revealed speech laced with the sense of local and global injustices, such as the UK's tacit support for Israel's Likud-led expansionism into Palestinian territory, or India's occupation of Kashmir, or—at the time of the study—the UK's occupation in Iraq and Afghanistan. Other related components of this structure of political grievances that we might examine for trends are the written and unwritten rules that produce structures of discrimination against non-native citizens, and especially young Muslims, who suffer three times higher unemployment, experience effective stratification to the margins of society, and tend to live in the lower class areas of Manchester and Liverpool. Another element within this grievance structure that a futures estimate might consider would be the trend in what Muslims and critics of anti-Islam speech describe as "Islamophobia," or other xenophobic speech from segments of the nation's indigenous population that are frustrated with the changes to its society, manifested in the rapid rise of the more right-wing nationalist British National Party or English Defence League. Once the research via grounded theory has identified the parts of this grievance structure, the estimate would then ascertain the trajectory or trends associated with each part.

THE CASE FOR SYNCRETISM: EXPANDING OUR THEORETICAL FRAMEWORK WITH MANY CONCEPTS

The reason we use these and other sociological frameworks is to grasp the threat before us in all of its social complexity, and to not miss any aspect of it that might give us greater purchase on containing or countering it. Let me offer a quick anecdote that highlights why the lack of a sufficiently broad and inclusive conceptual model hinders our understanding of threats and thus our ability to counter them. While at the National Defense University four years after 9/11 and leading the elective *Containing Al-Qaedaism*, I exhibited within the in-house course text many pages of quotes from scholars, security experts, and other authorities who had offered their assessment of the nature of Muslim extremism, or what al-Qaeda was and why it existed. Many of these authorities set forth explanations that were essentialist, or reductionist—explanations that contained one factor, or at most two. These characterizations pinpointed things like "lack of freedom," the predominantly Muslim "gap" and its disconnectedness from the global core, "sacred rage against the present [secular] order," the sword verses in the *Koran* and similar statements concerning jihad in the hadith, the "reaction to Western-led

globalization," or globalization's perceived assault in the traditional Islamic worldview, and so on. These one-factor explanations covered all possible realms of the social world. It was comical to read page after page of these explanations and to see just how divergent these recognized experts were in their characterizations of the threat. What they all had in common, however, was that each had grasped something that had empirical fit with the data emerging about this movement. Nevertheless, while all of them were grasping part of al-Qaeda and associated movements, not one was describing the actual al-Qaeda, that is, the one that existed in all of its social complexity.

Reading the whole parade of these descriptions of al-Qaeda was akin to a modern reenactment of the parable from ancient India of the blind men trying to describe the elephant. In the Bhagavad-Gita's version of the story, a raja ordered his servant to gather the blind at the location of an elephant, and have each describe it. Each blind man discovered only part of the elephant—one its head, another its ears, another a tusk, another the trunk, the foot, back, and tail. When the raja asked them what sort of thing the elephant was, each accurately described part of the beast, yet all of their descriptions put together completely missed the elephant itself.

This is why we use sociological models. They lead us to expect that the social beast we are examining involves much more than merely a trunk or a tail. By expecting certain features, we can point the lens of our intelligence or research apparatus toward those expected parts to see what is there, and to understand what is there in new ways. In this way, by discovering more of the whole than we might have otherwise, our strategies to contain or counter these threats gain as much purchase as possible.

It is for this reason that I advocate theoretical pluralism or syncretism, that is, combining as many conceptual tools as possible to help us break with our epistemological presuppositions and to give us more windows through which we can see the threat at hand. Since our goal is to see the threat in all of its social complexity, it makes sense that we want a set of concepts in our analytical framework that are as broad and nuanced as the threat is. As practitioners of social analysis, we can combine any number of conceptual models without fear of being wrong, and with every confidence that the added breadth will only enhance our research directive. Even in more formal social analysis this is the case. While many scholars have their sub-disciplinary commitments, there are no laws and no rules in this regard except the rule of pragmatic utility. Good social science is always guided by the axiom of "what works." In the words of social practice theorists Adler and Pouliot, we "should select those methodological tools that allow them to 'solve' their puzzle."[11] Moreover, broad, interdisciplinary approaches to the social phenomena seem to work best, for the reasons stated.

With this kind of pragmatism as our guide, we are free to "fit" any number of models to the nature of our object of inquiry. We can, for example, use the generic interpretive framework to examine or approach a wide range of threats, and eclectically expand it by adding to it one or more sociological frameworks designed more specifically for a particular category of threat. In our example case of al-Qaeda, ISIS, and other such groups, because they are at once social movements and comprised of radicalized individuals, we can analyze them with a basic interpretive framework that has been expanded with social movement theory and radicalization models. Again, beyond the basic structure-event-agency components of the interpretive framework, anything we add simply expands our set of lenses or tools that enable us to see aspects of the phenomenon that we could not otherwise.

...any theoretical idea that anyone had about why people do what they do, or why something in the world exists as it does, should be considered as a tool for our analytical tool kit.

Quilliam's framework, for example, lacked the various social and economic resources that social movements of any kind need, such as support from Arab state-funded mosques, as well as supporting social institutions such as radical mosques in the UK. Quilliam's model also notably excluded many concepts that other conceptual models for radicalization included.[12] Its developers could have eclectically added other elements to this four-part conceptual framework, either inserting them in one of the four main components or adding a fifth, sixth, or even more conceptual categories that other models include.

The point is this: any theoretical idea that anyone had about why people do what they do, or why something in the world exists as it does, should be considered as a tool for our analytical tool kit. If, based on our preliminary research, that concept has empirical fit and thereby suggests promise in bringing some aspect of the threat into view that otherwise would not be, then we should incorporate it into our analytic framework.

OCCUPATIONAL HAZARDS?

While use of conceptual models guides our strategic intelligence and research by helping us see more and more salient aspects of a threat, and give us insights into how its various parts function, some find their use to be potentially problematic. There are "purists" among researchers who believe that a conceptual model "forces" the data, or leads us to find only what the categories of the model pointed us to (in effect, what we were looking for), and thus prevents us from discovering the social phenomenon in its actuality, particularity, and complexity.[13] In other words, while most researchers use conceptual models to sensitize the data to the theoretical concepts derived from other similar phenomena, some believe they are presupposition structures that hinder research and discovery by forcing the data to emerge only within these imposed paradigms or preconceived notions.

A methodological step that precludes such a weakness and criticism is to begin this process of theoretical sensitizing not *a priori* but *a posteriori*, that is, after significant preliminary investigation. In this more purist grounded theory approach, we first categorize the actions and thoughts of the people involved, and other dynamics to which they are reacting. Once we have the categories of factors emerging from the data, we can shop around in our frameworks for those categories of factors that seem to be fitting the data. In this way, it is our preliminary research that guides us to the decision to broaden our framework with other specific frameworks, whether in whole or part, thereby further illuminating our threat topic's nature and function. Thus, rather than shopping for preconceived concepts in which dress the data, the conceptual tools that we use to know our object of inquiry at a broader, deeper, and more nuanced level are selected or emphasized to fit the data categories that have already emerged. In this way, each "thinking tool" in our conceptual framework earns its way into the analysis.

This step of theoretical sensitizing serves two other functions: it translates the categories and sub-categories produced in step one's more purist grounded theory into the lexicon of the sociological consensus, and it illuminates the still obscure characteristics of our object of inquiry that formal sociological inquiry found to be generalizable. In the words of other grounded theorists, the use of sociological frameworks help to "stimulate our thinking about properties or dimensions that we can then use to examine the data in front of us,"[14] to "stimulate reflection about the data at hand,"[15] and to "provide different ways of knowing the data."[16] Moreover, when it is a strategic threat that we are analyzing, it makes sense that our thinking about it be stimulated by as many concepts as practical, and that we attempt to know it from every possible angle or concept that seems to be reflecting part of its nature and function.

AN EXPANDED INTERPRETIVE CONCEPTUAL FRAMEWORK FOR INTELLIGENCE ANALYSIS

At this point, I want to offer an expanded interpretive conceptual framework that security professionals can use to analyze complex and strategically important social threat phenomena—both threat categories on the near-violent end of the spectrum, such as forms of destabilizing competition, religious-based animosities, new social movements, governance problems, and so on, as well as threats on the violent end of the spectrum, such as extremism and radicalization; terrorist movement; ethnic, nationalist, and other internal wars or insurgencies; the more hostile behavior or resistance of rogue states; and other forms of conventional war within or between states. Because of the significant sociological consensus surrounding the interpretive approach, the three main analytical components of that model already discussed—the various durable structures involved, historical events that shape it, and the strategies of the agents involved—will form the foundation of this conceptual toolkit, to which we will expand our thinking tools with distinct and insightful concepts from more specific models.

Before examining the structural factors that come to play in every kind of social phenomena, we should first note an important aspect of every structure that Giddens and others have emphasized: *its function as a resource that can be mobilized by the social agents embedded in it*.[17] In addition to having the capacity to shape or constrain human action, the structures in which a social threat is embedded also function as resources that enable the agents involved to create it, sustain it, transform it, and so on. In other words, structures do not merely shape or place constraints on human agency, but are resource-laden and are usable by or enacted by the knowledgeable agents involved in producing the social phenomenon in question. Thus, when we are assessing or estimating a certain kind of social threat—whether a conflict, an extremist movement, or a rogue regime—we need to consider the broader range of structures that the elites involved are mobilizing to advance their interests.

Structure has been categorized as softer cognitive schemas and emotions, and as harder social, economic, and material resources.[18] In Emirbayer and Goodwin's oft-cited elaboration of the interpretive approach, they conceptualize the environmental context of social action in terms of three distinct structural realms: (1) the cultural realm of basic mental schemas, hostile myths, master narratives, political ideologies, and so on; (2) the social-psychological realm of collective anxieties, insecurities, fear, hostility, hatred, resentment, grievance structures, etc., as elaborated upon by Roger Petersen and Ted Gurr;[19] and (3) the social-structural realm of material, media-institutional, and social network elements of all kinds.[20] To these three environmental structures or contexts Emirbayer and Goodwin add agency, or the strategies of the agents involved, as the fourth category of analysis in their solidly interpretive model of collective action and revolutions.

The main challenge for any political regime or movement—whether a rogue or resistance state like Iran or Venezuela, or an extremist movement like al-Qaeda or ISIS—is to construct and maintain a strong sense of a particular identity that underwrites its political project.

Furthermore, since many of the threats we analyze have a social movement component, we can usefully examine these three broad structural realms by transforming them into the more interdisciplinary terms of the aforementioned widely-cited social movement theorists, Doug McAdams and colleagues.[21] Translated into the more interdisciplinary social movement theory terms, these structural realms might be: (1) the culturally-resident political schema, mental structures, or framing structure that form the building blocks or raw material for cultural or political framing and that rendered the practice and the discourse surrounding it meaningful and credible; (2) the social-psychological or emotional resources structure; (3) the threat's politically relevant social-structural resources, or the apparatus of power, including its various social networks, institutions of various kinds, including media, its funding or philanthropic network, that empowered it; (4) those other softer and harder structural shifts, event-trends, or contingencies that constituted political opportunity or openings or eventful political openings or opportunity "structure" that otherwise enabled, supported, or incentivized the practice. To these structural and historical environmental contexts we can add as our fifth analytic category the function of agency in the terms of framing and resource mobilization strategies of the elites and intellectuals involved. This five-step framework is, therefore, an expansion of the three categories of analysis outlined in the subtitle of McAdam, McCarthy, and Zald's (1996) seminal work, *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framings*, and each of the five categories of analysis will now be examined in greater detail.

Step 1: Cultural Framing Structure Analysis

The first category of structure that social agents use or manipulate for their various political projects is that of culture. The main challenge for any political regime or movement—whether a rogue or resistance state like Iran or Venezuela, or an extremist movement like al-Qaeda or ISIS—is to construct and maintain a strong sense of a particular identity that underwrites its political project. All such identity politics entails (re) constructing the group's own or self-identity, and sustaining the hostile myths concerning its political outside, others, or enemies. Because any society's legitimate, meaningful language is culturally-based, movement or regime elites and intellectuals must make use of those culturally-resident cognitive frames or schemas, and other mental structures, such as ideologies, scripts, and so on, creatively relating them to contemporary social contexts in efforts to achieve some goal in a process commonly termed "framing" or "cultural framing."[22]

Sociologists, including social movement theorists, broadly understand that framing agents must mobilize those discursive resources that are already part of the rhetorical commonplace so that the approach advocated can "make sense" to the movement's existing or potential base.[23] The notion that these cultural or ideological structures are creatively put into play by social actors—whether unconsciously as common sense, or strategically or deliberately position themselves within a certain cultural script, or identity to attract recruits and achieve other interests—was popularized by Ann Swidler's concepts of "culture in action" and "cultural toolkit."[24] The individuals who constitute a threat, when they speak, do not create their own language, but they use terms which are culturally, historically, and ideologically available. For this reason, to engage in politics or struggle of any kind is to make use of this semiotic code in such a way as to advance one's interests over that of rivals. To be able to use a code or schema, Sewell notes, "means more than being able to apply it mechanically in stereotyped situations"; it also means "having the ability to elaborate it, to modify or adapt its rules to novel circumstances."[25]

In other words, from the perspective of movement intellectuals and elites, culture is resource-laden, providing them with an ideational toolkit to frame, interpret, or categorize the events and situations of the empirical world imaginatively (within these preexisting cultural forms,

expectations, or predispositions) to resonate with the market they are attempting to influence.[26]
Again, this means that a sub-society's set of schemas are—in Sewell's terms—"transposable" or "generalizable" in the sense that they can be applied in or extended to a variety of strategies and contexts when the opportunity arises; they are capable of being actualized or put into practice in a range of different circumstances.[27]

For this reason, this first part of the analytic framework leads us to map those basic building blocks of a threat's politics of identity. Because all threats are inherently political, involving one group of people struggling against one or more out-groups, a key focus in this segment of the inquiry is on those cultural frames that were mobilized with apparent perception of political utility in view. Analytically, the task is to identify the political codes and categories that emerge from the threat's discourse, and then find their antecedents in the form of culturally-resident political frames, schemata, ideologies, and other pretexts that rendered them meaningful and powerful. This step is crucial to understanding the nature of the threat; and it is from this knowledge that we can gain a sense of the power of the threat in meeting its recruiting, financial support, and broader legitimacy, solidarity, or sympathy goals, as well as identifying its vulnerabilities, from which we and our culturally-embedded partners can identify and resource the most powerful counternarratives and policies to contain it.

Step 2: Social-Psychological Structure Analysis

The second category of structural context that was identified by Emirbayer and Goodwin (1996) is the social-psychological or emotional realm. Emotions are powerful motivators that regime and movement elites can mobilize as a resource. Here we are not talking about emotions at the micro level of individuals, but at the macro or mass societal level—the important moods of the particular subset of society in which we are interested. Roger Petersen notes that these mass-level emotions can be constructed and manipulated by elites who have a grip on the media and who cleverly heighten emotions by framing the situation in reference to nationalist myths and past and present victimizations.[28]

According to Petersen, the moods most salient in conflict, for example, are those collective anxieties, insecurities, or fear, hostility or hatred, and resentment. Fear motivates people to satisfy safety concerns; hatred encourages them to act on perceived historical grievances or myths; and resentment leads them to address dissonance over status/self-esteem discrepancies.[29] Resentment, according to Petersen, is the most salient emotion that leads to conflict. According to Ted Gurr, resentment often emerges out of structures of humiliation and a sense of injustice—often as a result of relative deprivation or when groups perceive themselves as unfairly disadvantaged compared to others whom they view as having similar attributes.[30] All of these emotions can be present by the same group of people, sometimes under the influence of revenge for historical grievances or for injustices against fictive kin at one time, or the desire to help preempt or defend against an attack perceived to threaten the group with extinction at another time, and so on.[31]

In our analysis, it is important to discover how the salient emotions involved in producing or fueling the threat at hand are a function of embodied thought, or the beliefs that have been advanced by political entrepreneurs who seek to instigate conflict to further their goals.[32] In this part of the analysis, we are seeking to understand the roots of these emotional resources. For example, the belief that there is a threat causes fear, the belief that another group's past atrocities against one's own group have not been avenged causes hatred, and the belief that an injustice in status exists causes resentment.[33]

As the last step in our framework suggests, our analysis should also examine the events or societal dislocations that social-psychologists view as producing these beliefs which caused the associated emotions. In this paradigm, structural changes in society produce information, which produces belief, which in turn produces emotion—either fear, hatred, or resentment, which in turn produces desires (safety, vengeance, group status elevation), which ultimately produce action, or ethnic or other forms of violence, or discrimination, or humiliation.[34] For example, resentment based on status can often be traced to rises in literacy and media penetration, when people become aware that their community is relatively deprived, or occupies a lower, subordinate position, compared to those in the local or global commons whom they perceive as their significant others, or rivals.[35] Another example comes from what Barry Posen describes as "the security dilemma" as it applies to ethnic war. In this negative spiral of emotion, a dislocation that produces a period of "emerging anarchy," such as when the dominant order breaks down and the regime's monopoly of violence is lost, groups of people are suddenly faced with the realization that they are responsible for their own security, which often leads to fear of their extinction at the hands of historical rivals within the proximate political space from whom they have experienced catastrophic loss in times past.[36]

In summary, this step in the analysis reviews/conducts social polling and discourse analysis to map the salient situation or dislocation that is producing the beliefs, the associated beliefs or cognitive structure that is behind the emotions, or the associated mass-level emotions themselves. By having a complete description of the underlying situation, the beliefs it is creating, and the associated

emotions, we have the necessary knowledge to craft strategy to interdict at the appropriate level and diminish this key resource structure. We can also map the trends of each of these—the event stream, support for a particular belief-set or master narrative, and the degree to which a sub-set of the society has been captured by the associated emotion—thereby giving us an estimative capability.

Step 3: Social Resource Structure Analysis

The third category of structural context of collective action is that of the social-structural realm. Social-structural factors include things in the world that we can see and that can more appropriately be called resources of various kinds.

The world's objects and their discourses are largely a function of a significant social structure or base. Even a regime or movement elites' discourse, or what these agents put forth as its master narrative set, or "truth," is—in Foucault's words—"supported materially by a whole range of practices and institutions: universities, government departments, publishing houses, scientific bodies and so on."[37] In his later analysis of discourse or knowledge, Foucault expanded this grid of analysis in what he called the apparatus of power, which included a heterogeneous ensemble of discourses, institutions, technologies employed, regulations or laws, schools of thought, and so on that reflected—in his words—"strategies and relations of forces supporting certain types of knowledge."[38]

As Antonio Gramsci noted early on, every social group coming into existence creates intellectuals, who are organic to that political entity and who function as the chief source of all discourse that is recognized as authoritative within their regime or their movement.

This notion that the things of the social world, including their discourses, are supported by significant non-discursive, social, and material elements is well supported in literature dating back nearly fifty years. Ideology theorist Louis Althusser had noted how ideological beliefs were "materialized" in specific types of institutions and organizations in civil society, such as religious and political organizations.[39] For this reason, our analysis of various threatening ideologies—extremism, authoritarianism, and other "-isms"—should not be satisfied with describing the ideology as it has been articulated in discourse, but should describe in detail its social resource structure—its supporting power apparatus, if you prefer—including the various media, knowledge, religious, political, and other institutions undergirding it, its philanthropic or economic/funding base, the network or coalition of elite agents and intellectuals that maintain solidarity with it, and so on.

A key part of its network of power is the threat's framing agents, or organic intellectuals. As Antonio Gramsci noted early on, every social group coming into existence creates intellectuals, who are organic to that political entity and who function as the chief source of all discourse that is recognized as authoritative within their regime or their movement.[40] These organic intellectuals also play a crucial role in the broader project of identity politics, or in the process of identification of the good self and its evil or enemy others that it is struggling against, or seeking to place or maintain in lower, subservient levels or, in other words, in legitimizing one particular social hierarchy over another via political ideologies or master narratives of self and other. Because countering any threat involves countering it at the ideological level or at the level of ideas, our analysis should map or conduct a network analysis of the threat's ideologues, organic intellectuals, or its network of framing elites, with categories for their various distinctive narratives, function sources of support, niche markets, and so on. Finally, to grasp the full nature and dynamics of the threat, we need to map both the intellectuals and broader social network surrounding the establishment and its challengers, or resistance movements.

Step 4: Political Opportunity Analysis

Having examined the threat phenomenon at its structural realm—that is, at the level of its political framing resources, social-psychological resources, and social-structural resources—our analysis can now shift to the threat's fourth contextual and usually *more eventful* realm—*political opportunities*. The concept of political opportunity in social movement theory literature means simply the openings struggle at the political level, or the opportunity to engage in politics, or wage political struggle, or to do so with meaningfully greater or lesser capacity. Because this distinct and more eventful and political category of analysis is crucial to understanding a social threat's emergence, its persistence, growth, and even to estimate its future trajectory, it typically enjoys the status of a separate category of analysis in social movement literature.[41]

The suffix of "structure" that often attended the term "political opportunity" in early social movement literature was misleading, and has been largely abandoned by movement theorists, because it—in the words of movement theorists Jeff Goodwin and James Jasper—erroneously "collapsed fleeting strategic opportunities into stable structures."[42] Instead, they say, "We need to be sensitive to the historically shifting and situationally contingent combinations and sequences of processes and events that give rise to varying forms of social movements and

collective action more generally."[43] It is in this logic that the concept of political opportunity is more historically eventful, and typically involves looking at the "windows" of opportunity or openings for the kind of political practice or movement under examination.[44]

The virtually ungoverned space of the alternative media, for example, can be a resource for revolutionary movements of every kind—from the Muslim Brotherhood to the Arab Spring—but it can also constitute political opportunity...

Such eventful windows in a society that produce openings for increased political struggle often derive from structures that have undergone or are still undergoing transformation, and which are not properly categorized under our other categories of analysis in this framework, such as cultural frames, emotional structures, social-structural resources, strategies of elites, and so on. In this way, political opportunity for the threat or social phenomenon we are examining is usually *not all* eventful, but can be a combination of event and structure, with the more structural aspects being unable to be categorized as resources per se, but nevertheless constraining or enabling the movement/practice. Some of the more structural elements of political opportunity might include ones offered by McAdam, McCarthy, and Zald, such as: (1) the "relative openness or closure of the institutionalized political system"; (2) the "stability of that broad set of elite alignments that typically undergird a polity"; (3) the "presence of elite allies"; (4) the political system's "capacity and propensity for repression" of the movement and its practices; and (5) external, including "international and foreign influences" supportive of the establishment or its challenging movement.[45]

Maintaining a distinction between structure and event, and resource and opportunity, is difficult at times. The virtually ungoverned space of the alternative media, for example, can be a resource for revolutionary movements of every kind—from the Muslim Brotherhood to the Arab Spring—but it can also constitute political opportunity, especially when viewed as a parallel media-institutional society that enables some group to get its message out in *samizdat* fashion, and escape sanction by the more legitimate knowledge society. In other words, the emergence of the alternative media is a social-structural or technical resource, and the concomitant loss of a government's monopoly on the media as a result is a political opportunity for a movement using it to bypass the state's or society's regime of truth. The important thing is not what category in our framework we place this element of analysis, but that we do not forget it.

Step 5: Agency Analysis: Political/Identity Framing and Resource Mobilization Strategies

The sixth and final part of our broader interpretive sociological framework shifts to the micro level of analysis, that is, the analysis of the role and function of "*agency*." It seeks to know how the threat's principal agents manipulated, mobilized, or took advantage of the structural resources and more eventful opportunities examined in the earlier segments of the analysis.

Agency is the capacity of an agent—whether a person, group, organization, or regime or movement elites—to make choices and enact *strategies* to achieve their interests and thus change the world in which they are situated. As noted earlier, agency involves the knowledgeable use of available resources—cultural schemas, mass-level emotional structures, and harder social resources—and the seizing of political opportunity to sustain preferred structures or change non-preferred ones. Obviously, a certain amount of free will or freedom is implied in the concept, and we should see the world's actors as semi-autonomous agents in semi-determining structures.

Two aspects of agency analysis are included in this framework: cultural framing strategies, or strategies of identity and even cultural politics; and resource mobilization strategies. The first aspect is crucially important, and merits elaboration.

Cultural Framing Strategies or Identity Politics Analysis

As we saw in the first category of our analysis, the power of agency arises from an actor's knowledge of the cultural schemas and resources in his/her particular social milieu, which means the ability to apply these schemas to new contexts.[46] In the words of Emirbayer and Goodwin, agency involves the "capacity to appropriate, reproduce, and, potentially, to innovate upon received cultural categories and conditions of action in accordance with their personal and collective ideas, interests, and commitments."[47] This process of "cultural framing" is—in the words of movement and framing theorists Robert Benford and David Snow—the "conscious strategic efforts by groups of people to fashion shared understandings of the world and of themselves that legitimate and motivate collective action."[48] Framing in Robert Entman's words means "to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described."[49] In Benford and Snow's terms, framing involves "the struggle over the production of mobilizing and countermobilizing ideas and meanings" and "the generation or selection of interpretive frames that compete with others."[50] The *frames*

advanced in this discursive process, they add, are politically strategic; they are "deliberative, utilitarian and goal directed"; they are developed "to achieve a specific purpose—to recruit new members, mobilize adherents, acquire resources, and so forth."[51]

This concept of framing or cultural framing is identical to what Pierre Bourdieu described as the "labour of categorization,"[52] what Ernesto Laclau and Chantal Mouffe described as the process of "identification,"[53] or what cultural theorist Stuart Hall termed "the politics of signification,"[54] and what Schmitt called "the act of the political," wherein any group can exist as an identifiable entity only through identification of and juxtaposition to the other, or the constant articulation of the essentializing and dichotomizing friend/enemy distinction.[55] A pervasively common term for this discursive practice is "identity politics," or the politics of identity.

It is important to note that the threats of the world that have a human component must be understood in part as a function of this practice of identity politics.

Again, this semiotic work of meaning-making through cultural framing or identity politics is what intellectuals and elites who are organic to regimes and movements do to advance their political project; their chief work outside of the mobilization of more material resources is to frame the identity of the friendly inside or hostile outside.[56] Most of the world's threats are in some way a political project in the sense that they involve one group of people—whether an ethnic group, a religious movement, or a state—trying to advance its identity and interests over those of others who comprise its competitors. The unstable nature of identity—which as Manuel Castells noted is particularly acute in the era of globalization—is the chief source of this discursive form of political struggle.[57] Attempts to halt this slide of perpetual identity insecurity translate to such identity-instituting practice.

It is important to note that the threats of the world that have a human component must be understood in part as a function of this practice of identity politics. All threats to us—whether they be an extremist movement, a particular rogue regime, or the inept, corrupt regime of a failing or failed state—are self-identities to others involved or embedded in them. Again, all of those threat self-identities are produced through a process of identifying the friend/enemy distinction, or discourses of danger that externalize and then securitize others—enemies at the domestic level (e.g., secular political parties, Western norms) and those who are foreign (e.g., the U.S., the West, NATO)—their near enemies and far enemies. In this way, the political security of a state or group that we identify as a threat is paradoxically dependent upon its insecurity—upon the world of opposing or dangerous others or enemies.

Because the chief source of identity and legitimacy of regimes and movements is this political identity discourse, including its master narratives, it makes sense that we should empathetically map the various identities produced by which the organic intellectuals or discourse agents are involved, as well as map the cultural framing strategies they employ to frame or narrate the identities of the political inside and outside. The resulting description of these discursive practices will yield important insight in how to counter both their identity and strategies of identity politics with counter-identity, counter-framing, or information operations.

Two methodological points should be made here. The first process of mapping the identities and master narratives produced necessarily entails this reflexive move of empathy, or removing ourselves or reducing our culturally-derived presuppositions from our analytical lens. The empathetic spirit of basic interpretive approach is *Verstehen*, which strives for empathetic understanding, or understanding the meaning of action from the principal threat actor's point of view. This is the same ethos as that of grounded theory, which attempts to bring "the perspectives and voice" of those studied to the fore, and to minimize the words of the researcher.[58] The second process of mapping the identity-framing strategies of the organic intellectuals or discourse agents involved requires rigorous, empirical discourse analysis, often in the form of case studies, wherein an influential agent's *oeuvre* is examined for framing and resource mobilization strategies.

Ideology/Hegemonic Struggle Analysis: The Role of Ideology in the Construction of the Threat's Identity

A critical subset of political struggle and identity politics that are important aspects of the threats we confront is the production and maintenance of "hegemony" by a particular regime, or the struggle against it by its challengers or resistance movements. Hegemony—as it is known to sociologists—is a term with which few security professionals are familiar. Political projects proceed not merely by the (re) production of identities of self and others, but by the ideology that naturalizes or legitimizes those identities within the society in which the project strives for dominance. Like the struggle for more material aspects of power, hegemonic or cultural struggle—including counterhegemonic or countercultural struggle—is a core function of every regime and its challengers, such as social, political, and extremist movements. The threat's political

struggle with its near enemies within the state or group of states often does not involve direct, violent engagement of the political structure, but instead indirect, non-violent, and largely discursive and intellectual, ideological struggle in the institutions in which that societal order is legitimized. That broadest societal ideology is hegemony, and we cannot fully understand or counter a regime or its challengers if we do not grasp the hegemony for which they struggle and against, and how they do so.

All ideology causes people to—in the words of Margaret Wetherell—"read themselves into social relations," and to "make sense of the world, and to develop a taken-for-granted perspective, a feeling of 'that is just the way things are'."[59] Ideologies produce identities and positions for people, and they are the methods through which ruling groups legitimate their dominance, such as ideologies that put one people group hierarchically dominant over another, leading to ethnic war or resistance movements. Hegemony is that dominant ideology or set of ideologies that positions or naturalizes the place of one group of people—those favored by the regime, for example—over others in the society. A term advanced by Gramsci, hegemony is the orthodox, natural, unquestioned, common sense view of how society should be ordered and governed, and it involves a consensus or compromise among the ruling and ruled groups of the society.[60] One example of hegemony is state Islamism, where authoritarians of Muslim societies naturalized their rule by taking on the identities and interests of those over whom they exercised power. This was Zia al-Haq's strategy in Pakistan's Islamization in 1978, and it was the al-Saud family's strategy in its Islamization of the Kingdom of Saudi Arabia beginning in 1979.

In sub-steps almost identical to the previous ones, mapping both the hegemonic ideology and that of its challengers, as well as the strategies of waging a culture war or cultural struggle between the establishment regime and its challengers, should be key objects of this step of the inquiry, since they also give us key insights into how to support either the regime or its challengers in support of our interests.

CONCLUSION

By now, it is obvious that we could keep going in this regard, incrementally adding to our basic interpretive analytic framework those sociological concepts that seem to yield important insights into the threats that we typically analyze. Suffice it to say the strategic-level assessment and any hope of containing the world's complex threats in which humans are involved requires that we know them in terms of all the factors that cause them to emerge and grow, and that we understand how these factors function. The conceptual tools that help us identify these factors and their specific function are provided in no small part in the form of the theoretical frameworks derived from formal empirical research and peer review in the social sciences. That is the logic behind the broadly inclusive interpretive framework offered here. Over 300 intelligence professionals and graduate students at the National Intelligence University have readily grasped these concepts discussed here and used this framework in producing detailed research directives for strategic-level estimates of nearly every contemporary threat. In the spirit of pragmatism, they not only give us deeper insights into the world's threats but they are useful in the kind of practical social analysis that security professionals do…therefore, *why not know and use them?*

Notes

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[3] Ibid., 29
[4] Pierre Bourdieu, *Homo Academicus*, trans. P. Collier (Cambridge, MA: Polity Press, 1988 [1984]), xvii.
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[14] Anselm Strauss and Juliet Corbin, *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, 2nd ed. (Thousand Oaks, CA: Sage, 1998), 45.
[15] Juliet Corbin, "Alternative interpretations: Valid or not?" *Theory & Psychology* 8, no. 1 (1998): 122.
[16] Jane Mills, Ann Bonner, and Karen Francis, "The Development of Constructivist Grounded Theory," *International Journal of Qualitative Methods* 5, no. 1 (March 2006): 4.
[17] Giddens, *New Rules of Sociological Method*, 161.
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[27] Sewell, *Logics of History*, 131-132, 140.
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[35] Ibid., 42.
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[44] Romano, *The Kurdish Nationalist Movement: Opportunity, Mobilization, and Identity*, 19.
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[50] Benford and Snow, "Framing Processes and Social Movements," 613-614.
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A Counterintelligence Analysis Typology

by CDR (USNR, Ret) Kevin P. Riehle

This article proposes a typology of CI analysis to define the discipline more clearly, differentiating it by the customers it serves, the targets it pursues, and the nature of the resulting analysis.

Counterintelligence (CI) analysts serve a wide variety of customers across a spectrum from national-level policymakers to tactical commanders. That variety, however, is at the core of confusion, even among CI analysts themselves, surrounding the nature and purpose of CI analysis. This article proposes a typology of CI analysis to define the discipline more clearly, differentiating it by the customers it serves, the targets it pursues, and the nature of the resulting analysis. This typology divides CI analysis into four distinct but related types:

(1) **Foreign intelligence threat analysis**: assessments of the threat posed to friendly interests by foreign intelligence activities.
(2) **Counter-counterintelligence analysis**: analytic advice and direction to positive intelligence collectors to help them avoid foreign counterintelligence activities.
(3) **CI operational and investigative analysis**: analytic input directly facilitating counterintelligence investigative, operational, and information assurance activities.
(4) **Strategic foreign intelligence analysis**: exploring and explaining the relationship between foreign intelligence activities and the foreign strategic decision-making that directs them.

By distinguishing CI analysis types and their associated customer sets, this typology can inform intelligence transformation initiatives by identifying the required skills and organizational settings where the different types can have the greatest impact on the full spectrum of decision-makers that they serve. A lack of understanding of these types is at the root of an identity crisis that CI analysts constantly face: Am I a CI specialist first but assigned as an analyst; or am I a professional analyst first, but one who focuses on CI topics? This unanswered question permeates the career planning and training of CI analysts; if the foundational skill is as a CI specialist, then professionals would first obtain CI specialization training and some of them would apply that training to analytic tasks. However, if the foundational skill is as an analyst, then training in analytical tradecraft would predominate, with foreign intelligence activities being the topic against which an analyst applies those skills. This same division of focus also determines the optimum organizational placement of these analysts, with some more effectively placed organizationally proximate to their specific customers, while others, with a much broader customer set, would be better aligned together in a regionally-focused strategic CI analytic organization.

Figure 1 summarizes the profile of each CI analytic type and posits the dominant skill that analysts should employ in each type to be successful:

	Target	Customer	Organizational Proximity	Dominant Skill
Type 1, FI Threat Analysis	"Hard targets," plus any country that poses a threat to U.S. interests	Non-intelligence audience across a wide spectrum from strategic to tactical	Close proximity to customer not necessary	Analytic tradecraft, with specialization on the threat equation
Type 2, Investigative/ Operational Analysis	"Hard targets"	CI/IA practitioners	Benefits from close proximity to customer	Operational, with specialization on CI methods
Type 3, Counter-CI Analysis	"Hard targets," plus any country that poses a threat to U.S. collection operations	Collectors	Benefits from close proximity to customer	Operational, with specialization on collection methods
Type 4, Strategic FI Analysis	"Hard targets" primarily, but can be applied to intelligence systems of any country	Policymakers and fellow analysts	Close proximity to customer not necessary	Analytic tradecraft, with specialization on foreign intelligence systems analysis

Figure 1: Summary of the Four CI Analytic Types

This article will describe each of these types and elaborate on how they impact the training and organization of CI analysts.

Type One: Foreign Intelligence Threat Analysis

The first and most common type of CI analysis is **foreign intelligence (FI) threat analysis**. This type strives to answer the question, "Where and how is a foreign intelligence system operating against U.S. interests?" FI threat analysts emphasize the portion of the U.S. Executive Order 12333 definition of CI that reads, "…protect against espionage, other intelligence activities, sabotage, or assassinations...."[1] Customers for FI threat analysis span the spectrum from tactical to strategic actors, but most are located outside the Intelligence Community (IC). They include military decision-makers concerned about threats to their operations, facilities, or personnel; government seniors who need information to protect themselves while traveling abroad; government establishments protecting their personnel against foreign espionage attempts; and the research, development and acquisition community, which is concerned about protecting critical technologies. Consequently, foreign intelligence threat products are often the face of CI to the non-intelligence world.

This type of analysis ideally follows the equation threat = intent x capability x opportunity, to determine the level of threat that a foreign intelligence/clandestine actor poses.

This type of analysis ideally follows the equation **threat = intent** x **capability** x **opportunity**, to determine the level of threat that a foreign intelligence/clandestine actor poses. The intent factor in the equation describes the actor's willingness to conduct threatening actions; in the intelligence context, it is an intelligence actor's willingness to employ clandestine methods to collect secured information. Capability describes the quantitative and qualitative factors that facilitate a foreign intelligence actor's success, such as expertise, freedom of movement, and communications mechanisms, along with the amount of resources aligned with a particular task. Opportunity describes the spatial-temporal relationships between the intelligence actor and the target, and is impacted by physical proximity of intelligence officers to a desired item, as well as by virtual proximity through electronic connectivity.[2] The level of intent, capability, and opportunity are unique to each foreign intelligence/clandestine service, making it necessary to weigh each factor for each individual service to come to a reliable measurement of that service's threat. Increasing in importance over the past decade are assessments of an adversary's ability to collect intelligence by penetrating computer networks. "Cyber threat" assessments use the same threat equation, measuring an adversary's capability combined with intent, although global access to information networks opens opportunities to anyone who has the capability to exploit them.

The subjects of this type of analysis can be any country or entity that poses a threat. Hence, FI threat analysts are often generalists in broad regions of the world, seldom having the luxury of concentrating on the threat from one particular country. Rather than expertise in one country, threat analysts are better served by a general understanding of how intelligence services work, how clandestine activities are conducted, and how to apply the threat equation, which allows them to overlay that knowledge against any foreign intelligence/clandestine actor. Added to this general understanding of foreign intelligence tradecraft must also come a firm grasp on analytic standards to clearly and persuasively articulate threats in analytic products.

Type Two: Counter-Counterintelligence Analysis

The second type of CI analysis, which can be labeled **counter-counterintelligence analysis**, is related to but different from the first. It strives to answer the question, "Where and how is a foreign CI service trying to neutralize our intelligence operations?" The customer for this type of analysis is our own intelligence collector. This type of analysis identifies foreign CI activities directed against friendly intelligence collection operations, identifying friendly vulnerabilities and hostile capabilities to exploit those vulnerabilities; provides CI reviews of HUMINT activities; conducts CI damage assessments; and supports asset validation. In this way, Type Two analysis is similar to operations security analysis, which identifies the aspects of friendly operations that make them vulnerable to foreign observation and potential neutralization.[3]

This type of analysis uses the traditional threat equation similarly to Type One, but differs from Type One analysis by serving a narrow audience inside the IC, rather than a non-intelligence audience. Consequently, this analysis is closely tied to individual collection operations and is often done in immediate organizational proximity to customers themselves. The foreign targets of this type of analysis can include nearly any country worldwide in which friendly collection platforms are located, since most countries have a CI capability that monitors foreign activities within their borders. Targets also include the most capable CI threats emanating from countries with worldwide reach, since they have the potential to pose a third-country threat even outside their own borders. However, unlike Type One CI analysis, Type Two analysis does not always result in a finished analytic product, but is often communicated through less formal analytic output nodes directly to a customer.

In HUMINT, this type of analysis seeks specific information about a source's authenticity and reliability, plus the level of control a handler exercises over the source. Authenticity indicates whether the source is genuinely and truthfully representing placement and access; i.e., is the source telling the truth about the information that he/she is capable of providing? Reliability, or veracity, determines the truthfulness of the source's information itself. Control determines whether the source complies with instructions and follows operational security procedures. The U.S. DoD instruction that governs CI analysis and production identifies "collection source evaluations" as analytic products that determine if a source's information is valuable and credible and to ascertain the reliability and veracity of the source.[4] These products support HUMINT collectors' efforts to "understand and assess the intentions and motivations of their assets, as well as the authenticity of the intelligence they provide."[5]

Similar to operational and investigative analysis, cyber CI analysis directly supports friendly actions to counter and disrupt foreign clandestine activities.

The term "counterintelligence threat" applies to this type of analysis, as it assesses the threat from foreign CI entities. However, because both Type One and Type Two analysis are usually conducted by CI analytic organizations, threat assessments often contain a combination of FI threat information (Type One) and CI threat information (Type Two), sometimes confusing or conflating the two. In reality, because the customers represent such different interests, analytic products in these two types would best be separated or clearly distinguished to avoid that confusion.

Type Three: Operational and Investigative Analysis

The third type of CI analysis, **CI operational and investigative analysis**, strives to answer the question, "How can our CI efforts neutralize foreign intelligence threats?" This type of analysis emphasizes the portion of the U.S. Executive Order 12333 definition of CI that reads, "…activities conducted to identify, deceive, exploit, disrupt…" It is focused more than any other CI analytic type on opportunity analysis, seeking to identify the right venue, asset, scenario, target, or passage material that would facilitate a friendly CI operation, or to develop evidence that would support a CI investigation. As could be expected, the customers for this analysis are inside the CI community, essentially serving as the inverse of Type Two, which supports actions to prevent the foreign equivalents from neutralizing friendly intelligence operations. The foreign targets that dominate this type of analysis tend to be those that pose the most severe foreign intelligence threats, since it is those entities that require the greatest amount of resources to counter.

Into this analytical type also falls analysis of the methods required to defend the information infrastructures from foreign penetration, manipulation, or denial. An Internet search for the phrase "cyber counterintelligence analysis" yields hundreds of job openings for individuals to support computer security efforts. Recognizing the computerized nature of critical information and the increased defensive efforts to protect it, these analysts merge counterintelligence with information security to provide analytic input to protective activities. Similar to operational and investigative analysis, cyber CI analysis directly supports friendly actions to counter and disrupt foreign clandestine activities. Its customers are primarily information assurance specialists whose job is to protect friendly networks.

The results of Type Three CI analysis are usually communicated directly to the operational or investigative customer, and are seldom compiled into finished analytic products. Although analytic tradecraft standards are required to fully document and support any analytic conclusions, including those in Type Three analytic output, Type Three analysis may sometimes omit analyst assessments, simply articulating facts in support of prosecutorial activities.

PRIMARY FOCUS OF CI

It is in Type Three analysis where the CI analyst's identity crisis is most pronounced. This type is where the majority of U.S. DoD CI analysts aspire to work, as the DoD CI community views this as the most important type. This aspiration is based on a perception that there is little value or purpose for CI analytical efforts that do not directly prompt some kind of CI action. Some CI analysts go as far as misidentifying "strategic CI analysis" (see Type Four below) as analysis that provides tactical support to CI operations and investigations. Consequently, much of the analytical training available for CI analysts focuses on this type of analysis, prioritizing the active countering nature of the work over the analytical nature.

The vast majority of academic and government studies of CI focus on the first three types of CI analysis, emphasizing the threat and mitigation aspects of CI. For example, the WMD Commission Report concluded that the U.S. government should strengthen CI "to stanch the hemorrhaging of our secrets and take the fight to our adversaries."[6] Michelle Van Cleave, the former U.S. National CI Executive, similarly stated, "The signature purpose of counterintelligence is to confront and engage the adversary."[7] Similarly, in a 2007

speech to the American Bar Association, then-National CI Executive Dr. Joel F. Brenner (Van Cleave's successor) summarized the mission of CI as "the business of identifying and dealing with foreign intelligence threats to the United States." Dr. Brenner enumerated the losses of technological and national security information caused by spies, and emphasized the responsibility of U.S. CI to mitigate those losses.[8] In light of these national-level statements, it is not surprising that the majority of CI analytic resources are devoted to these types.

Type Four: Strategic Foreign Intelligence Analysis

The fourth and least common type of CI analysis is **strategic FI analysis**. It is closely related to strategic political/military analysis, answering the questions, "To what missions does an adversary assign its intelligence resources?" and "What are an adversary's intelligence priorities and what do those priorities tell us about the adversary's overall strategic thinking?" Through this type of analysis, CI analysts should be able to offer answers to the critical "why" questions that provide insights into an adversary's decision-making: Why does a country direct its foreign intelligence/clandestine activities toward certain targets and what does that indicate about the country's policies; why is a country's intelligence system increasing or decreasing its collection against a certain target; etc.? This type of analysis uses much of the same information that all the other CI analytic types use, including the information derived from investigations and operations, but for a different purpose: to draw a rough picture of the strategic thinking that goes into the adversary's intelligence activities, focusing on the intent side of the threat equation. It essentially reverse-engineers another country's National Intelligence Priorities Framework (NIPF)-like decision-making process by analyzing the visible intelligence activities and tracing them back to the priorities at their core. Targets of this type of analysis are typically adversarial countries, since their decision-making is the most opaque to friendly intelligence, and the reflections of strategic thinking that come from analyzing their foreign intelligence activities could be among the few windows we have into their internal thought processes. Similar to Type One CI analysis, customers for Type Four are often outside the IC, using the analysis for policy-level decisions. Consequently, this type of analysis leads to formal finished analytic products, requiring high analytic tradecraft standards.

This author explored this CI analysis type in-depth as a research fellow in the Director of National Intelligence Exceptional Analyst Program. The research project sought to identify the strategic insights that could be derived from looking closely at foreign intelligence collection, using early Cold War Soviet intelligence collection as a case study. The study applied four screening questions to a set of data describing Soviet intelligence activities from the end of World War II to Stalin's death in 1953. These questions were:

- What questions were Soviet intelligence services trying to answer? What were the Soviet essential elements of information (EEIs)?
- What type of sources were Soviet intelligence services targeting for information? What placement and access were they trying to develop: military, political, economic, scientific, internal security, etc.?
- What liaison relationships did Soviet intelligence services establish and how did they exploit those relationships?
- How were Soviet intelligence services structured and what did the structure reveal about priorities?

Answers to these questions revealed specific areas where Soviet intelligence services focused their effort, reflecting the USSR's national security interests at the time.[9] Fused CI information painted a rich picture of Soviet national security priorities and the evolution in priorities over time, yielding valuable insights into Soviet strategic thinking in the early Cold War period. While the Soviet case study used historical, publicly available data, applying this same methodology to current data about foreign intelligence activities yields similar insights.

The customer for this type of analysis is the same as the customer for other strategic intelligence analysis—primarily the national security policymaker. However, because this analysis relies on CI-derived data, it offers a second opinion that can be weighed against analysis based on non-CI sources. Currently, there are few places in the U.S. CI community where this type of analysis is performed. Nevertheless, a few CI analysts with a truly strategic perspective could add significant insights to the IC's knowledge base, yielding, as Sherman Kent, the director of CIA's Office of National Estimates from 1952 to 1967, described as "information which the positive intelligence people have wanted for a long time and which they could get from no other source."[10]

This type of CI analysis is *not* simply a redefinition of political/military analysis, nor does it replace traditional positive intelligence analysis with strategic FI analysis. Rather it identifies the broader value of CI-derived information and provides a venue to make full use of what is already being collected and analyzed for more tactical purposes (particularly Types Two and Three), mining it, as Vincent Bridgeman states, for the "insights gained by accessing the competitor's intelligence cycle."[11] Similarly,

John Ehrman in his 2009 *Studies in Intelligence* article on CI theory asserts that:

> CI analyses can help fill gaps in analysts' understanding of the political processes in other countries… [and] can provide valuable information for use in policy deliberations, especially in issues involving authoritarian or totalitarian states. Because those regimes, unlike democratic governments, do not debate their policies in public, understanding the intelligence services and their practices can help analysts infer how their political leaders view the outside world.[12]

The common knowledge baseline in all of these analytic types is an understanding of how foreign actors conduct intelligence and CI activities.

Strategic FI analysis builds on Ehrman's foundation, showing how "the study of the organization and behavior of the intelligence services of foreign states and entities" can be applied more broadly across the Intelligence Community.

Impact on Training and Organization of CI Analysts

The common knowledge baseline in all of these analytic types is an understanding of how foreign actors conduct intelligence and CI activities. A general understanding of foreign intelligence activities informs all four CI analysis types. Consequently, training in how foreign intelligence and counterintelligence services conduct their activities is a baseline requirement for all four types. It is needed to develop well-informed threat analysis, which assesses whether a particular FI activity threatens friendly interests. It is needed to successfully support intelligence collectors by recognizing the tradecraft and methods that a foreign CI service might use against them. It is needed to inform CI investigations and operations about an adversary's weaknesses and vulnerabilities that can be exploited. Moreover, it is needed in informing policymakers of the connections between intelligence and an adversary's broader strategic interests.

The four types of CI analysis differ, however, in the audience they serve and their most appropriate organizational alignment. Type One and Four analysts typically serve a non-IC audience and, while analysts involved in Types One and Four need to understand the decision- makers they serve, they are usually not collocated with them. The skill to recognize these customers' needs can be taught in analytical tradecraft training, similar to the training that non-CI analysts receive. Analysts who began their career outside the CI community and transferred into an element which produces threat analysis products or strategic FI analysis products can usually apply the analytical skills they obtained before becoming an analyst conducting Types One or Four. However, both Types One and Four also require distinct specialized training to be successful: Type One analysts need to be trained in applying the threat equation; Type Four analysts need to understand how to define and articulate the link between foreign intelligence and foreign decision-making. Of all the types, Type Four analysis also requires the deepest collaborative relationship with other intelligence analysts outside the CI community, to compare, contrast, and augment assessments of an adversary's strategic thinking.

On the other hand, Type Two and Three analysts require a deeper understanding of friendly operational and investigative tradecraft, and place less emphasis on finished analytic production skills. Both of these types must have a closer understanding of friendly courses of action, applying their knowledge of an adversary's activities directly to the friendly operational decision-making process. Type Two analysts need to understand friendly collection tradecraft as well as specific ongoing collection operations to tailor analysis to the specific threats that the collector customer may face. A Type Three analyst needs to understand CI functional capabilities to penetrate, neutralize, or manipulate foreign intelligence activities in order to make analytic products actionable and applicable. Organizationally, these analysts are often embedded directly with their supported customer, resulting in fewer formally published analytic products and more face-to-face, direct support. To be fully successful, an analyst responsible for Types Two and Three requires specialized training in HUMINT and CI methods to gain credibility with the customer and to fully understand the customer's needs. A former CI operator, investigator, or collector who has training and experience in these fields and transfers to an analytic job can feel more comfortable in these types of analysis than in either of the other two.

CONCLUSION

Regardless of which type of CI analysis an analyst is performing, all types have their root is a common baseline of knowledge about foreign intelligence/clandestine activities. While the four CI analysis types use CI-derived information for different purposes and serve different customers, they are all CI analysts at their core, with a distinct career path and set of expectations. Their output can support a variety of decision-making frameworks, from tactical to strategic, within the Intelligence Community or outside it. Consequently, CI analysts need to recognize which customer they are serving, how that customer uses information, and what information will best fill the specific

customer's need. With this knowledge, CI analysts can better understand how to develop skills and customer relationships that will serve them well in a CI analytic career.

[Author's Note: The views expressed in this article are those of the author and do not reflect the official policy or position of the Department of Defense or any U.S. government agency.]

Notes

[1] Executive Order 12333, *United States Intelligence Activities* (as amended by Executive Orders 13284 (2003), 13355 (2004), and 13470 (2008)), 30 July 2008.

[2] For a detailed application of this threat equation to foreign intelligence threat analysis, see Kevin P. Riehle, "Assessing Foreign Intelligence Threats," *American Intelligence Journal* (Vol. 31, No., 1, 2013), pp. 96-101.

[3] U.S. Marine Corps, *Intelligence Training and Readiness Manual*, NAVMC 3500.100, 18 March 2011, pp. 11-45; Department of Defense, *DoD OPSEC Program Manual*, DoD Instruction 5305.02-M, 3 November 2008.

[4] U.S. Department of Defense, *Counterintelligence (CI) Analysis and Production*, DoD Instruction 5240.18, 17 November 2009.

[5] Central Intelligence Agency, "INTelligence: Human Intelligence," *News and Information, 2010 Featured Story Archive*, https://www.cia.gov/news-information/featured-story-archive/2010-featured-story-archive/intelligence-human-intelligence.html (accessed 5 July 2013).

[6] *Report of the Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction* (Washington, DC: U.S. Government, 2005), p. 495.

[7] Michelle Van Cleave, "Strategic Counterintelligence: What Is It, and What Should We Do About It?" *Studies in Intelligence,* Vol. 51, No. 2, p. 2.

[8] Dr. Joel F. Brenner, "Strategic Counterintelligence," Speech to the American Bar Association, Standing Committee on Law and National Security, Washington, DC, 29 March 2007.

[9] The methodology used in this study was described in a paper by this author titled "Counterspies Helping Spies: Counterintelligence Contributions to the Strategic Intelligence Picture," which was selected as a finalist in the 2012 Director of National Intelligence-sponsored Galileo Award, recognizing innovative and creative solutions to U.S. intelligence challenges.

[10] Sherman Kent, *Strategic Intelligence for American World Policy* (Princeton, NJ: Princeton University Press, 1949), p. 217.

[11] Vincent H. Bridgeman, "Defense Counterintelligence, Reconceptualized," in Jennifer E. Sims and Burton Gerber, eds., *Vaults, Mirrors and Masks: Rediscovering U.S. Counterintelligence* (Washington, DC: Georgetown University Press, 2009), p. 128.

[12] John Ehrman, "What are We Talking About When We Talk about Counterintelligence?" *Studies in Intelligence*, Vol. 53, No. 2 (unclassified edition), June 2009, p. 9.

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The Role of the Zimmermann Telegram in Spurring America's Entry into the First World War

by Puong Fei Yeh

One hundred and one years ago in June the Archduke of Ferdinand was assassinated, setting in motion one of the most devastating conflicts in human history and one that laid the seeds for an even more destructive conflict 25 years later. It was a war whose scale and scope of devastation were not widely anticipated, save for a few prescient voices, even if there was a general sense of inevitability about it.[1] When the various belligerents mobilized their armies, most imagined the war would be short and decisive.[2] Addressing German soldiers deploying for the battlefront in early August 1914, Emperor Wilhem II of Germany declared, "You will be home before the leaves have fallen from the trees."[3] In the summer of 1914, no government imagined it would be fighting *the* Great War. After nearly four years of brutal fighting, however, the Great War—because at the time no one could imagine there could be a another war more catastrophic than the first—claimed more than nine million soldiers across Europe, the Middle East, Asia, and Africa.

The Zimmermann Telegram is still hailed as one of the most consequential events in code-breaking history.

As we know from history class, the U.S. entry into the war broke the stalemate that was the Western Front by April 1917. Just two months prior to the Zimmermann Telegram, the Battle of Somme was fought, notorious for the astounding number of British soldiers killed in a single day—nearly 20,000—and the futility of absorbing hundreds of thousands of casualties for several miles of battlefront progress .[4] Nevertheless, how many of us truly understand the role British code-breaking played in President Woodrow Wilson's decision to declare war against Germany? This was a remarkable about-face for a President whose slogan during his re-election campaign in 1916 was "He kept us out of war," and who possibly was more concerned about the threat Japan posed to U.S. interests than that of Germany.[5] At the time, Wilson was committed to maintaining America's neutrality and negotiating a peace between the belligerents—"peace without victory."[6] The Zimmermann Telegram is still hailed as one of the most consequential events in code-breaking history.[7]

Two key events contributed to Wilson's decision to break his campaign promise. The first was Germany's decision to resume unrestricted submarine warfare on January 31, 1917, breaking a pledge Berlin made in 1916. In early January, Germany's navy had won the Kaiser's agreement to unleash its submarines onto the high seas, drowning out all other voices of dissension, including those of its Chancellor and its ambassador to the United States. Convinced that it could deliver the decisive blow, the German Navy assessed it could starve Great Britain into defeat within six months. The decisiveness of the submarine campaign would quash any impact a U.S. entry into the war would have even if it decided to join the war—a possibility that the German Navy chief did not seriously entertain.[8] [9] The second contributing event was Great Britain's success in decrypting the Zimmermann Telegram and its decision to disclose the telegram to Washington.

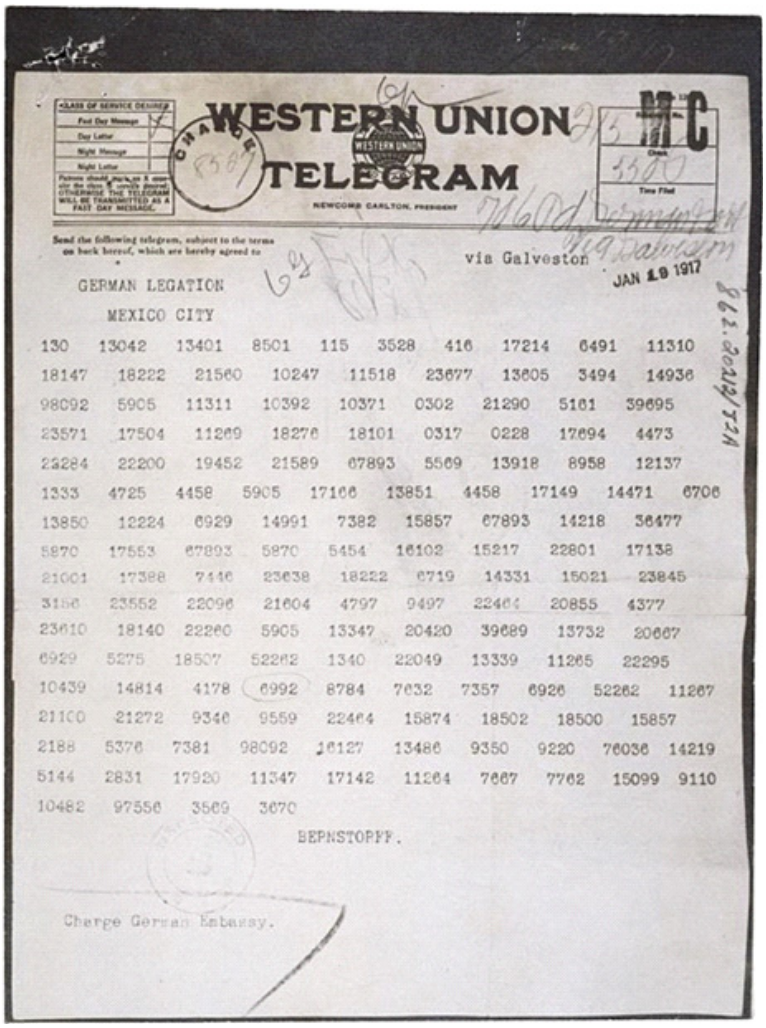
The Zimmermann Telegram consisted of two parts. The first part was German Foreign Minister Arthur Zimmermann's announcement to the German ambassador in the United States, Johann von Bernstorff, that Berlin had decided to resume unrestricted submarine warfare. The second part was a German hedge against the risk of the U.S. sending troops to Europe in response to Berlin's decision to resume unrestricted submarine warfare. By way of Bernstorff, Zimmermann instructed the German minister in Mexico, Heinrich von Eckardt, to seek an alliance with Mexico if it appeared Washington was about to declare war. Eckhardt also was instructed to ask the Mexican president to solicit Japan for a Germany-Mexico-Japan alliance.[10] The logic was that a United States distracted in the Pacific and South America would probably pay little attention to Europe.[11]

The coded Zimmermann Telegram was transmitted on January 16 from Zimmermann to Bernstorff, who then forwarded Zimmermann's instructions to Eckhardt on January 19. Room 40, the code-breaking unit of British Naval Intelligence, decoded most of the Zimmermann Telegram the day it was sent through the U.S. diplomatic cable system. Yes, Wilson permitted Berlin to transmit coded messages to

its ambassador—unreadable to the State Department—using the State Department's cable system. This arrangement was born out of an attempt to foster personal diplomacy. Both sides believed discussions for a negotiated peace to end the war would be more productive if Berlin could directly communicate with Wilson through its ambassador.[12]

Room 40's code-breaking successes stemmed from Great Britain's rapid decision to sever Germany's undersea cables (i.e., communications links) to the rest of the world the day after it declared war against Berlin.[13] That decision forced Germany to communicate with its overseas posts either wirelessly or by persuading neutral countries to allow it to send coded messages over their cables. Earlier accounts of the re-telling of the British intercept of the telegram often note that Room 40 acquired the telegram through multiple means: (1) the U.S. diplomatic cable system; (2) the "Swedish Roundabout"—a process whereby Sweden relayed Germany's coded messages to the United States via its posts in South America; and (3) radio transmissions. The Swedish Roundabout, in addition to the U.S. diplomatic cable system, is most often cited, but it is a myth. In what is probably a credit to British operational security and a desire to protect its code-breaking successes from foes and the United States, that myth persisted beyond the immediate post-war years and into the 21st century. Only recently have historians become certain that the sole means Room 40 used to acquire the telegram was through reading U.S. diplomatic cables; Berlin never used the Swedish Roundabout to send the telegram.[14] [15]

Almost two-and-a-half months passed before Wilson sought a declaration of war from Congress. Why did so much time pass between the day the telegram was sent and April 2? The importance of the Zimmermann Telegram to the war was not lost on Admiral William Reginald Hall, the Director of Naval Intelligence overseeing Room 40. By February 5, Hall seems to have appreciated the potential impact of the telegram's disclosure on U.S. decision-making to enter the war, which at this point was fixated on steadfast neutrality, but he was not ready to disclose the message.[17] [18] Hall



WESTERN UNION TELEGRAM

NEWCOMB CARLTON, PRESIDENT

Send the following telegram, subject to the terms on back hereof, which are hereby agreed to

via Galveston

JAN 19 1917

GERMAN LEGATION

MEXICO CITY

130 13042 13401 8501 115 3528 416 17214 6491 11310
18147 18222 21560 10247 11518 23677 13605 3494 14936
98092 5905 11311 10392 10371 0302 21290 5161 39695
23571 17504 11269 18276 18101 0317 0228 17694 4473
23284 22200 19452 21589 67893 5569 13918 8958 12137
1333 4725 4458 5905 17166 13851 4458 17149 14471 6706
13850 12224 6929 14991 7382 15857 67893 14218 36477
5870 17553 67893 5870 5454 16102 15217 22801 17138
21001 17388 7446 23638 18222 6719 14331 15021 23845
3156 23552 22096 21604 4797 9497 22464 20855 4377
23610 18140 22260 5905 13347 20420 39689 13732 20667
6929 5275 18507 52262 1340 22049 13339 11265 22295
10439 14814 4178 6992 8784 7632 7357 6926 52262 11267
21100 21272 9346 9559 22464 15874 18502 18500 15857
2188 5376 7381 98092 16127 13486 9350 9220 76036 14219
5144 2831 17920 11347 17142 11264 7667 7762 15099 9110
10482 97556 3569 3670

BEPNSTORFF.

Charge German Embassy.

Zimmermann Telegram as Received by the German Ambassador to Mexico, 01/19/1917[16]

primarily was concerned that the telegram's disclosure would jeopardize Great Britain's most sensitive intelligence secrets, compromising sources and methods to Germany and offending the United States—which would immediately suspect that Great Britain was reading the coded messages of neutral countries, including those of itself.[19] A secondary concern was that the disclosure of a partially deciphered telegram would fuel skeptics of British intent in the United States, a country already with sizable streaks of anti-English sentiment. Those skeptics would likely perceive the telegram as a British ruse to push a neutral country into war.[20]

Still, the most obvious argument against disclosure was time. It seemed that it would only be a matter time before Germany's decision to resume unrestricted submarine warfare would push the U.S. to enter the war. This was not the case. Wilson remained committed to staying out of Europe's war. Three days after Germany's announcement, Wilson only broke off diplomatic relations with Germany, refusing to believe that Germany intended to do what it announced it was doing.[21] Writing on February 12, Wilson's ambassador to Britain, Walter Page, remarked that the only way Wilson was willing to go to war with Germany was if someone kicked him into doing it.[22]

Room 40 continued its work on completely deciphering the telegram and preparing for its potential disclosure by the British government. Hall's plan involved obtaining the a copy of the telegram that was forwarded to Eckhardt via Western Union from Berstorff, reasoning that message received in Mexico would probably use an older and more breakable code and dated later than the initial telegram sent on January 16. The British envoy in Mexico secured a copy of the telegram through a spy in the Mexican telegraph office and forwarded it back to London.[23] By February 19, Room 40 had completely deciphered the Zimmermann Telegram. The version of the telegram received in Mexico was invaluable for protecting British sources and methods. Now, in the event of the telegram's disclosure, Great Britain could convincingly mislead the Germans into thinking that it was older codes that were compromised and that the source of the security lapse was its post in Mexico. London also could maintain the pretense that the telegram it obtained was a copy of the one sent to Mexico and not the result of reading America diplomatic communications. Reflecting on this ploy later after the war, a key British officer in the early history of Room 40 remarked that the "curtain which hid Room 40 remained wholly undisturbed. . . The cryptographic machine continued to function as silently as before."[24]

Recent history shows that Hall, convinced that Wilson would not declare war against Berlin, set in motion the plans for revealing the telegram to Washington.[25] On February 22, more than a month after British knowledge of the Zimmermann telegram, British Foreign Secretary Lord Balfour officially presented the telegram to Ambassador Page. In explaining the telegram to President Wilson, Page seemed to play a part in Hall's ruse. Page explained to Wilson that the reason Great Britain could not disclose the telegram to Washington earlier was because of the time it took to obtain and decipher the telegrams Bernstorff sent to Eckhardt.[26] On March 1, as a result of a planned leak by the Wilson administration, news of the German plot topped the headlines of major newspapers across America.

...as a result of a planned leak by the Wilson administration, news of the German plot topped the headlines of major newspapers across America.

Hall's anticipation that there would be U.S. skeptics was correct. In a scene that would surely resonate today, Wilson's Secretary of State and his counselor pressured the president of Western Union to hand over a copy of Bernstorff's telegram to Mexico, in violation of federal privacy laws, so that the U.S. could de-code the telegram on its own (with British help).[27] The telegram that was sent between Bernstorff and Eckhardt, of course, a simpler, older code and Room 40 did not attach the same level of sensitivity to this code as it did for the coded telegram between Berlin and Washington. None of this was necessary since on March 3 Zimmermann himself confessed to the legitimacy of the telegram.

On April 2, more than a month after London disclosed the telegram to Washington and more than two months after Germany resumed unrestricted submarine warfare, Wilson asked the U.S. Congress for a declaration of war. War came grudgingly to Wilson during March as German submarines sank merchant vessels, resulting in the loss of American life.[28] [29] [30] Indeed, when it came to asking Congress for a declaration of war, Wilson used German submarine warfare as the primary reason for entering the war, noting that Berlin's submarine attacks were "warfare against mankind."[31] The telegram was not forgotten, but its importance to Wilson, Congress, and the American public had diminished by then and did not prominently figure in subsequent Congressional debates over Wilson's request.[32] In Wilson's April 2 speech of over 3,600 words, the telegram occupied just 26 words and was buried in the fourteenth paragraph.

In hindsight, how should we evaluate the importance of the Zimmermann telegram? U.S. entry into the First World War was not contingent on the Zimmermann Telegram because by April 2, a little more than a month after Wilson learned of

the telegram, he had more compelling reasons to go to war than on the basis of a German plot, a plot Washington did not consider credible. Still, the Zimmermann Telegram and Room 40's code-breaking effort should occupy one of the most celebrated episodes in intelligence lore. Beyond the code-breaking aspect, however, the telegram is noteworthy in one other regard: were it not for the German Navy's grossly exaggerated view of its submarine capabilities, the telegraph probably would have never been sent and Wilson might have been able to carry out his promise to keep America out of the war.

[Author's Note: The views expressed here are my own and do not reflect the official policy or position of the Defense Intelligence Agency, the Department of the Defense, or the U.S. government.]

Notes

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[3] Barbara Tuchman, *The Guns of August*, New York, Random House, 1962, 119.
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[17] Barbara Tuchman, *The Zimmermann Telegram*; New York, Random House, 1958, 156.
[18] David Kahn, *The Code-Breakers: The Comprehensive History of Secret Communication from Ancient Times to the Internet; N*ew York, Sribner, 1996, 287.
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[20] Jeffery T. Richelson, *A Century of Spies: Intelligence in the Twentieth Century*, New York, Oxford University Press, 1995, 45.
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The Greater Middle East's Fifth Historical Wave:

Revolutionary Upheavals, but Game-Changing Progress? An Application for Preemptive Early Warning Intelligence Analysis

by Dr. Joshua Sinai

The Greater Middle East (GME), stretching from Iran to Morocco, is currently engulfed in a revolutionary fifth historical wave whose upheavals are transforming many of its political regimes, although not necessarily in the direction of game-changing progress and stability. As demonstrated by the recent country breakdowns in Iraq, Libya, and Syria where the incumbent governments have either been overthrown or where large territories have been taken over by Islamist insurgents, as well as the brutal war between Hamas and Israel in July-August 2014 that led to the massive destruction of much of the Gaza Strip (and severe damage to Israel's economy), one could argue that the current historical wave is being marked more by regime breakdown, political instability, and societal upheaval than the creation of more effective and stable regimes to take their place.

This upheaval in many ways is the opposite of the highly optimistic new historical era that was naively predicted by Francis Fukuyama's 1989 "End of History" paradigm...

This upheaval in many ways is the opposite of the highly optimistic new historical era that was naively predicted by Francis Fukuyama's 1989 "End of History" paradigm,[1] in which he proclaimed that "what we may be witnessing is not just the end of the Cold War, or the passing of a particular period of post-war history, but the end of history as such: that is, the end point of mankind's ideological evolution and the universalization of Western liberal democracy as the final form of human government."[2] Although even at that time there were many who disagreed with such a rosy prognosis, today it is evident that not only is it unrealizable around the world, but particularly in the Middle East where reactionary social forces, especially those associated with the Muslim Brotherhood and al Qaida and its affiliates, have been pushing, with some degree of success, for a complete rejection of the very "Western liberal democracy" that analysts such as Fukuyama had been expecting to spread throughout this and other regions.

As a result of these types of highly optimistic prognoses that have not been borne out in the current period, new paradigms in intelligence analysis are now required to account for and explain the types of systemic changes that are currently engulfing the GME. This essay is intended to raise these changes as a preliminary approach that hopefully will be complemented by frameworks developed by other analysts.

With this wave beginning with the mass demonstration movements of the Arab Spring in December 2010, its upheavals have led to massive geostrategic disruptions throughout the region, with governments appearing incapable of controlling the course of their direction. Initially, these mass demonstration movements exerted region-wide repercussions as they brought about regime changes in the Arab world's countries of Egypt (until the expectantly reformist Muslim Brotherhood-led government was overthrown by a military coup), Libya, Tunisia, and Yemen, with civil uprisings erupting in Bahrain and Syria. The Arab Spring's call for greater government transparency and socio-economic improvements also affected Israel, where mass street protest demonstrations broke out in August 2011 against the country's high cost of living (particularly housing), deterioration of public services, such as health and education, and the power structure which appeared to favor tycoons. Although these protests led to an increase in the parliamentary strength of pro-reformist parties in the January 2013 elections, they also emboldened hard-line right-wing opponents of the Israeli-Palestinian peace process to block any attempt to reach a territorial compromise with the Palestinian Authority, thereby paralyzing the Benjamin Netanyahu-led coalition government into inaction. This paralysis in the peace process continued following the March 2015 parliamentary elections and the formation of a narrow Netanyahu-led right-wing coalition government.

Despite the initial hopes by the reformists who had spearheaded these mass opposition movements that their efforts were going to bring about "game-changing" progress in terms of more representative and transparent governments and socio-economic improvements, they have ended up being hijacked by other forces with radically different

agendas. It could be argued, in fact, that the fifth historical wave is being marked by an escalation in religious extremism and sectarianism that have little interest in promoting greater pluralism and representativeness in their societies. The most striking example of such intolerance can be found in Syria, where al Qaida-like groups have assumed primacy over the insurgency against the brutal rule of Bashar al-Assad's regime. Although it is the regime's brutal response to the initially reform-seeking opposition demonstrations that led to more than 200,000 people killed in the country's civil war, with more than 5 million people (some 25 percent of its previous population) either internally displaced or as refugees in neighboring countries—which has become a continuously escalating and unprecedented humanitarian catastrophe (including for the neighboring countries that are finding themselves overwhelmed by massive scale of their influx as new populations in their already severely strained societies), the country itself is being divided into mutually antagonistic cantons with al Qaida-like insurgent armies such as the Islamic State carving out and expanding the territories under their control in Syria. There they are imposing their own harsh Taliban-like theocratic regimes over the populations under their control. The situation has even worsened as it has spilled over into neighboring Iraq, where its Sunni-based insurgency led by the Islamic State against the Shi'ite- dominated government is, in effect, partitioning the country into conflicting and autonomous Shi'ite, Sunni, and Kurdish provinces with a weak, ineffectual central government and a military incapable of responding to these threats to its rule and authority.

...questions are being raised about the continued relevance of the boundaries that were established by the Second Wave's 1916 Sykes-Picot Agreement between Great Britain and France.

Such new geostrategic trends are so revolutionary, in fact, that they are even transforming and splitting previous regional alliances, as Western countries, such as the United States, are finding themselves supporting the Sunni insurgent opposition against the minority Alawite-led government in Damascus and its Shi'ite Hezbollah forces in Syria, while attempting to work with the Shi'ite government in Baghdad to combat the Islamic State's Sunni insurgent forces in Iraq. Even Israel, which is hugely concerned about the building up of Hezbollah's military capability in Lebanon with long-range rockets, now finds itself silently hoping that the Alawite-dominated regime in Damascus and its Hezbollah and Iranian allies succeed in restoring control over the country, which would restore the long-standing cease-fire along the Golan Heights, now largely under control on the Syrian side by al Qaida-linked al Nusra Front and Islamic State insurgents who are threatening to wreak havoc throughout the region.

With many of the long-standing geostrategic paradigms of the earlier historical waves, particularly over national boundaries, being challenged by the blurring of borders, for instance, between Syria and Iraq, questions are being raised about the continued relevance of the boundaries that were established by the Second Wave's 1916 Sykes-Picot Agreement between Great Britain and France. This historic agreement had led, following the defeat of the Ottoman Empire in the First World War, to the division of the Middle East into nation-states-in-the- making through the establishment of their respective mandatory authorities in Palestine, Syria/Lebanon, and Iraq, and in effect ushered in the Second Historical Wave, which lasted until 1948.

One could argue, at least thus far, that the events characterizing the fifth historical wave are leading to greater regional paralysis and instability than heretofore, with significant negative implications for any prospects for long-term regional stability and economic growth. The significance of the fifth historical wave, therefore, is in its ushering in of new political upheavals and highly volatile security conditions into the GME that would have been unimaginable in previous historical waves where continuity and predictability were considered the paradigmatic norm, but that now require new conceptualizations and difficult-to-implement solutions to resolve the multidimensional upheavals created in its wake.

DEFINING HISTORICAL WAVES

This framework's historical wave-like cycles of revolutionary political developments and changes are intended for analytical purposes to complement other theoretical explanations of social, economic, political, and military change and evolution, such as Barrington Moore's notion of the social origins of democratic, fascist, and communist regimes,[3] or Samuel Huntington's notion that if rapid social modernization is not managed by appropriate political development and institutionalization, then political decay and disorder inevitably take place.[4] Moreover, the precise dates of the origins and terminations of these historical waves are not intended to be exact (e.g., new historical waves may begin a few years earlier than outlined, the same year may both end and begin a new political era, and some components of a historical wave may continue in some form or another a new wave), and while not all political systems in the same region will experience the same degree of a wave's revolutionary change or upheaval, nevertheless the impact of such revolutionary developments on a few of them will be sufficiently significant to affect the rest, as well, to some degree or another. Thus, for example, while Saudi

Arabia may not be experiencing the same degree of regime turbulence as Egypt, Riyadh is so highly concerned about the spillover of Islamist extremism to its own society that it has become Cairo's primary financial supporter to enable it to withstand such internal upheavals.

In this construct—which was derived from David Rapoport's conceptualization of the four historical waves of modern terrorism[5]—each historical wave lasts about 30-40 years (e.g., a generation). Unlike short-term political cycles, such as the length of a government administration (typically 3-5 years), a historical wave is intended to describe long-term, as opposed to near-term, political developments and changes.

FIRST HISTORICAL WAVE: FOUNDATION

In this analytical construct, the first historical wave laid the foundation for the modern GME's nation-state system. It began around 1880 with the rise of the external and indigenous forces that brought about the dissolution and partitioning of the Ottoman Empire in the aftermath of the First World War. During this historical wave's initial years the 6-centuries-old Ottoman Empire was already in decline in the GME, but it was greatly hastened by the intervention of European powers, such as Great Britain, France, and Italy, which had ambitions to become the region's preeminent colonial powers. British victory in the 1882 Anglo-Egyptian War led to its colonial administration of Egypt (which lasted until 1922). Coincidentally, it was also in 1882 that the first wave of Jewish immigration from Europe to historical Palestine occurred, which was followed by the second wave of immigration in 1904 (lasting until 1914).

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It was during this historical wave that Great Britain and France began to reshape the region's territorial boundaries when Britain's political officers from their Cairo Bureau entered into negotiations with the Sharif Hussein of Mecca and his sons, which, in a document known as the Hussein-McMahon Correspondence of 1915-16, Britain promised to reward the Hashemites for leading the revolt against the Ottoman Empire with "Arab independence" declared for the lands to be liberated, although, as later revealed in the Sykes-Picot Agreement of 1916, Britain and France had already agreed to split and occupy among themselves parts of the promised "independent" Arab lands.

In another significant foundational development, unbeknown to the Hashemites, Britain had also promised in the Balfour Declaration of November 2, 1917, to establish in [an undefined portion of] Palestine "a national home for the Jewish people…it being clearly understood that nothing shall be done which may prejudice the civil and religious rights of existing non-Jewish communities in Palestine." A third European country, Italy (although not an ally of Great Britain and France), also was active during this historical wave, when it became Libya's colonial power following its victory against its Ottoman ruler in 1911.

SECOND HISTORICAL WAVE: CONSOLIDATION

In the GME's second historical wave, the first wave's foundational political developments (whether regarded as justified or unjustified) began to be consolidated for long-term endurance. Beginning around 1920, new political entities, although initially not expected to be fully independent, were created by the victorious British and French forces following their defeat of the Ottoman Empire in the First World War. As a result of the first wave's complex and back-door agreements by Great Britain and the Hashemites, as well as by Britain and France (and not yet authorized by the League of Nations), in 1921 Britain gave Hussein's son Emir Abdullah its territory of Transjordan (which was split off from historical Palestine) as a kingdom, and his other son, Faisal, was given the territory of Iraq as a kingdom (also in compensation for not giving him his first choice of Syria, which had already been promised to France).

These arrangements were formalized by the League of Nations in 1923, when Great Britain was granted the mandates for Palestine... France was granted the mandate for Syria...

These arrangements were formalized by the League of Nations in 1923, when Great Britain was granted the mandates for Palestine (to cover the territory's Arab and Jewish communities), Transjordan, and Iraq. Moreover, in September 1923 France was granted the mandate for Syria (which included the territory of modern-day Lebanon). This was not France's first colonial rule in the GME, as it had first established its colonial presence in Algeria, which it had conquered in 1830, and Morocco, over which it was the protectorate power from 1912 to 1956.

It was also during this period that parts of the Arabian Peninsula, which had been liberated from Ottoman rule by the British-allied Hashemite dynasty, were declared as the Kingdom of Hejaz, and were under their rule from 1917 to 1924, when they were defeated by the forces allied with the

Ibn Saud dynasty that ultimately succeeded in creating a unified Kingdom of Saudi Arabia in 1932. This historical wave lasted until 1948, when virtually all of these entities became independent states (except for the Palestinian-inhabited West Bank and Gaza Strip, which were controlled by Jordan and Egypt, respectively, until June 1967).

THIRD HISTORICAL WAVE: POST-INDEPENDENCE CONSOLIDATION

The third historical wave, lasting from 1948 to 1979, represents the GME's post- consolidation phase, with countries previously under colonial administration, such as Algeria and Morocco, granted independence; with other countries such as Saudi Arabia and Morocco strengthening their monarchies; and with others, such as Egypt, Iraq, and Libya, overthrowing their monarchies and becoming military-ruled republics. In one of the most significant developments, national liberation movements emerged, such as the Palestine Liberation Organization (PLO, founded in 1964), which were largely secular in nature and pressed for statehood, particularly in countries such as Israel (which had conquered the West Bank and Gaza Strip in the June 1967 War), where the consolidation process was still in dispute.

This wave also featured the beginning phases of several Arab-Israeli peace initiatives, beginning with the United States-brokered 1978 Camp David Accord, the 1979 Egyptian-Israeli Peace Accord, and, following the first Palestinian Intifada (1989-92), the 1993 Oslo Accord, which also paved the way for the Israeli-Jordanian peace agreement. Most worrisome, this wave also prepared the ground for the fourth wave's radicalization processes, which were exemplified by the Likud's victory in the May 1977 parliamentary elections and, together with its religious political partners, its promotion of messianic Zionism and escalating Jewish settlement activity in the West Bank.

FOURTH HISTORICAL WAVE: RADICALIZATION

The fourth historical wave's radicalization processes began in 1979 with the victory of the Ayatollah Khomeini-led Islamic revolution in Iran, which overthrew the Shah's autocratic (although largely secular-based) regime. It also inaugurated the conflict, which has been greatly exacerbated in the fifth wave, between militant religious fundamentalism and mainstream religious orientations in the GME's Shi'ite and Sunni societies. During this historical wave, new Islamist-based terrorist and guerrilla organizations emerged, such as the Iranian-backed Lebanese Hezbollah (1982) and the Muslim Brotherhood-backed Palestinian Hamas (1987), both of which succeeded in entrenching themselves in their respective societies. Although the activities of Hezbollah and Hamas were largely regionally oriented, a new, revolutionary, and transnational terrorist organization also emerged during this wave, embodied by al Qaida which was founded in 1988-89. Al Qaida threatened all GME governments with its call for the establishment of an Islamist Caliphate throughout the Muslim world, including the overthrow of the Saudi monarchy.

In Israel, the rise of militant religious fundamentalism continued to proliferate, with such movements spearheading the proliferation of Jewish settlements in the West Bank. Their splinter movements also formed their own terrorist groups, such as the Gush Emunim Underground (which lasted from 1979 to 1984), and Yigal Amir, a "lone wolf," far-right religious extremist, who assassinated Prime Minister Yitzhak Rabin in November 1995 in order to sabotage the Oslo Accords.

FIFTH HISTORICAL WAVE: DISRUPTION

The current fifth historical wave has served to challenge all political regimes that have remained autocratic (to some extent or another, even with a democratic veneer, such as elections to a parliament in a monarchy without decisive powers) or that are not strictly Islamist. Although the social protests that produced the Arab Spring in late 2010 were largely secular and advocated opening their countries' political systems to democratic representation, pluralism, and freedom of expression, they were quickly overtaken by Islamist forces, such as the Muslim Brotherhood in Egypt and the Ennahda Party in Tunisia. In both Egypt and Tunisia, large segments of the population, especially the young, had become disenchanted with the pace of expected transitions to democracy and the ruination of their economies by these regime changes. In Libya, the aftermath of the 42-year dictatorship by Muammar Qadhafi had produced a transitional government but also widespread disorder and violence over the country's future orientation and political institutions.

In what is considered the GME's most explosive geostrategic crises, in Syria al Qaida-affiliated al Nusra Front and Islamic State insurgents have formed a sizable proportion of the armed opposition to the Assad regime, a prospect that concerns the increasingly weakening mainstream elements among theopposition forces. With Jordan, Lebanon, and Turkey severely strained by the socio-economic catastrophe caused by the massive influx of Syrian refugees into their countries, Jordan and Lebanon, in particular, are highly concerned about the spillover political, economic, and security implications of this influx on their societies. The spillover has already occurred in Iraq, where the increasingly ambitious ISIS had, in effect, also in de facto

fashion erased the borders established by the Sykes-Picot Agreement between Syria and Iraq.

What is important about these five historical waves is that each one was triggered by distinct revolutionary political events that served to radically transform the nature of the previous historical wave's political regimes.

CONCLUSION

What is important about these five historical waves is that each one was triggered by distinct revolutionary political events that served to radically transform the nature of the previous historical wave's political regimes. To comprehend the significance of the revolutionary disruptions being experienced in the current fifth wave and their possible future direction, it is therefore crucial to understand the changes introduced by the previous waves, including how much of their development may have continued into their succeeding waves.

Such revolutionary change, however, has not been uniform, with most political regimes in the GME remaining in place. In the Gulf, for example, with the exception of Bahrain, most of the principalities are considered relatively stable, although even they are aware that they need to come to terms with the demands of the Arab Spring's proponents for greater political representativeness and equitable distribution of national wealth throughout society. For national security planners and intelligence analysts, this construct of the five historical waves is intended to signify that the revolutionary changes currently underway in the GME may not necessarily be positive, constructive, or peaceful in nature, and in fact may be highly disruptive and accompanied by outbreaks of political intolerance, widespread internal violence and breakdown, and severe economic decline that might last for many years.

For intelligence analysts, in particular, this analytic framework is intended to upgrade their capability to adapt and keep ahead of such historical developments and what is likely to constitute the next near-term phase of the current fifth historical wave of "Disruption." It is intended to mitigate the problem facing intelligence communities worldwide of being so focused on current developments that they may miss recognizing the implications of gradual changes in the nature of new historical developments, thereby failing to stay ahead of them operationally. Thus, for example, while accepting that the revolutionary upheavals in the current fifth historical wave are likely to last for several decades, the changes within the next short-term phase are likely not to be transformational, but gradual—although unanticipated transformational surprises are always possible. For such near-time warning, concrete indicators drawn from the fifth historical wave will need to be identified to enable intelligence analysts to draw actionable inferences, with appropriate data collected that are sufficiently concrete to provide analysts with insights about what may be out there in the future or, at the very least, if such concrete data are not available to forecast warning trends, to come up with next best approximations that will enable them to make the necessary adjustments to effectively respond to emerging systemic upheavals down the road.

Notes

[1] See Francis Fukuyama, "End of History," *The National Interest*, Summer 1989.
[2] Ibid.
[3] See Barrington Moore, *Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World* (reprint edition), Boston, MA: Beacon Press, 1993.
[4] See Samuel Huntington, *Political Order in Changing Societies*," New Haven, CT: Yale University Press, 1968.
[5] See David C. Rapoport, "The Four Waves of Modern Terrorism," pages 46-73 in Audrey Kurth Cronin and James M. Ludes, eds., *Attacking Terrorism: Elements of A Grand Strategy*, Washington, DC: Georgetown University Press, 2004.

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Understanding ISIL:
How History Explains Ideology

by Dr. Rasheed Hosein

BACKGROUND

On June 10, 2014, mainstream news outlets began breaking the news that Sunni Islamic extremists, operating under the banner of the Islamic State in Iraq and the Levant (*al-Dawlat al-Islâmiya fî al-Irâq wa al-Shâm*) or ISIL,[1] had taken Mosul. The city, Iraq's second largest and home to roughly 1.8 million people, is a critical part of the federated state and its capture by extremists sent shockwaves throughout the region. Within two days of this major victory, the cities of Tikrit (roughly 260,000 people) and Samarra (340,000 people) both in the neighboring Saladin Governorate just to the north of Baghdad, also fell to ISIL. However, these attacks and their successes were not out of the blue. In May 2014, two of the major cities of the al-Anbar Governorate—Ramadi and Fallujah—both fell to ISIL. During the previous month, 994 people died due to the militaristic actions of ISIL and other paramilitary extremist groups throughout Iraq,[2] highlighting what appears as a steady erosion of political support and military power of the Iraqi government. After these reverses in May and mid-June, both the head of the Nineveh Governorate, Athîl al-Nujaifî, and Iraq's Prime Minister Nûrî al-Mâlikî appealed repeatedly for military assistance,[3] calls which have thus far gone largely unanswered.[4] When one combines these ISIL gains with its already established holdings in Syria—carved out of the chaos of the ongoing Syrian civil war and mainly ranging from Raqqa (220,500 people), the ISIL center of power in north central Syria, all the way to the Iraqi border roughly along the Euphrates River—the group appears to be making good on one of its stated aims of erasing the Syrian-Iraqi border. When one factors in the capture of the Karameh Border crossing (near the village of Trebil),[5] the busiest between Iraq's al-Anbar Province and the Hashemite Kingdom of Jordan, ISIL appears poised for a much wider campaign.

Understanding and disseminating the origins and aims of this rising paramilitary organization should be a critical part of the U.S. government's agenda. However, the picture that has emerged thus far on ISIL from government statements, the media, and academia has been somewhat uneven and confusing. In looking at this group, its name is perhaps the most important element in understanding it and is central to our discussion; analyzing the evolution of this group's name will help illuminate its past, present, and future agendas. Additionally, I will examine its history from roughly 2004, the historical pillars upon which its ideology rests, and its stated aims. With these elements, we may begin to see a clearer picture of how the group operates and better predict how it will act in the future.

A BRIEF HISTORY OF ISIL TO 2007

The group that would become known as ISIL began life in early 2000 as *Jama'at al-Tawhîd wa al-Jihîd* or JTJ (Organization of Monotheism and Striving [for the Faith]), under the leadership of Abû Mus'ab al-Zarqâwî (1966-2006).[6] Born in Jordan, al-Zarqâwî and his organization originally aimed to foment regime change at the expense of the current Jordanian monarch, King Abdullah II, and his pro-Western regime. The JTJ, in furthering this goal, would commit terror attacks, including the 2002 assassination of U.S. diplomat Laurence Foley in Amman, Jordan, and the 2002 killing of the UN Special Representative of the Secretary General for Iraq, Sergio Vieira de Mello, in Baghdad, to name only a couple.[7] Considered originally a protégé of al-Qaeda (alternately spelled al-Qâ'idah) leader Osama bin Laden (1957-2011) from their days in Afghanistan as the Soviet invasion drew down, al-Zarqâwî returned to the Levant in the wake of the U.S. occupation of Afghanistan after September 11, 2001. In 2004 al-Zarqâwî gave the *biy'ah* (oath of support) to Osama bin Laden on behalf of the JTJ, adding to al-Qaeda's role as an organizer of terror groups throughout the Islamic world.[8] In return, the Iraqi paramilitary group was designated a Foreign Terrorist Organization by the U.S. government and al-Zarqâwî himself was named as Bin Laden's official agent (*amîr*) in Iraq.[9] In commemoration of this moment, JTJ rebranded and transformed into *Tanzim Qâ'idat al-Jihâd fî Bilâd al-Râfidayn* or Organization of the Foundation of Jihad in the Land between the Two Rivers (QJBR).[10] However, despite the new name and partnership with al-Qaeda, QJBR often operated under an agenda that serviced its own aims and not necessarily those of its parent.[11]

By 2005 al-Zarqâwî had begun to enunciate a definitive, 4-stage policy for QJBR, and he sent a letter outlining it to al-Qaeda's second in command, Ayman al-Zawâhirî. In the document, al-Zarqâwî stated his aims were to force the exit of U.S. forces, establish an Islamic authority (or caliphate), spread the conflict to Iraq's regional neighbors, and finally engage Israel in armed conflict.[12] It is also around this time that the QJBR began to be commonly known as al-Qaeda in Iraq (AQI)[13] by outsiders, partly as a simplification of the title and perhaps to help reinforce the relationship between al-Qaeda proper and the nation of Iraq.[14] Despite advice from al-Zawâhirî calling for a more moderated approach to the sectarian situation in Iraq,[15] al-Zarqâwî instead declared an all-out war against the nation's Shî'î population, ordering a series of bloody attacks against them and their holy sites.[16]

In January 2006 al-Zarqâwî and QJBR helped to establish the Mujâhidîn Shura Council of Iraq, an umbrella organization meant to handle the merger of Sunni extremist groups in the country. Quickly, this group rose to prominence and became known as *dawlat al-'Irâq al-Islâmiyah*, or the Islamic State of Iraq (ISI), by October of that year. However, al-Zarqâwî did not live to see this as a U.S. bomb killed him at a QJBR safe house near Baqubah on June 7, 2006.[17] He was succeeded by Abû Ayyûb al-Masri (1968-2010), an Islamist with longstanding ties to al-Zawâhirî from their time as *mujâhidîn* in Afghanistan and with Egypt's *al-Ikhwân al-Muslimîn* (Muslim Brotherhood) and the Egyptian Islamic Jihad (EIJ), a group once led by the aforementioned al-Zawâhirî.[18]

After the U.S. enacted a surge which saw the addition of some 30,000 additional troops during 2007, ISI appeared to wane as the level of violence subsided due to the increased U.S. military presence.[19] Despite some high-profile actions, such as an assassination attempt on then Iraqî Sunnî Prime Minister Salâm al-Zaubai, the bombing of the Iraqî Parliament building, and the capture and execution of three American soldiers, U.S. forces were able to push out elements of ISI from al-Anbar, Saladin, and Nineveh Provinces in a series of engagements throughout 2007 and 2008. While weakened, however, a series of events began to take place that enabled the survival of ISIL and created an environment where it could again prosper.

THE COLONIAL CONTEXT

In order to understand the survival and recent resurgence of ISIL, we must first look back at the history of the region since the First World War to better understand how the group developed and built a basis for support in both Iraq and greater Syria. After the First World War, the victorious powers (specifically Great Britain and France) imposed onerous territorial demands on the defeated Ottoman Empire (1299-1923). During the war, a British officer, COL Mark Sykes (d. 1919), and a French diplomat, François Georges-Picot (d. 1951), had hammered out a secret agreement on behalf of the two powers which partitioned Ottoman lands in the Middle East. After the Armistice of Mudros (October 30, 1918) which ended hostilities between the Ottoman Empire and the Entente Powers, Great Britain and France finalized the extent of their territorial ambitions at the San Remo Conference (April 9-26, 1920), and formalized these demands to the Ottomans in the Treaty of Sèvres (August 10, 1920). The backlash created by the treaty prompted Mustafa Kamal Atatürk (d. 1938) to launch a revolution of national Turkish liberation against the Ottoman signatories at Sèvres (now viewed as traitors), eventually leading to the establishment of a new peace under the Treaty of Lausanne (July 24, 1923). The outcomes of this treaty were transformational. It formalized the dissolution of the Ottoman Empire after more than 600 years in power and set the groundwork for the abolishment of the Sunnî caliphate,[20] as a part and prerogative of the Ottoman royal family, by Atatürk on March 3, 1924. However, while the new Republic of Turkey won most of the territory it considered essential for a Turkish state, the Arab lands were left to the designs of the French and British.

After the First World War, the victorious powers (specifically Great Britain and France) imposed onerous territorial demands on the defeated Ottoman Empire (1299-1923).

Dating back to a time before Ottoman control, the Arab lands in question fell under two broad geographic terms: *bilâd al-Râfidayn* (the land between the two rivers)[21] and *bilâd al-Shâm* (the land of the left hand).[22] According to the Ottoman *Vilayet* Reform Law of January 21, 1864, which was a part of the series of reforms and restructuring in the empire known as the *Tanzimât* (Reorganization) Era, the regions of *bilâd al-Râfidayn* and *bilâd al-Shâm* were subdivided into several new administrative provinces. In *bilâd al-Râfidayn* two new provinces, the Vilayet of Basra and the Vilayet of Baghdad, were created, while in *bilâd al-Shâm* the Vilayets of Syria, Jerusalem, Beirut, Aleppo, and Dayr al-Zawr (or Deir ez-Zor) also came into being as a result of these Ottoman reforms. The lands directly north and east of the Vilayet of Baghdad were an ethnically Kurdish-dominated region which became the Vilayet of Mosul. However, all of this would unravel in the aftermath of the "Great War."

During the First World War, the British quickly recognized that the most expedient way to deal with the Ottomans was to drive a wedge between Istanbul and her Arab subjects. Feisal I (1885-1933) was the son of the Ottoman Sharîf[23] of

Mecca Hussein b. 'Alî (1854-1931). Prior to the Arab revolt against the Ottomans during World War I, Great Britain, represented by Sir Arthur Henry McMahon (1862-1949), engaged in secret agreements with the family which came to be known as the Hussein-McMahan Correspondences. In it, an Arab kingdom was promised, although there were some issues with its exact boundaries. Feisal, along with British General Sir Edmund Allenby (1861-1936) and then-captain Thomas Edward Lawrence (1888-1935), fought the Ottomans in the Levant, and by war's end Feisal was in Damascus where he looked to capitalize on the British promises. The French, though, did not want a pro-British monarch in what was their territory according to the terms of the still secret Sykes-Picot Agreement, and ousted him shortly after he was enthroned in 1920. As recompense, Feisal was made King of Iraq roughly a year later in August 1921 while the band played the British national anthem "God Save the King."

In the aftermath of the Great War, the League of Nations created a mandate system whereby developed (i.e., Western) nations would help in the development of new nations. As such, five mandates (Palestine, Transjordan, and Iraq for Great Britain; Syria and Lebanon for France) were carved out of the Ottoman *vilayet* system. These new states generally corresponded to the terms of the Sykes-Picot Agreement of roughly a half decade earlier. There was some gerrymandering, however, as Ottoman *vilayets* were bundled together and their territorial boundaries redrawn to meet European economic, military, and geostrategic needs. A good example of this may be found in the creation of Iraq, as the Kurdish *Vilayet* of Mosul was added to the Arab *Vilayets* of Baghdad and Basra largely to better control the economic potential that the recent discovery of oil in the region might bring, and also to better balance the confessional demographics of their new charge.

THE CONFESSIONAL CONTEXT

Another element that we must address when looking at the recent military successes of ISIL in the region is the relationship between the two main branches of Islam, the Sunnîs and the Shî'îs, and how it plays into the confessional political landscape. While there is a considerable and longstanding enmity between the two Muslim confessional groups, the issues which divide the Sunnî and Shî'î communities find their origins not in events from the time of Muhammad (ca. 570-632), as many contend, but rather in events relatively more recent.

In the year 1501, Shâh Ismâ'îl I (r. 1501-1525), the founder of the Persian Safavîd empire (1501-1736), declared that the overwhelmingly Sunnî lands under his control would henceforth and forevermore now be Shî'î in confession. The reasons for this move by Ismâ'îl I are many. The Safavîds, while initially comprising a Sunnî Sûfî organization, had gradually changed their orientation to a Shî'î position by the mid-15th century. Sûfism, or mystical, non-canonical Islamic practice was a critical component in the dynamic spread of the faith throughout central and southern Asia. However, the larger political realities of Shâh Ismâ'îl I's age appear to factor prominently in the shift. To the west of Iran lay the aforementioned Sunnî Turkish Ottoman Empire, to Iran's east lay the ethnically Turkic but Persian-speaking Delhi Sultanate (1206-1526) and the rising power of the Turkic Sunnî Mughals (1526-1857), while to the north lay the Turkic Sunnî Uzbeks and their Khanate of Bukhara (1500-1785). The Safavîds, themselves of Turkic origin, needed a way to define themselves and more critically their military base (known as the Qizilbas tribes) *vis-à-vis* their neighboring Turkic states. By making this confessional differentiation, the Safavîds protected their sovereign and military prerogatives against any external encroachment from the Ottomans, Uzbeks, or Mughals, and thus the designation of Safavîd Iran as a Shî'î state may be seen as a way of creating a new, solid ideological base for the state.

The choice of "twelve" Shî'ism by Shâh Ismâ'îl I is also important to consider. Within the Shî'î tradition, there are multiple lines of religious legitimacy. According to the majority of Shî'î, there are three major divisions: the Zaydîs (or "fivers"), the Ismâ'îlîs ("seveners"), and the Imâmî ("twelvers").[24] Historically, the Shî'î marry both political and religious authority (*nacc*) in the person of the Imâm. The Imâm, according to majority of Shî'î, had to be a direct descendent of the union of 'Alî (d. 661), the Prophet Muhammad's cousin and the fourth commonly acknowledged caliph of the *ummah*, and Fâmimah (d. 633), the Prophet Muhammad's daughter, through the line of their son al-$usayn (d. 680). The remembrance of al-$usayn's death at the Battle of Karbalâ' through the observance of *ta'ziyah* (mourning) during 'Âshûrâ' is a central facet of Shî'î religious practice to this day. This marriage of political and religious authority within a very specific lineage worked well initially, but as the pool of candidates increased over time the potential for the formation of differing factions likewise increased.

One unique feature of the Imâmî tradition of Shî'ism was the fact that, after the twelfth Imâm, this line of political and religious authority stops. Within both the Zaydîs (fivers) and the Ismâ'îlîs (seveners) Shî'î traditions, there still exists a living Imâm to act as a guide and interpreter for several of their communities. The Imâmî tradition does not. Twelfth in the accepted line, Muhammad al-Mahdî (*fl.* 874), is believed to be in occultation, returning with Jesus to inaugurate an era of peace and justice. The occultation of the "hidden" Imâm meant that there was no single figure holding both political and religious authority. Rather, the Imâmî Shî'î *'ulamâ'* began to develop and eventually assume guardianship of the religious prerogatives, leaving the political arena open. For a Turkic ruler like Shâh Ismâ'îl I,

nominally recognized as the head of a Shî'î-leaning (though still somewhat heterodox) Sûfî group, these realities provided an excellent opportunity to redefine the state in a religious sense, bind his supporters to his cause, and create a political differentiation from virtually every other major state in the Islamic World. Inviting Shî'î '*ulamâ'* from their traditional strongholds in what is now modern Lebanon, the Safavîd ruler began the construction of his new state. In this way, the first years of the 16th century gave rise to a new entity—political Shî'ism—and this in turn forced the Sunnîs (largely in the Ottoman lands) to establish and codify a political Sunnism to match.

Despite the early successes of Shâh Ismâ'îl I, his defeat at the battle of Chaldiran, August 23, 1514, by the Ottoman Sulmân Selim I opened up Ottoman expansion and control into Iraq and modern Iran. While the border would vacillate until firmly defined by the Treaty of Zuhab (or Qasr-i Sirîn) on May 17, 1639, key Shî'î religious sites, such as al-Najâf and Karbalâ', and populations were now outside the territorial boundaries of Shî'î Persia (Iran). Despite attempts to undo the Shî'î conversion of Iran by several successor dynasties to the Safavîds after their fall, the religious change would hold and, with the Islamic Revolution of 1979, the Shî'î '*ulamâ'* were finally able to construct a state in which the twin pillars of Shî'ism and political power were united.

REBUILDING AND EXPANSION YEARS, ISI AND U.S. FORCES, AND THE MOVE INTO THE LEVANT, 2008-2010

One fact which emerges from any study of the recent successes enjoyed by ISIL is that, in spite of its limited numbers, its ability to project power far outstrips any other group. Despite the successes enjoyed by U.S. and coalition forces in 2007 and 2008 during the height of the surge, ISI, renamed from QJBR just after the formation of the Mujâhidîn Shûrâ Council,[25] displayed great flexibility and was able to survive the setbacks of losing al-Zarqâwî. That said, ISI experienced its political and military nadir in the early years of Abû Ayyûb al-Masri's guidance. While serving as the ideologue of the previous manifestation of the group (i.e., QJBR), al-Zarqâwî's uncompromising stance did much to alienate potential allies from his cause. In the heavily Sunnî al-Anbar Province, ISI carried on these policies of a hyper-strict adherence to *sharî''ah* legal practice long after the name change. However, this only served to leech potential buy-in and support from the locals.[26] Additionally, ISI attacks against the Shî'î invariably invited a reciprocal response and ISI could do little to protect its constituents, creating the enmity of which al-Zawâhirî had warned in his letters back in 2005.[27]

Toward the end of 2008, the U.S. government and Iraq signed a new Status of Forces Agreement (SOFA), which extended some of the extraterritorial rights (legal and otherwise) common in such agreements. At the time of the 2003 invasion of Iraq, no such agreement existed. However, when incidents such as those which occurred at Abû Ghurayb (alternately spelled Abu Ghraib) Prison came to light toward the beginning of 2004, negotiating a new SOFA with the government of Iraq became much more complicated. When al-Mâlikî took office in 2006, the insurgency was at a high point. The interim Prime Minister of Iraq, Ibrâhîm al-Ja'farî, paid a political price for the violence under his watch,[28] and it was only after a measure of peace was established after the surge that al-Mâlikî was in a position to open negotiations. Embedded within the agreements was a Memorandum of Understanding (MOU) which established U.S. troop levels and would explicitly show the drawdown and final withdrawal of forces from Iraq by the end of 2011 in real numbers.[29]

THE SYRIAN COMPONENT

One unanticipated factor during the 2008 SOFA and MOU discussions was the unraveling of Syria in 2011. In December 2010, a series of uprisings—known as the Arab Spring—ushered in major political and social changes in Tunisia, Egypt, and Libya. By late January 2011, small-scale protests against the Alawî-dominated Syrian government began flaring up, leading to the eruption of mass protests against the government of President Bashâr al-Assad on March 15, 2011, and the bloody crackdown on dissent three days later. The United Nations had estimated over 100,000 casualties on July 24, 2013, the last official total, and UN Secretary General Ban Ki-moon has recently stated that the number of dead may well top 150,000.[30]

Several of the issues behind the conflict in Syria lie in the way the state was constructed by the French in the 1920s. The French, eager to consolidate their position as mandatory power over the Levant, divided the region along sectarian lines. The region of Mount Lebanon, a traditional enclave of Maronite Christians, became the core of a Lebanese state. The rest of the French Mandate territories in the Levant became Syria. Within this Syrian state, the French were quick to marginalize the Arab Sunnî elite, the previously dominant ethnic and social grouping. This was accomplished by advancing the interests of the Druze and Alawîs,[31] the two other major ethnic groups in the Mandate lands. Once independence came to Syria on April 17, 1946, there was a move toward rebuilding the status of the old Arab Sunnî elite but, with the secession of Syria from the United Arab Republic[32] (UAR) in 1961, the subsequent political instability led to a coup in 1963 and the rise of the Alawî al-Assad family.

The Alawîs, comprising roughly 12 percent of the Syrian population, would materially benefit from the al-Assad family's prominent role in the post-coup government and military restructuring of Syria. A member of the Syrian military, Hâfiz al-Assad (alternately spelled Hafez al-Assad, 1930-2000) demonstrated great skill as a pilot, all of which eventually culminated with his assumption of command over Syria's air force with his promotion to the rank of major general in 1964.[33] In the resulting restructuring of key national institutions after the *coup d'état*, several hundred ranking Sunnî military officers were removed from their posts and replaced with Alawî supporters, resulting in a dominating presence in the armed forces for the minority group.[34] This would heighten the tensions between the Sunnî and the Alawî Shî'î, which would culminate in the sectarian revolt of Sunnîs in 1983. The al-Assad government brutally put down that struggle, killing—by some accounts—up to 40,000 Sunnîs in the city of Hama while blaming the uprising on the Sunnî transnational Muslim Brotherhood organization.[35] It would take a generation before the Sunnî population would again challenge the al-Assad regime.

By 2011, with the status quo being challenged in several countries and a wave of change spreading across the Middle East, Syrian governmental authority and civil society began to unravel. President Obama, having recently ordered a drawing down of U.S. forces in both Iraq and Afghanistan and perhaps feeling pressure from a war-weary domestic electorate, decided against deploying forces to Syria. The uneven response of Syria's leadership in the early days of the uprising, as it vacillated between police action and brutal military responses, would serve only to add to the problems. Additionally, several countries, such as Russia, Saudi Arabia, and Iran, saw this as an opportunity to expand their regional influence. In the case of Russia, which had long-standing ties to both the Syrian nation—extending back to the 1960s and the Cold War—and to the al-Assad family personally, Russian President Vladimir Putin blocked attempts at the UN to censure the al-Assad regime for its use of violence.[36] For Saudi Arabia, this was an opportunity to support the nascent political aspirations of an oppressed Sunnî population, while spreading the influence of the austere strain of Islam, known as Wahâbism, which was practiced in Arabia.[37] Iran's policy aims are somewhat more pragmatic. Syria was seen as a traditional, strategic ally against Iraq. Coupled with the heterodox Shî'î practice of its ruling elite, each viewed the other as natural partners, and any threat to that relationship would be viewed as critical to Iran's security by the Iranian Supreme Leader, the Ayyat Allâh (Sign of God, otherwise spelled Ayyatollah) 'Alî Khâmenei.[38] With all these varied players in the mix, each pursuing different objectives and fueling the fire of factionalism within the nation, the situation quickly spiraled out of control and Syria became the splintered location for various groups—both Sunnî and Shî'î in orientation—eager to advance their own agendas.

FROM ISI TO ISIL, 2010 TO PRESENT

With U.S. forces beginning their withdrawal out of Iraq in 2009 and sectarian strife in a state of decline after the surge of U.S. forces the previous two years, ISI saw a transformation in both its composition and support. As the al-Mâlikî regime began to solidify its Shî'î base of support in Iraq, it also began to receive substantial aid and assistance from Iran. With less of a need for coalition building, the al-Mâlikî regime increasingly marginalized Sunnî notables in the political system, with many finding that their only outlets lay in armed response to the government and enmity toward Iran.[39] By 2010, with al-Mâlikî reelected amid calls of voter fraud and candidate buying,[40] and as the number of U.S. troops began to decrease through troop withdrawals, the level of violence began to increase in the Sunnî-dominated areas of Iraq. However, ISI was dealt a significant blow with the targeted death of its leader al-Masrî on April 18, 2010, by a joint U.S.-Iraqi action.[41] In response to the event, ISI pledged to continue the struggle against its enemies and, roughly a month later, Abû Bakr al-Baghdâdî took control of the organization.[42]

This period would prove to be the critical time for the existence and eventual successes now enjoyed by ISI. For the Syrian regime of al-Assad, the U.S. invasion and subsequent occupation provided a golden opportunity to increase the instability of Iraq. Perhaps as early as 2005, Bâshar al-Assad had turned a blind eye to the creation of a weapons and training pipeline, referred to as the "Rat Line" by the U.S., wherein *jihâdists* from Iraq would receive weapons and find safety across the border in Syria.[43] This system made perfect sense prior to the Arab Uprisings of 2011, when al-Assad's rule was secure. However, when the wave of dissent spread to Syria and al-Assad had to crack down on the disaffected within his own borders—largely driven by the anger of a marginalized Sunnî population—the "Rat Line" became a ready network of insurgents.

Once the situation escalated into a violent and sustained response against the Sunnî population in Syria, Syrian Sunnî *jihadists* began to turn this established network against the al-Assad government in defense of their persecuted co-religionists, especially once Iran began offering substantial aid to Syria. Toward the end of 2012, the group *Jabhat al-Nusrah li-ahl al-Shâm fî Sâhat al-Jihâd* (Support Front for the People of the Levant in the Area of Service [to the Faith], sometimes abbreviated as JN or simplified to the al-Nusra Brigade) began to take a leading role in the anti-Assad struggle in Syria. This group and a good portion of its fighters could trace their origins back to al-Zarqâwî and the

struggle against U.S. forces in Iraq from 2003 to 2006.[44] While there was much in common between JN in Syria and ISI in Iraq, by 2013 the groups had different command structures and different "spheres of influence," as defined by al-Qaeda.

In April 2013, the leader of ISI, al-Baghdâdî, announced that JN was in fact the Syrian arm of his *jihadist* movement, and thus created a new group: *al-Dawlat al-Islâmiya fî al-Irâq wa al-Shâm* or ISIL. The two groups had a strong working relationship and some analysts were already referring to JN as the component of al-Qaeda in the Levant (AQL).[45] However, when al-Baghdâdî's assertion that the partnership he declared was sanctioned by al-Qaeda leadership was proven incorrect in a letter written by al-Zawâhirî himself in June of that same year, clear divisions began to appear between the parent group and its agents abroad. Despite a direct order by al-Zawâhirî in October 2013 to separate commands, al-Baghdâdî refused to comply and ISIL was formally disavowed in February 2014. Freed from any constraints, ISIL began its policy of consolidating territory, erasing the borders between Iraq, Syria, and Jordan drawn by the British and French in the hated Sykes-Picot Agreement, and pushing their effective control into new territories.[46]

CONCLUSIONS

On June 29, 2014, which coincided with 1 Ramadân[47] 1435 on the Muslim lunar calendar, ISIL issued a release stating that it was changing its name yet again. The group dropped Iraq and the Levant from its name and simply wished to be known as *al-Dawlat al-Islâmiyah* (Islamic State or IS). Additionally, the head of the movement, the aforementioned Abû Bakr al-Baghdâdî, declared himself *amîr al-Mu'minîn* (Commander of the Faithful) and took the regnal title Caliph Ibrâhîm al-Qurayshî. This historical title possesses great meaning for Muslims; both of these moves by IS highlight the importance of titles and portray very clearly the aims of the group.

By truncating the movement's name to *al-Dawlat al-Islâmiyah*, the group made a very clear statement that it was not subordinate to any other organization, including al-Qaeda. Furthermore, clearly imbedded within the title is a clear statement of the organization's aims, the creation of an Islamic state and a solid rejection of non-Islamic forms of government (be it parliamentary democracy, Arab socialism, or the remaining monarchies). This stands as a direct rejection of the modern boundaries of the Middle East and the broader Islamic world, which instead views these "nations" as Western imperial tools designed to separate and divide the *ummah*. In its place, IS seeks to reimpose a more traditional, *salafî*-inspired model of authority. There are elements of consultation, such as the creation of a *shûrâ* council which was derived from both the Qur'ân and early Islamic practice but, in general, the method of rule proposed by IS included a fundamentalist interpretation of the *sharî'ah* that would present serious limitations on the personal freedom of women and minority groups.

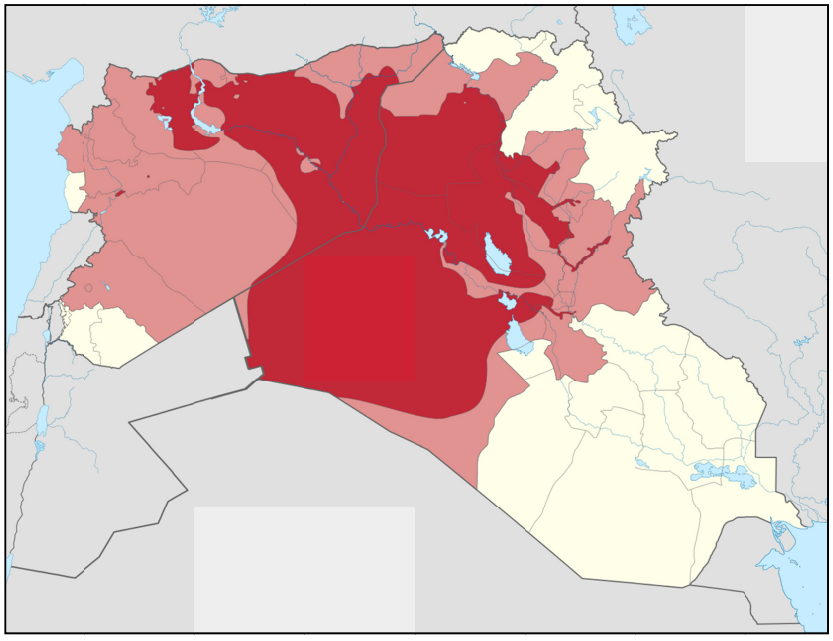
When al-Baghdâdî adopted the name *amîr al-Mu'minîn*, he was likewise making a very clear statement of who he felt himself to be and what his group believed. The term is a direct reference to the early Islamic period and the companions of the Prophet Muhammad. The second Islamic caliph and close companion of the Prophet, 'Umar b. al-Khattâb (r. 634-644), was believed to be the first to use the title, and over time it became synonymous with the term "caliph." According to the Shî'î, 'Alî was given that title while Muhammad was still alive, and they reject its use by the other companions and subsequent Muslim rulers and dynasties. As such, al-Baghdâdî is making a very specific, historically-grounded claim of universal temporal authority to the rest of the Sunnî population, one that would not invite cooperation from the Shî'î, the West, or the current regimes of the Middle East. In that way, the self-styled Caliph Ibrâhîm's message may find many sympathetic ears in the region, as the West has been perceived as long supporting corrupt regimes at the expense of popular will.

However, while making a claim to be *amîr al-Mu'minîn* is one thing, there are certain qualifications which must be met. Chief among these qualifications is the receiving of the *biy'ah* from the *ummah*. While the title implies universal sovereignty, since the middle of the 10th century the power associated with the office began to erode steadily, eventually leaving it largely as a figurehead office by the 13th century. The term would rarely be used outside of African Muslim polities after the rise of Ottoman power in the 14th century. Incumbent upon the *amîr al-Mu'minîn* is the task of "commanding what is right and forbidding what is evil," summed up in the Qur'ânic phrase *al-Amr bi al-Ma'rûf wa al-nahy 'an 'al-Munkar*. If one subscribes to the narrow ideological view of IS, then this claim has already been substantiated with the implementation of *sharî'ah* law throughout IS lands. The final elements expected of the *amîr* are the receiving of the *khutbah* (Friday sermon) in the ruler's name, and the minting of coinage (*sikkah*) also in the ruler's name. These two elements are not difficult for IS to muster, especially since the conquest of much of northern Iraq has led to a substantial infusion of money. One final condition, though functionally unfulfilled since the 16th century, is lineal descent from the tribe of Quraysh. However, with the adoption of the sobriquet "al-Qurayshî" in his title, al-Baghdâdî makes the claim that he is a member of one of the clans of Quraysh, and therefore satisfies the main prerequisite to hold the title of caliph according to medieval Arab legal thought.[48]

There are several broader implications for this move by IS. The idea of swearing allegiance to IS may serve to limit the degree to which other *jihadists* will interact with the group. While hatred of the Syrian President al-Assad or the Iraqi President al-Mâlikî may be sufficient to draw in a coalition of groups for the short term, it is unlikely that these groups would work well together in the long term once their common irritants are removed. This move also places significant strain on the current balance in the Middle East. While Iran and Saudi Arabia are still engaged in a proxy war which has benefited IS thus far, neither the Saudis nor the Iranians are interested in a *salafî* state in the region. For the Shî'î of Iran, an IS polity in the neighborhood would constitute a serious military and ideological threat, while Saudi Arabia, guilty for indirectly aiding IS as it was arming Sunnî insurgents in Syria and Iraq,[49] faces a rejection by IS of the ruling dynasty due to the perceived corruption of the House of Sa'ud.

In the end, IS may have overplayed its hand. The only way to maintain its claims of universal sovereignty is to continue pushing against its neighbors and, while Iraq and Syria may not have been able to deal with the group independently, IS has become a much more appealing target against which a coalition may be built. The U.S. has not dismissed overtures from Iran on the IS issue, largely because each had a vested interest in maintaining the former al-Mâlikî government.[50]

Nevertheless, there are deep ideological divides which must be overcome; the successes and recent claims of IS make that a serious possibility. With the recent capture of territory adjacent to the Jordanian border and the presence of IS-affiliated groups in Lebanon,[51] a new player may be brought into the mix. Part of the territorial claims made by IS back in its ISIL days included the occupied territory of Palestine and the lands which comprise the state of Israel. The inclusion of Israel brings a unique quality to the political situation and, as a regional power, its specific security concerns add an interesting dimension. Whether or not IS is successful in its goals remains to be seen, but its chances, while boosted by the wealth it has accumulated thus far, appear to be rather slim. The key is whether IS can emerge as the successor to al-Qaeda in the prosecution of multiple *jihads* simultaneously. If IS can gain enough "buy-in" from other groups, it should be able to continue its momentum. However, the rift formed by al-Baghdâdî *vis-à-vis* the other *salafî* and *jihâdist* movements is thus far quite large and likely not easily overcome. These recent and splashy successes may be anomalous, and may have served only to focus attention on the group in a way detrimental to its longevity.



"Territorial Control of the ISIS," *Wikipedia: Creative Commons* (image borrowed under fair use policy), last accessed July 6, 2014. https://en.wikipedia.org/wiki/The_Islamic_State#mediaviewer/File:Territorial_control_of_the_ISIS.svg.

[Author's Note: I would like to especially thank MAJ Dan Horst and Dr. Greta Bucher for their invaluable help with this project. The views expressed in this article are those of the author and do not reflect the official policy or position of the Department of the Army *or any of its subordinate commands*, DOD, or the U.S. Government.]

Notes

[1] The acronym ISIS (Islamic State in Iraq and Syria) has also been used to describe this group during its ISIL phase. This essay will try to use the appropriate acronym to describe the group at the various points in its history.

[2] The numbers for those killed from May 1 to May 31, 2014, break down as follows: 603 civilians (including 144 civilian police), 196 members of the Iraqi Security Force, and a further 195 killed in actions in and around Fallujah and Ramadi. UN-Iraq Commission, "UN Casualty Figures for May 2014," last accessed June 1, 2014, http://www.uniraq.org/index.php?option=com_k2&view=item&id=2055:un-casualty-figures-for-may-2014-anbar-province-excluded&Itemid=633&lang=en/.

[3] Michael Gordon and Eric Schmitt, "U.S. Said to Rebuff Iraqi Request to Strike Militants," last accessed June 11, 2014, http://www.nytimes.com/2014/06/12/world/middleeast/iraq-asked-us-for-airstrikes-on-militants-officials-say.html?hp&_r=1.

[4] According to President Obama's speech on June 13, 2014, a direct involvement of U.S. troops was not on the table, but the President did offer increased aid and military training.

[5] Suadad al-Sulhy and Tim Arango, "Sunni Militants Seize Crossing on Iraq-Jordan Border," *The New York Times*, last accessed June 23, 2014, http://www.nytimes.com/2014/06/24/world/middleeast/sunni-militants-seize-crossing-on-iraq-jordan-border.html?_r=0.

[6] Bruce Riedel, "ISIS Bids for Global Jihad Leadership with Mosul Attack," *Al-Monitor*, last accessed June 13, 2014, http://www.al-monitor.com/pulse/originals/2014/06/isis-mosul-jihad.html#.

[7] Richard Boucher, "Foreign Terrorist Organization: Designation of Jama'at al-Tawhid wa'al-Jihad and Aliases," U.S. Department of State, last accessed June 13, 2014, http://web.archive.org/web/20070711131613/http://www.state.gov/r/pa/prs/ps/2004/37130.htm.

[8] James G. Meek, "Top Iraq Thug: Osama's my hero al-Zarqawi Pledges His Support for Bin Laden's Reign of Terror," *The New York Daily News*, last accessed June 13, 2014, http://www.nydailynews.com/archives/news/top-iraq-thug-osama-hero-al-zarqawi-pledges-support-bin-laden-reign-terror-article-1.642584#ixzz34XteeWdt.

[9] "2005 Country Reports on Terrorism," Office of the Coordinator for Counterterrorism: U.S. Department of State, last accessed June 16, 2014, http://www.state.gov/j/ct/rls/crt/45392.htm.

[10] "2005 Terrorist Groups," Office of the Coordinator for Counterterrorism: US Department of State, last accessed June 16, 2014, http://www.state.gov/j/ct/rls/crt/45394.htm.

[11] Peter Chalk, "QJBR," *Encyclopedia of Terrorism* (Santa Barbara, CA, 2013), p. 687.

[12] "2006 Country Reports on Terrorism," *Office* of the Coordinator for Counterterrorism: U.S. Department of State, last accessed June 16, 2014, http://www.state.gov/j/ct/rls/crt/2005/65275.htm.

[13] For the purposes of consistency, we will use the acronym QJBR as opposed to the more common AQI to describe the al-Zarqârî terrorist group from 2005 to 2006.

[14] It is important to note that QJBR never used the name al-Qaeda in Iraq. *cf.* Chalk, p. 686, and Juan Cole, "The Fall of Mosul and the False Promise of History," *Informed Comment*, last accessed June 16, 2014, http://www.juancole.com/2014/06/promises-modern-history.html.

[15] "Letter from al-Zawahiri to al-Zarqawi," *GlobalSecurity.org*, last accessed June 16, 2014, http://www.globalsecurity.org/security/library/report/2005/zawahiri-zarqawi-letter_9jul2005.htm.

[16] Nile Gardiner, "The Death of al-Zarqawi: A major Victory in the War on Terror," The Heritage Foundation, last accessed June 16, 2014, http://www.heritage.org/research/reports/2006/06/the-death-of-zarqawi-a-major-victory-in-the-war-on-terrorism.

[17] Muhammad Al Ubaydi, Daniel Milton, and Bryan Price, "The Islamic State in Iraq and the Levant: More than Just a June Surprise," *Combating Terrorism Center*, last accessed July 16, 2014, http://www.isn.ethz.ch/Digital-Library/Articles/Detail/?lng=en&id=181568.

[18] "US Publish Picture of New al-Qaeda Leader in Iraq," *The Times of London*, last accessed June 16, 2014, http://www.thetimes.co.uk/tto/news/world/middleeast/iraq/article1993932.ece.

[19] Tom Bowman, "As the Iraq War Ends, Reassessing the Surge, National Public Radio, last accessed June 16, 2014, http://www.npr.org/2011/12/16/143832121/as-the-iraq-war-ends-reassessing-the-u-s-surge.

[20] The claims of the Ottoman guardianship of the caliphate stretch back to the Battle of Marj Dâbiq, August 24, 1516, when Selim I "The Grim" (r. 1512-1520) broke Mamluk rule in Syria and Egypt. After the fall of the Abbasid caliphate to the Mongols in 1258, a scion of the family escaped to Egypt and was protected by the Mamluk sultans. In the wake of the Ottoman victory, these "shadow" ½Abbâsid caliphs, long a source of legitimacy for the Mamluk slave dynasty's rulers, were transported to Istanbul and, shortly thereafter, they fade from public view. Their authority became merged with the person of the Ottoman Sultan. *cf.* Hamilton Gibb, "Lumfî Paºa on the Ottoman Caliphate," *Oriens* 15 (1962), pp. 287-295; David Ayalon, "Studies on the Transfer of the ½Abbâsid Caliphate from Ba!dâd to Cairo," *Arabica* 7:1 (1960), pp. 41-59.

[21] The two rivers in question are the Tigris and the Euphrates and, as such, this geographic name is coterminous with the Greek term "Mesopotamia."

[22] The term comes from Arab geographers and establishes the relationship of the Levant from Yemen. Facing east from the $ijâz (the location of Mecca and Medina in what is now Saudi Arabia), a person's left hand would point to al-Shâm, while his/her right would point to al-Yamîn or Yemen. The region includes the lands of the modern State of Israel and the Palestinian territories, Lebanon, and Syria.

[23] For Sunnî Arabs prior to the mid-20th century, this term was reserved for someone descended of ½Alî from the line of his son al-Hasan (d. 670), who exercised considerable political and social power on a local or regional level.

[24] The Imâmîs (twelvers) are also known as Ja½farîs after the Shî½î Imâm Ja½far al-Sâdiq (702-765), and derisively as Râfi

îs (rejecters) by some Sunnîs. They have the name Imâmîs due to their adherence to the belief in the twelve canonical Imâms which serve as a body for *sunnah* or correct (i.e., orthodox) practice for their sect.

[25] As of October 13, 2006, QJBR adopted the name *dawlat al-½Irâq al-Islâmiyah* or the Islamic State of Iraq (ISI). The acronym ISI was the most appropriate term until April 9, 2013, when the name shifted to ISIL, to include the Levant.

[26] Chalk, p. 687.

[27] Chalk, p. 687. *cf.* "Letter from al-Zawahiri to al-Zarqawi," *GlobalSecurity.org*, last accessed June 16, 2014, http://www.globalsecurity.org/security/library/report/2005/zawahiri-zarqawi-letter_9jul2005.htm.

[28] Marisa C. Sullivan, "Fact Sheet: Ibrahim al-Jaafari," Institute for the Study of War, last accessed June 25, 2014, http://www.understandingwar.org/reference/fact-sheet-ibrahim-al-jaafari.

[29] "Iraq to Reject U.S. Deal Without Pullout Timetable," *Newsmax*, last accessed June 25, 2014, http://www.newsmax.com/Newsfront/iraq-pullout-timetable/2008/07/08/id/324458/.

[30] "More than 2,000 Killed in Syria since Ramadan Began," *Times of Oman*, last accessed June 25, 2014, http://www.timesofoman.com/News/Article-20325.aspx, and Ban Ki-moon, "Crisis in Syria: Civil War, Global Threat," *The World Post: The Huffington Post*, last accessed June 25, 2014, http://www.huffingtonpost.com/ban-kimoon/crisis-in-syria-civil-war_b_5529973.html.

[31] The Alawîs, also known by the somewhat derogatory term "Nucayrîs"—after their founder Abû Shu½ayb Mu%ammad b. Nucayr (*fl.* 833)—are considered by many Sunnî and even some Shî½î to be outside the pale of orthodox Islam. The sect is known for its extreme veneration of the Caliph ½Alî.

[32] The United Arab Republic was the political union of Egypt and Syria from 1958 to 1961.

[33] Bernard Reich, *Contemporary Leaders of the Middle East and North Africa: A Biographical Dictionary* (New York, 1990), pp. 51-52.

[34] Reva Bhalla, "Making Sense of the Syrian Crisis," *Geo-political Weekly*, last accessed June 26, 2014, http://www.stratfor.com/weekly/20110504-making-sense-syrian-crisis?utm_source=GWeekly&utm_medium=email&utm_campaign=110505&utm_content=readmore&elq=2ef73758a9434404bd465acd3490d5fe#ixzz1LTPFUuuw.

[35] Amir Ahmed, "Thousands Displaced as Syrian Authorities Demolish Hama Neighborhood," *CNN World*, last accessed June 26, 2014, http://www.cnn.com/2012/10/01/world/meast/syria-hama-neighborhood/.

[36] "Russia, China Block 2nd Draft of Resolution on Syria," *The Voice of Russia*, last accessed June 28, 2014, http://voiceofrussia.com/2011/06/10/51517343/.

[37] Ashish Kumar Sen, "Proxy war Between Iran, Saudi Arabia Playing out in Syria," *The Washington Times*, last accessed June 28, 2014, http://www.washingtontimes.com/news/2014/feb/26/proxy-war-between-iran-saudi-arabia-playing-out-in/?page=all.

[38] Ibid.

[39] "Al-Qaeda in Iraq becoming less Foreign-U.S. General," *Reuters*, last accessed June 28, 2014, http://www.reuters.com/article/2009/11/18/idUSLI176502.

[40] Heather Robinson, "Mithal al-Alusi, Iraq's Maverick, Charges Iraqi Elections Were Corrupt," *The World Post: Huffington Post*, last accessed June 28, 2014, http://www.huffingtonpost.com/heather-robinson/mithal-al-alusi-iraqs-mav_b_524477.html. *cf.* Anthony Cordesman and Sam Khazai, "Iraq after US Withdrawal," Center for Strategic and International Studies (Washington, DC, 2012), p. iii.

[41] "US: 2 of al-Qaeda's Top Leaders Killed in Iraq," *CBS News/AP*, last accessed July 6, 2014, http://www.cbsnews.com/news/us-2-of-al-qaedas-top-leaders-killed-in-iraq/.

[42] Ibid.

[43] Rowan Scarborough, "Al-Qaeda 'Rat Line' from Syria to Iraq Turns Back against Assad," *The Washington Times*, last accessed June 28, 2014, http://www.washingtontimes.com/news/2013/aug/19/al-qaeda-rat-line-from-syria-to-iraq-turns-back-ag/?page=all. *cf.* Noman Benotman and Roisin Blake, "Jabhat al-Nucra: A Strategic Briefing," The Quilliam Foundation (London, 2013), p. 2.

[44] Benotman and Blake, p. 2.

[45] Benotman and Blake, p. 8.

[46] Ariel Ahram, "The Middle East Quasi-State System," *The Washington Post*, last accessed uly 2, 2014, http://www.washingtonpost.com/blogs/monkey-cage/wp/2014/05/27/the-middle-east-quasi-state-system/.

[47] The month of Rama
ân is considered to be a holy month for Muslims the world over. It was during that month that the Qur'ân was first revealed to Mu%ammad in 610, and marks the beginning of a strict, month-long fast for observant Muslims.

[48] *cf.* ½Alî b. Mu%ammad al-Mâwardî (d. 1058), *al-A%kâm al-Sulmâniyah* (*The Ordinances of Government*), trans. by Wafaa Wahba under the title *The Ordinances of Government* (London, 2000).

[49] Steve Clemons, "Are the Saudis to Blame for Iraq?" *The Atlantic*, last accessed July 6, 2014, http://www.defenseone.com/threats/2014/06/are-saudis-blame-iraq/87082/.

[50] Paul Lewis et al., "Iraq Crisis: US Willing to Work with Iran but Officials Play Down Military Talk," *The Guardian*, last accessed June 30, 2014, http://www.theguardian.com/world/2014/jun/16/iraq-isis-takes-tal-afar-us-iran-vienna-nuclear-talks.

[51] "Jihadist Announces Creation of ISIL Branch in Lebanon," *Jordan Times*, last accessed June 30, 2014, http://jordantimes.com/jihadist-announces-creation-of-isil-branch-in-lebanon.

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The Iraq War:
Bad Intelligence or Bad Policy?

by Joshua Kameel

INTRODUCTION

In 2003 the United States led a coalition of Armed forces into Iraq and toppled the regime of Saddam Hussein. The United States alone spent nearly four trillion dollars on its involvement in Iraq, and close to 200,000 lives were lost throughout the invasion and subsequent counterinsurgency operation. Operation IRAQI FREEDOM was initially considered a necessary engagement due to deductions by both U.S. and British intelligence agencies that (1) Iraq was involved in Al-Qaeda's September 11 and (2) Saddam Hussein possessed, or was aggressively pursuing, weapons of mass destruction (WMD). Within months of Iraq's occupation, however, both of these assumptions were proven to be false. For the first time in over 200 years, the United Kingdom entered a war with no factual basis. Clearly, intelligence used by the respective U.S./UK administrations conveyed false information regarding the situation in Iraq. Were these intelligence failures made by the Intelligence Community, or policy failures committed by the officials who determined which of the intelligence assessments to utilize? This article hypothesizes that the Bush administration was biased in its use of intelligence, and the politicization of the intelligence collection process misled the general public and the international community into acquiescing to the Iraq War.

Muhammad Ibrahim Makkawi, Al-Qaeda's premier military strategist and author of "Al-Qaeda's Strategy to the Year 2020," claimed the organization's ultimate goal was the economic collapse of the United States and an inevitable global jihad. The first step: trigger a U.S. invasion of an Islamic country;[1] the catastrophic September 11, 2001, terrorist attacks on the World Trade Center, in essence, did just that. Al-Qaeda's brutal murder of nearly three thousand lives enticed the United States to invade Afghanistan, dismantle the Taliban, and subsequently invade Iraq. This invasion of Iraq fulfilled Makkawi's third step: to expand conflict into neighboring countries and incite the Americans into a long and costly war.

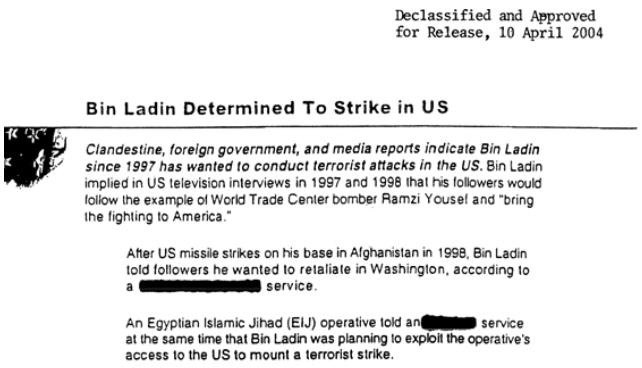
THE CALM BEFORE THE STORM

Although U.S./UK intelligence agencies have cooperated closely for over sixty years, collection and analysis of intelligence on Al-Qaeda remained relatively unilateral in the years preceding the September 11 attacks. Whereas Al-Qaeda remained the NSA's number one priority since the 1998 bombings of the U.S. embassies in Tanzania and Kenya, British intelligence remained ignorant of the growing threat. For example, Francis Richards, Director of GCHQ, admitted that Osama Bin-Laden had not become a priority until the 21st century.[2] This does not imply British intelligence agencies had no indication of terrorist activities before 2001; in fact, far from it. In the mid-1990s, London was increasingly being used as a hub for promoting Middle East terrorism, a fact the Intelligence Community was well aware of. These terrorists, however, were not seen as a threat to national security and were left to go about their business.[3] Had a closer eye been kept on those with terrorist affiliations in the UK, it is possible information regarding 9/11 could have been intercepted and conveyed to American counterparts in an effort to prevent the most disastrous attack on U.S. soil since Pearl Harbor.

> ***According to former Director of Central Intelligence James Woolsey, "We have slain a large dragon. But we live now in a jungle filled with a bewildering variety of poisonous snakes. And in many ways, the dragon was easier to keep track of."***

The Intelligence Community cannot be fully blamed for lack of attention, however, as the fall of the Soviet Union resulted in an extreme lack of intelligence funding and personnel. The 9/11 Commission determined that, although the FBI's budget remained constant through the late 1990s, the CIA's budget shrank considerably. As a result, the Intelligence Community hired very few new agents. "In 2000, there were still twice as many agents devoted to drug enforcement than counterterrorism."[4] Without a powerful, state-based enemy on which to focus, Western governments found themselves

unprepared to face the new terrorist threat. According to former Director of Central Intelligence James Woolsey, "We have slain a large dragon. But we live now in a jungle filled with a bewildering variety of poisonous snakes. And in many ways, the dragon was easier to keep track of."[5]



Declassified and Approved
for Release, 10 April 2004

Bin Ladin Determined To Strike in US

Clandestine, foreign government, and media reports indicate Bin Ladin since 1997 has wanted to conduct terrorist attacks in the US. Bin Ladin implied in US television interviews in 1997 and 1998 that his followers would follow the example of World Trade Center bomber Ramzi Yousef and "bring the fighting to America."

After US missile strikes on his base in Afghanistan in 1998, Bin Ladin told followers he wanted to retaliate in Washington, according to a [redacted] service.

An Egyptian Islamic Jihad (EIJ) operative told an [redacted] service at the same time that Bin Ladin was planning to exploit the operative's access to the US to mount a terrorist strike.

President George W. Bush's August 6, 2001, Presidential Daily Brief, titled "Bin Ladin Determined to Strike in US," was the first ever approved for release to the general public.

This lack of funding and personnel could not have been more poorly timed; the rise of instant communication such as the Internet and cell phones created even more places for these "poisonous snakes" to hide. Nevertheless, several red flags caught both by U.S./UK intelligence agencies led to President Bush's August 6, 2001, Daily Brief being titled "Bin Ladin Determined to Strike in the US," the 36th PDB regarding Bin-Laden or Al-Qaeda that year alone. According to the report, Bin-Laden had been planning an attack on U.S. soil since 1997; in the words of Director of Central Intelligence George Tenet, "The system was blinking red."[6]

It is easy to look back and connect overlooked dots; responding to these red flags and preventing an attack in real time, however, is a nearly impossible task.

It is easy to look back and connect overlooked dots; responding to these red flags and preventing an attack in real time, however, is a nearly impossible task. Regardless, the absence of effort put into precautionary measures is disturbing. Borders were not fortified, transportation security was not strengthened, and domestic agencies were not ready to respond to the threat. A lack of communication between the CIA and the FBI resulted in devastatingly inefficient counterterrorism efforts. The CIA searched for a foreign threat to national interests while domestic agencies anticipated a domestic threat from dormant sleeper cells: "No one was looking for a foreign threat to domestic targets."[7] As a result, U.S. agencies lacked a clearly defined and unified direction and overlooked several key clues. Immediately following 9/11, however, steps were taken to prevent future acts of terrorism. GCHQ immediately doubled the size of its counterterrorism team and the budget of U.S. agencies focused on counterterrorism became virtually unlimited. Unfortunately, these measures did nothing to prevent political incentives from manipulating and undermining intelligence agencies' efforts in the aftermath of 9/11.

THE LINK THAT NEVER WAS: "IRAQAEDA"

President Bush needed to implicate Saddam Hussein's regime in the September 11 attacks so as to justify Operation IRAQI FREEDOM to the American public and the international community. As a result, the immediate aftermath of 9/11 was marked by fervor to link Iraq to Al-Qaeda. At President Bush's request, the September 21, 2001, PDB regarded the possibility of collusion between Saddam Hussein and Osama Bin-Laden. Although the FBI and CIA stated they had no conclusive evidence implying a relationship between the parties, the Bush administration continued its witch-hunt until these claims were finally disproven, several months *after* the Iraq war.[8]

One of the administration's strongest pieces of evidence of an Iraq/Al-Qaeda relationship stemmed from Abu Musab al-Zarqawi, a militant Islamist who was primarily active in Iraq. Initially the founder of Al-Tawhid Wal-Jihad, Al-Zarqawi was not a member of Al-Qaeda; he turned down Bin-Laden's requests for cooperation until October 2001, when the United States launched its war against Afghanistan, and did not officially join Al-Qaeda until 2004.[9] In 2003, a detained senior-level Al-Qaeda member, Abu Zubaydah, identified Zarqawi as an Al-Qaeda associate with close ties to the Iraqi regime. Even if these claims were valid, this should not have been sufficient to imply a connection between Iraq and Al-Qaeda activity. Zubaydah went on to denounce any role Iraq may have played in 9/11; according to Zubaydah, an alliance between Al-Qaeda and Iraq was "extremely unlikely," quoting Bin-Laden's fundamental quarrels with the secular nature of Hussein's government.[10] Nevertheless, the mere fact that al-Zarqawi operated within Iraq and, at one point, received medical treatment within the country, proved reason enough for President Bush to point to al-Zarqawi as the connection between Saddam and Bin-Laden in a June 15, 2004, press conference.[11]

President George W. Bush delivers remarks on Iraq at the Cincinnati Museum Cetnter in Cincinnati, Ohio, Monday night, October 7, 2002. White House photo by Eric Draper.

According to the "Senate Report on Pre-War Intelligence on Iraq," Iraq's capability to keep track of and detain al-Zarqawi was overvalued. Many officials believed that Al-Tawhid Wal-Jihad's use of Iraq as a home base meant Saddam offered safe haven to the Al-Qaeda-linked terrorists or, even worse, used his regime to fund and support them. Postwar intelligence revealed, however, that Saddam had fervently tried to locate and dismantle the terrorist organization, as he viewed it as a threat to his regime.[12] An unnamed foreign service notified the Iraqi Intelligence Service of al-Zarqawi's presence in Baghdad and potential location; however, the IIS replied that it was unable to locate him. Even if the Iraqi regime did provide safe-haven for al-Zarqawi's operations, a large "if" considering there is no supporting evidence, there is no additional intelligence linking Iraq to the attacks of September 11 or to any of Al-Qaeda's operations.

The United States was not only concerned that Iraq was providing safe-haven for terrorist activity, but actively training members of Al-Qaeda in the use of chemical warfare. According to George Tenet's testimony in September 2002: "There is evidence that Iraq provided al-Qaida with various kinds of training – combat, bomb-making, and CBRN."[13] [14] This intelligence stemmed solely from information retrieved from Ibn al-Shaykh al-Libi, a Libyan national familiar with Al-Qaeda operations who was captured in Afghanistan in 2001. Shortly after his capture, al-Libi implicated several Al-Qaeda members in an Iraqi-sponsored CBW training program. Although the CIA learned al-Libi was not officially a member of Al-Qaeda, the administration deemed his testimony credible enough to confirm suspicions of an Iraq/Al-Qaeda relationship, regardless of a lack of supporting evidence.[15] In October 2002, President Bush claimed, "We've learned that Iraq has trained al-Qaeda members in bomb-making and poisons and deadly gasses."[16] This bold statement was made on the testimony of an Al-Qaeda outsider who was desperate to gain more favorable conditions from his interrogators.

In January 2004, Ibn al-Shaykh al-Libi admitted to intentionally misleading his interrogators and recanted his information. According to Phase 2 of the "Senate Report on Pre-War Intelligence on Iraq," al-Libi was consistently pressured to link Al-Qaeda to Iraq, and faced unfavorable conditions when he was unable to do so.[17] This intelligence should have been properly analyzed and vetted before being used by policymakers. Why was this faulty information able to influence policy so heavily?

The position of CIA Ombudsman for Politicization was created over two decades ago to respond to and prevent instances of politicization of intelligence and analytic misrepresentation.

The position of CIA Ombudsman for Politicization was created over two decades ago to respond to and prevent instances of politicization of intelligence and analytic misrepresentation.[18] Five days following the publishing of a CIA document entitled *Iraq and al Qaida: Interpreting a Murky Relationship*, the Ombudsman received a complaint that the report was misleading and distorted views and opinions. In his subsequent investigation, the Ombudsman discovered that several analysts were repeatedly asked to analyze and report on Iraq's relationship with Al-Qaeda, and that these requests were "unreasonable and took away from their valuable analytic time."[19] In addition, over a fourth of analysts interviewed mentioned "pressure" from the administration. The nature of this pressure, however, must be commented on. Analysts were not required to link Iraq to Al-Qaeda; rather, they were required to reexamine the facts and avoid missing a credible threat. The pressure was not to make a certain deduction in accordance with the administration's goals, rather to make correct assessments and validate their analytic judgments. Nevertheless, repeated identical inquiries along with intense political pressure not to overlook details often led to cherry-picking of intelligence by political figures.

The attacks of September 11 quickly became the most publicized and well-known terrorist attacks around the world. Naturally, with the public eye focused on ensuing events, policy leaders faced tremendous pressure to react in a timely manner, efficiently, and in accordance with public opinion. In order to garner support for planned military intervention in Iraq, a series of highly publicized statements was made

regarding the link between Al-Qaeda and Saddam Hussein. Vice President Dick Cheney made several controversial statements on a series of "Meet the Press" interviews. In these interviews, the Vice President claimed that in April 2001 Mohammad Atta, a September 11 hijacker, met with Ahmad Samir al-Ani, a Prague-based Iraqi Intelligence Service officer. According to Cheney, these reports were "pretty well-confirmed."[20]

Vice President Dick Cheney interviewing with "Meet the Press" host Tim Russert on December 9, 2001, regarding Mohamed Atta's alleged meeting in Prague.

In reality, these claims were made before the Intelligence Community was able to properly vet the intelligence, and ultimately the FBI and CIA were both "unable to confirm that Atta met al-Ani in Prague on these two occasions."[21] Cheney went on to accuse Iraq of both harboring terrorists and aggressively pursuing a nuclear arms program. Weak evidence was used as justification and given to the public by extremely influential national leaders to convince them of Iraq's hand in 9/11. Even after this intelligence was disproven, over 40% of Americans continued to believe Saddam Hussein had close ties to Al-Qaeda.[22] The Vice President should not have cherry-picked unverified intelligence as his statements surely heavily influenced these numbers; unfortunately, in regard to weapons of mass destruction, he was far from the only public figure pointing figures at Saddam.

WEAPONS OF MASS DECEPTION

If, as was inevitably proven, Saddam truly did not play a role in the attacks of September 11, a new and terrifying accusation must be proven so as to convince the public of the necessity of an invasion. Claims that Iraq possessed biological and chemical weapons and was aggressively pursuing a nuclear program to develop weapons of mass destruction would do just that. Four months after the invasion, however, WMDs still had not been found, and the public demanded answers as to why it had been misled. U.S. and British intelligence agencies, which both claimed they possessed evidence that supported the Iraqi WMD theory, underwent a period of scrutiny and investigation. In the United States, President Bush established the Iraq Intelligence Commission (Silberman-Robb Commission) to investigate errors made regarding Iraqi WMDs; in the same month, the British government explored similar intelligence errors in the UK intelligence community through what is commonly referred to as the Butler Review. The scope of these reports, as well as the majority of their findings, is nearly identical.

These mistakes resulted from an inability of the Community to collect relevant intelligence, a lack of unbiased analysis of said intelligence, as well a failure to effectively communicate the minimal intelligence to policymakers.

Both commissions concluded that the intelligence used to determine whether Saddam Hussein truly possessed WMDs was severely flawed and unsubstantiated. The reports do not accuse the Intelligence Community of manipulating policy leaders; the Community's conclusions were in accordance with its beliefs. Its beliefs, however, were simply wrong: "We conclude that the intelligence community was dead wrong in almost all of its pre-war judgments about Iraq's weapons of mass destruction program. This was a major intelligence failure."[23] These mistakes resulted from an inability of the Community to collect relevant intelligence, a lack of unbiased analysis of said intelligence, as well a failure to effectively communicate the minimal intelligence to policymakers.

Conclusions regarding Iraq's nuclear program were not based on factual, supported evidence, but rather on a series of assumptions deduced from controversial human intelligence sources and past encounters with Saddam Hussein. Following the First Gulf War, the Intelligence Community erred by underestimating Iraq's nuclear capabilities, and seemed determined not to make that mistake again. The Intelligence Community assumed Saddam actively pursued a nuclear program following the withdrawal of United Nations weapons inspectors, thus overvaluing the progress Iraq had made.[24] These assumptions could have supported additional evidence. Unfortunately, the evidence used to supplement these accusations was drawn from faulty documents and unreliable human intelligence.

Both the U.S. and UK intelligence communities remained convinced Saddam Hussein was attempting to procure uranium to further Iraq's nuclear program. They discovered

documents depicting an agreement for the sale of uranium between Niger and Iraq; these documents were subsequently used as justification for President Bush's State of the Union address in which he noted: "The British government has learned that Saddam Hussein recently sought significant quantities of uranium from Africa."[25] The validity of this supposed transaction, however, had yet to be confirmed. Although the Butler Review states there was sufficient evidence to conclude Saddam was seeking these materials in Africa, the Silberman-Robb report confirms that the documents in question were, in fact, forged.[26] Unfortunately, this is far from the sole example of faulty intelligence being relayed to public officials. Both the Butler Review and the Silberman-Robb report emphasize the faults made by U.S./UK intelligence communities in relying on unconfirmed human intelligence sources, the most controversial of which was a source codenamed "Curveball."

Rafid Ahmed Alwan, aka Curveball, falsified testimony to United States intelligence officials in an attempt to overthrow the Hussein regime.

Virtually all of the intelligence regarding Iraq's alleged nuclear and biological weapons program stemmed from debriefings of an Iraqi defector, codenamed "Curveball." According to this source, who claimed to be a chemical engineer for Saddam's regime, Iraq possessed several mobile biological weapons laboratories, effective producers of biological weapons able to avoid detection. Curveball's testimony quickly became the centerpiece of the West's case against Iraq, quoted in endless public testimony, from President Bush's State of the Union address to Colin Powell's infamous speech to the United Nations. In 2007 Curveball's true identity was revealed; Rafid Ahmed Alwan came forth to *The Guardian* and, for the first time, admitted he fabricated stories of Saddam's weapon capabilities in an attempt to topple the dictatorial regime.[27] Why was the testimony of an exiled fabricator seen as sufficient evidence to begin the Iraq War, and why did the U.S./UK intelligence communities not properly vet said testimony? The Silberman-Robb report explains this crucial mistake was due to three factors:

> … of the Defense Department collectors who abdicated their responsibility to properly vet a critical source; of CIA analysts who placed undue emphasis on the source's reporting because the tales he told were consistent with what they already believed; and, ultimately, of the intelligence community leaders who failed to tell policy makers of Curveball's flaws in the weeks before the war.[28]

Essentially, Curveball's testimony was exactly the evidence for which the officials were searching, so why question it? Because his "insider" information was in accordance with pre-existing beliefs, it was accepted regardless of a lack of supporting evidence. Even more worrisome than the administration's blind acceptance of Curveball's testimony was its immediate dismissal of contradictory evidence, regardless of the validity of such claims.

In 2004 George Tenet publicly claimed that the CIA had obtained a source "who had direct access to Saddam and his inner circle."[29] This source was Naji Sabri, Iraq's former foreign minister, who spent the majority of his time in the lead-up to the Iraq war lobbying the United Nations and the international community to weaken support for an invasion of Iraq. Over six months before the war's start, the CIA established a French-sponsored connection with Naji Sabri in an attempt to acquire additional evidence regarding Saddam Hussein's WMD program. Although Tenet stated Sabri claimed Saddam was aggressively pursuing a nuclear program and had stockpiled chemical weapons, the story told by other intelligence officials depicts a drastically different story.[30]

In exchange for considerable sums of money from both U.S. and French intelligence officials, Sabri answered a series of questions regarding the Iraqi regime's nuclear capabilities and stockpiles of biological and chemical weapons. Although he admitted Saddam was interested in possessing weapons of such a nature, Sabri was explicitly clear that, at the moment, Iraq was not pursuing a nuclear program.[31] He concluded that the most optimistic time frame for nuclear weapons to be developed if all materials were obtained was a minimum of two years. In addition, although the West accused Saddam of possessing mass amounts of chemical and biological weapons, Sabri claimed Saddam had given the stocks of weapons left over from the nineties to loyal tribes.[32] Sabri's information was supported by the testimony of Tahir Habbush, head of Iraqi intelligence, who contacted MI6 independently several months before the invasion. Although Sabri and Habbush were quite possibly the most credible sources of intelligence obtained by the U.S./UK intelligence communities, their information was manipulated by public officials and all but discarded by the administration.

In the words of the "Senate Report on Prewar Intelligence," "The intelligence community depended too heavily on defectors and foreign government services to obtain human intelligence information on Iraq's weapons of mass destruction activities… it was exceedingly difficult to determine source credibility."[33] The committee did not find evidence of analysts being pressured into providing reports in accordance with the administration's policy. This, however, is irrelevant because intelligence was cherry-picked by high-ranking officials in public statements. The Intelligence Community did not need to be pressured into providing reports of a certain nature if all but those in accordance with the administration's policy were discarded. One of the most notorious examples of said cherry-picking was Secretary Colin Powell's speech to the United Nations.

In February 2003, in an attempt to garner support from the international community, Secretary of State Colin Powell delivered a speech to the United Nations outlining Iraq's violations of UNSC Resolution 1441, requiring Saddam to comply with disarmament obligations. Throughout his speech, Secretary Powell included a plethora of intelligence collected from various sources that he claimed to be "facts and conclusions based on solid intelligence."[34] In reality, the majority of Secretary Powell's claims were drawn from sources that had not been validated. He claimed Iraq was seeking to purchase uranium, although the documents on which these claims were based were forged. He centered the entirety of his evidence regarding Iraq's biological weapons on intelligence obtained from Curveball, a known fabricator. In regard to the alleged Iraq/Al-Qaeda relationship, Secretary Powell quoted Zarqawi's operations in Iraq and the intelligence provided by al-Libi as sufficient evidence, regardless of the invalidity of these claims.[35] Not once was intelligence received by Naji Sabri mentioned, although it was the most credible human intelligence received. Manipulation of intelligence by the administration was not solely used to influence opinions of the international community but also those of the general public.

Douglas J. Feith, former Under Secretary of Defense for Policy and founder of the Office of Special Plans.

In the lead-up to the invasion of Iraq, highly classified intelligence was being leaked to the public in an attempt to garner support for military intervention. In the UK, the GCHQ attempted to use secret intelligence to "educate" the public; this faulty intelligence was used to manipulate the masses into believing Saddam Hussein was a dictator with WMD capabilities and close ties to Al-Qaeda that were putting British lives at risk.[36] In the United States, Douglas J. Feith, Under Secretary of Defense for Policy, opened two controversial offices: the Office for Special Plans (OSP) and the Office of Strategic Influence (OSI). The OSI was created for the sole purpose of manipulating the beliefs and interests of foreign populations regarding the war in Iraq, predominantly by leaking intelligence and special reports to foreign media outlets.[37] Although the Pentagon is prohibited from running such propaganda operations domestically, the OSP influenced policy more heavily than any media report could. The OSP collected and relayed un-vetted intelligence to high-ranking members of the Bush administration, even when this intelligence was unsubstantiated and clearly defied the beliefs of the Intelligence Community. The Pentagon's inspector general later conducted an investigation and concluded that Feith's offices' "actions were inappropriate given that the intelligence assessments were intelligence products and did not clearly show the variance with the consensus of the Intelligence Community."[38] In particular, the OSP was held responsible for manipulating opinion regarding an Iraq/Al-Qaeda relationship and providing intelligence to the administration that directly contradicted conclusions reached by the Intelligence Community.

Why was there such a clear effort by the West to associate Saddam Hussein with WMDs and Al-Qaeda, to the point of manufacturing and biasing intelligence? In order to answer

this, one must take a look back. Throughout the 1980s, the Iraqi government relied heavily on chemical weapons to negate the Iranian offensive. Following the war's stalemate, Iraqis viewed chemical weapons of mass destruction as their savior, a fact that worried the Western world. The salvation provided by chemical weapons inspired Hussein's regime to dedicate itself to improving WMD capabilities. Although this should have proven worrisome, at this time Saddam was an ally of the U.S. government and received American support in his war with Iran.

...perhaps this key opened a door that should not have been opened in the first place.

In the early 1990s, however, Saddam Hussein proved to the West he was even more dangerous and reckless than previously imagined when he unilaterally invaded neighboring Kuwait. Although the United States quickly denounced such repression, Saddam's defiant nature and desire to establish himself as a Middle Eastern hegemonic power led to a refusal to retreat. The United States took coercive action to protect the Kuwaiti people; the U.S.'s superior military strength quickly suppressed Saddam's invasion and humiliated Iraqi capabilities on an international scale. The UN and the U.S. destroyed the Iraqi nuclear program, the same program that had proven the regime's savior against Iran. Naturally, this created resentment for the Western world in the once U.S.-backed dictator's eyes. This resentment, combined with admiration for chemical and biological WMDs, was exactly the threat that worried the Bush administration following 9/11. September 11 proved that the United States was not, in fact, inviolable, and a decision was made to preemptively quell the Iraqi threat before Saddam took steps to redeem himself against American citizens. Iraq constituted a threat to interests of national security and, following a devastating attack on U.S. soil, such a threat could no longer be accepted. Perhaps ousting the dictator prevented another attack on the scale of 9/11 and saved countless lives; the world will never know.

What is known, however, is that there were serious shortcomings in the collection and use of intelligence regarding U.S. interests in Iraq. The Intelligence Community may not have been forced to produce reports to support an Iraqi invasion; nevertheless, the administration did not rely solely on the beliefs of the Intelligence Community, and manipulated its conclusions to suit its own agenda. In the words of Tyler Drumheller: "The policy was set. The war in Iraq was coming, and they were looking for intelligence to fit into and justify the policy."[39] The intelligence used to support accusations against Iraq relied too heavily on testimony from less-than-credible sources. Critical human intelligence was not confirmed before being utilized by high-ranking public officials as justification for war. Al-Libi was a fraud. Curveball was a fraud. Naji Sabri, perhaps the only credible informant, was assumed to be a fraud. The Bush administration wished to open a door but required a key to open the lock; it had a mold of this key, and selectively used reports from the Intelligence Community to fill and create its key to the Iraq War. Unfortunately, the fallacies used to make this key do not hold under the weight of scrutiny and, considering the lack of validity of the administration's claims, perhaps this key opened a door that should not have been opened in the first place.

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A Scrum Approach to Integrated Intelligence

by Dr. Ronzelle L. Green

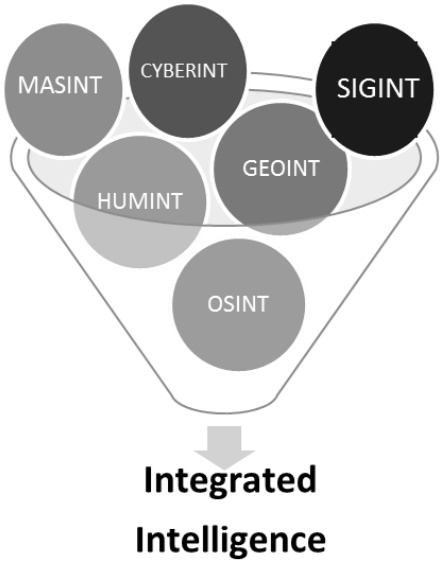
EXECUTIVE SUMMARY

How can the Intelligence Community (IC) leverage the multiple intelligence (multi-INT) domain to provide decision-makers with the absolute best information available while incorporating new data over time? What is the process to build truly dynamic, diverse problem-solving teams in the IC? How can the IC develop an agile, mission-focused workforce poised to tackle known and unknown threats and still be able to shift quickly to address current, crisis, and emerging requirements? Within the next decade, the IC will face tremendous challenges to include declining resources, dwindling budgets, and worldwide instability. These challenges will demand the IC increase its speed of analysis while being limited to its current or reduced level of funding and capabilities. This article explores the relevance of applying Agile Software Development (ASD) techniques to tackle new and complex intelligence problems leveraging multi-INT. Historically, ASD methods, in particular "Scrum," have been used in commercial and industry settings to combat systems engineering uncertainty and change, while increasing productivity, collaboration, and overall effectiveness. Scrum utilizes collocated, collaborative teams to focus on volatility. Interdisciplinary scrum teams provide incremental "deliveries" within time-boxed sprints while incorporating prioritized new requirements and data. Applying this same concept throughout the intelligence cycle can yield similar results.

INTRODUCTION

"But don't confuse integration across agencies as an attempt to make every agency and organization into the same bland oatmeal. Integrate across organizational lines to take advantage of diversity and the strength of different organizations, including yours."

As a sagacious leader, Director of National Intelligence (DNI) James Clapper outlined the need for integration across the IC. Clearly, these thoughts stem from September 11, 2001, lessons learned. Documented intelligence failures occurred either because policy consumers disregarded or misinterpreted the intelligence reporting they received (single viewpoint of intelligence analysis).[2] Intelligence analysis is "the process of evaluating and transforming raw data acquired into descriptions, explanations, and judgments for policy consumers."[2] Analysts play a key role in this process. Moreover, the IC must strengthen its process not only to leverage all sources and methods, but to integrate information collaboratively to produce insightful estimates within an accelerated intelligence cycle. Unlike the Cold War



era, terror plots and destabilization occur in compressed timelines. As such, limited indications and warnings are available to decision-makers. Multiple data and viewpoints are needed to understand credible trends and threats. This truncated reaction time will demand the IC build better models, processes, networks, and mechanisms to collect, exploit, analyze, and disseminate information.

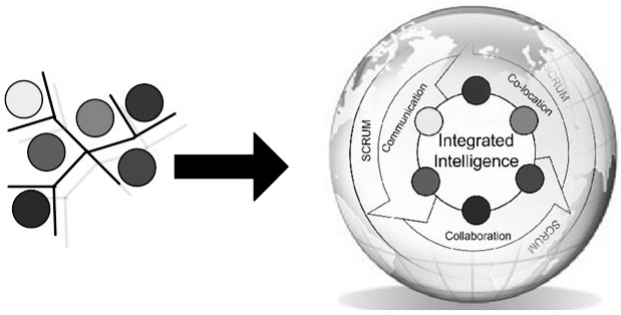


Figure 1. Moving to Multi-INT Integration with GEOINT as the Foundation

Also driving the necessity of agile intelligence is the abundance and analysis of data. Over the last decade, the IC attained improved platform and avenues for acquiring data. Scholars note the insatiable appetite the IC has for information.[3] The necessity of actionable information is important, but the ability to properly analyze and integrate intelligence stovepipes is paramount. The IC will continue to gather more data, but the true value added is the ability to consolidate and transform multi-INT sources and data stores while establishing connections. Data content is plentiful; however, analysts continue to face hurdles analyzing, interpreting, and transforming these data into relevant information.

Over the next five years, the fiscal budget will be a limiting factor for the IC and DoD. This new normalcy will force the IC to reevaluate how to orchestrate scarce intelligence resources to plan, collect, exploit, analyze, and disseminate intelligence. Unfortunately, during this transition, the IC must continue to predict strategic and operational goals of both state and non-state actors. This will require a rapid, all-source teaming approach to integrate intelligence from all elements of the IC working collaboratively. Established on the foundation of geospatial intelligence (GEOINT), this new business model must incorporate signals intelligence (SIGINT), human intelligence (HUMINT), cyber intelligence (CYBERINT), measurement and signature intelligence (MASINT), and open source intelligence (OSINT). Harmonized together, this methodology will provide decision-makers actionable insights and foresight into emerging and complex intelligence issues. However, to achieve this end state, the IC must develop a unified operational model to support the intelligence cycle.

PROBLEM STATEMENT

In the near future, the IC will face shrinking budgets, constrained resources, and the need to accelerate the intelligence cycle. During this period, the combination of these factors will force the IC to recalibrate how all facets of intelligence are sequentially analyzed to meet national security requirements. Compounding this problem, reduced capabilities, intelligence gaps, and lagging data collection will demand that the IC rethink how to support the effectiveness of intra-Community collaboration, especially during crisis situations. An agile, multi-INT process will be indispensable to quickly assimilate Community-wide information for decision-makers. This multi-INT environment will be the only solution to observe, understand, and predict future events. Henceforth, the IC must balance decreasing capabilities and resources with innovative, integrated processes to unify multi-INT to respond to worldwide national security priorities through reducing decision uncertainty.

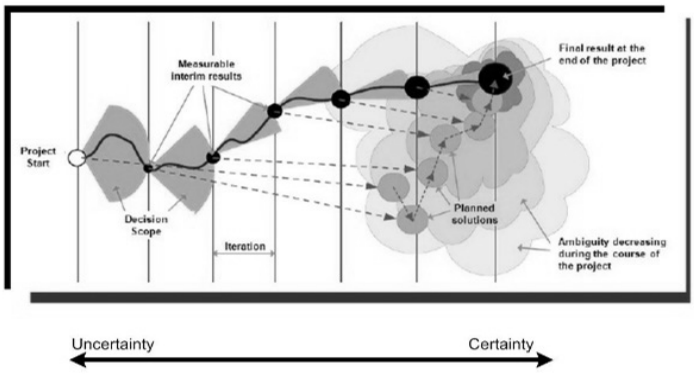


Figure 2. Agile and Uncertain

AGILE SOFTWARE DEVELOPMENT AND SCRUM

In the late 1990s, experts introduced the concept of agile and iterative software development methods. Agile software methods are risk mitigation practices to combat the effects of introducing changing user requirements, emerging technologies, new data, and uncertainty throughout the development cycle. A main component of agile is iterative software development. Iterative software development "allows the user to instantly incorporate feedback into the process to improve functionality."[4] This agility helps incorporate new and evolving requirements/ information throughout the development process to improve and refine the software quickly. One of the goals of ASD is to accommodate new, unpredictable, and changing user requirements/information. Utilizing this process, ASD projects historically achieved a rate of 37% faster delivery of software to market and a 16% more productive team.[5]

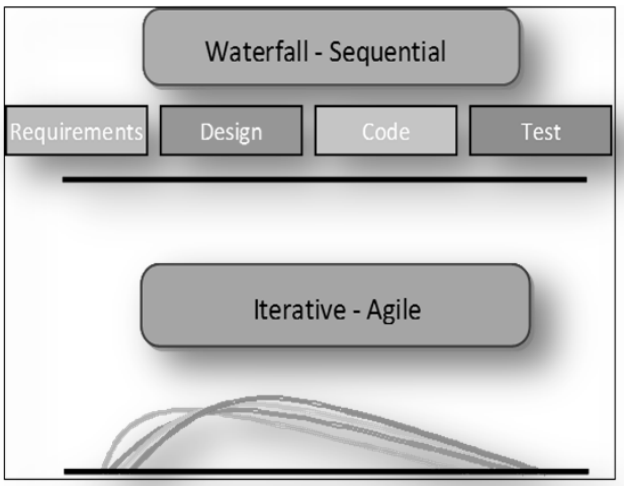


Figure 3. Waterfall vs. Iterative Development

The discussion of ASD practices first appeared in the 1986 edition of the *Harvard Business Review*. Takeuchi and Nonaka, two professors at Hitotsubashi University in Tokyo, Japan, published their innovative paper titled the "New Product Development Game." This paper argued that traditional (Waterfall) approaches to software development are not sufficient, and a new flexible methodology was needed for companies to be competitive.[6] Takeuchi and Nonaka clearly understood the shortfalls and inefficiencies of Waterfall (sequential) development. They stated, "Companies are increasingly realizing that the old sequential approach to developing new products simply will not get the job done."[7] Takeuchi and Nonaka realized that software development team cohesiveness and speed to market would be the new success factor for product development. Furthermore, they declared, "The traditional sequential or 'relay race' approach to product development…may conflict with the goals of maximum speed and flexibility. Instead a holistic or 'rugby' approach—where a team tries to go the distance as a unit, passing the ball back and forth—may better serve today's competitive requirements."[8] Moreover, their research compared software development to various activities of rugby, with a primary focus on "Scrum" (the act of gathering each team together on the field to move the ball forward). The team operates together as one unit to accomplish its goal. This sports analogy became the cornerstone of ASD.

In general, ASD initiates the idea of collocated, close-proximity teams that immediately respond to changing, unpredictable requirements and new information. Collocation implies physically close, face-to-face communication, timely feedback, and informal social interaction.[9] The notion of proximity refers to "the physical distance between people…"[10] Collocation is one of the key tenets of ASD. Collocation helps teams react quickly to rapidly changing or ambiguous requirements. An iterative process helps one understand requirements, synthesize new data, and incorporate feedback. During the agile process, circular iterations within sprints occur multiple times until an application meets users' progressing requirements while synthesizing new information.

INTELLIGENCE COLLABORATION AND ASSESSMENTS

Initial intelligence assessments are often based upon whatever information is readily available. Because of the time it takes to exploit, analyze, integrate, and finally develop products, consolidated, multi-INT assessments are not instantaneously obtainable.[11] In addition, various systems and datasets on different networks are not quickly accessible in a single, collaborative environment. Thus, decision- makers lack the advantage of multi-INT knowledge that is immediately available; they see only a small portion of the germane "picture." The IC of the future must incorporate not only intelligence agility but also unified access to yield the reality of quickly producing multi-INT products. Merging each intelligence discipline together, decision-makers can understand the entire "picture," promptly. As such, when additional information is injected, the "picture" will evolve, reducing knowledge uncertainty.

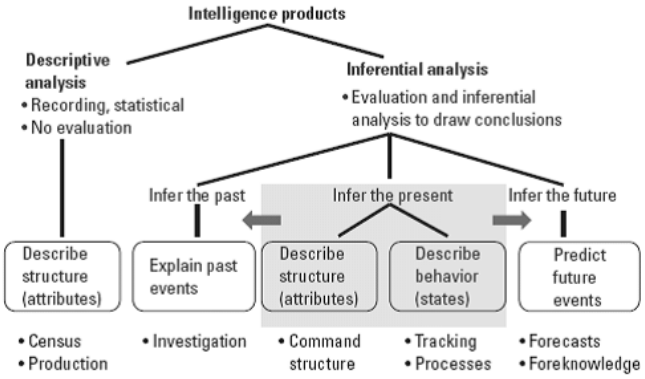


Figure 4. Intelligence (Waltz)

Multi-INT integration supports goals of the post-9/11 National Military Strategy to envision "decision superiority," or the ability to make better decisions more rapidly than adversaries.[12] The foundation of this strategy relies on the ability to collect data more rapidly, analyze the information more quickly, and disseminate in an agile manner over time. Implementing this ability will allow the IC to continue moving from reactive (descriptive analysis) to proactive (inferential analysis) responses to potential threats.[13] Some of the IC's greatest threats will continue to come from non-state actors. Non-state actors are often less predictable than state actors. The ability to gather and analyze all intelligence disciplines and achieve

foreknowledge in real-time will be a critical success factor for the IC. Yet, this requires an integrated, multi-intelligence framework to successfully collaborate.

IMPORTANCE OF COLLABORATION, COMMUNICATION, AND COLLOCATION

The key tenets of Scrum are collaboration, communication, and collocation. During the 1980s, Daft and Lengel produced groundbreaking research introducing Media Richness Theory (MRT). MRT provides a framework for understanding communications requirements and matching those requirements to the capabilities of a given medium.[14] MRT categorizes media in a hierarchy of established richness based on the "availability of instant feedback; the capacity of the medium to transmit multiple cues such as body language, voice tone, and inflection; the use of natural language; and the personal focus of the medium."[15] Daft and Lengel deem communication rich if it can clear *ambiguous* and *uncertain* issues in a timely manner. In addition, their theory proposed various forms of communication media possessing different capacities for solving uncertainty and ambiguity.[16] For effective communication to occur, the richness of the medium should match the level of message ambiguity.[17] In this context, MRT helps evaluate communication media choices. Because of the reduced contextual cues and less rapid feedback mechanisms, media other than face-to-face is considered less rich.[10] As such, tasks during the intelligence cycle other than analysis and production are usually less complex and uncertain – needing a reduced degree of richness. However, MRT suggests that tasks requiring a considerable amount of collaboration require richer media. Therefore, face-to-face, collocated communication is the richest media available.[18] This is an important key element for scrum teams.

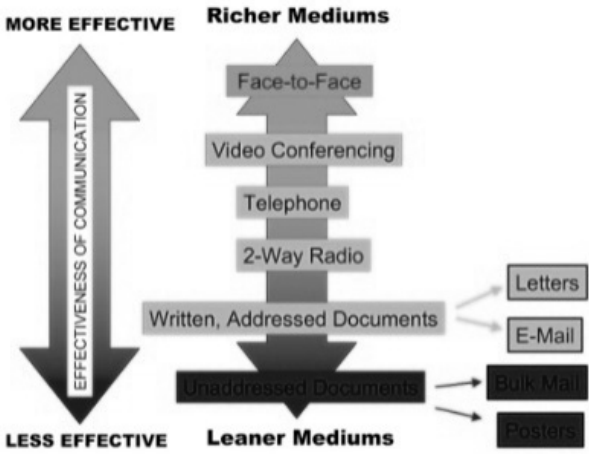


Figure 5. "Organizational information requirements, media richness and structural design," *Management Science*

In addition, face-to-face, in-person communication has major advantages over other forms of communication. Opponents may contest that technology could mimic face-to-face, collocated communication. Evidently, virtual teams using VTC (video teleconferencing) tools are somewhat effective. Nevertheless, according to Olson and Olson, virtual and distributed teams fail because "collaboration technology cannot overcome all the challenges distance creates."[19] These challenges are especially conspicuous when performing complex tasks of intelligence analysis and production while attempting to predict future events. Collaboration, communication, and collocation are critical factors to improving team interaction, enhancing overall proficiency.

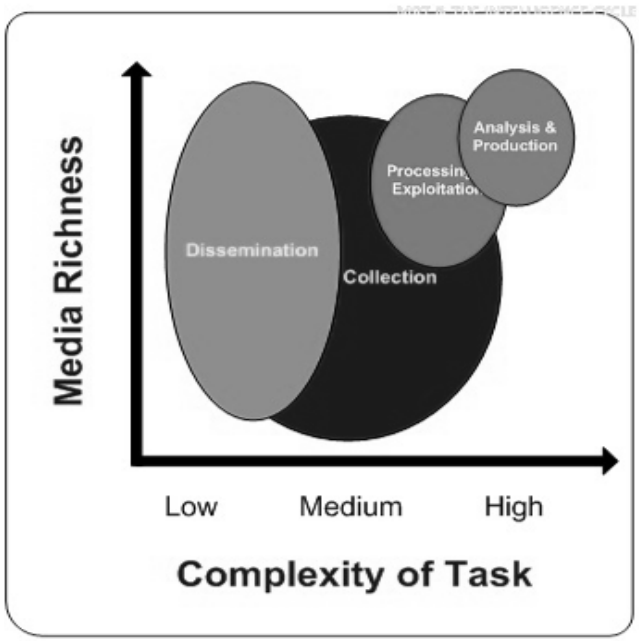


Figure 6. Daft & Lengel, Trevino, 1987 (adapted)

EFFECTIVENESS OF SCRUM: THE NATIONAL COUNTERTERRORISM CENTER (NCTC)

After the attacks of 9/11, two authoritative reports (The 9/11 Commission and The Joint Inquiry into Intelligence Community Activities Before and After the Terrorist Attacks of September 11, 2001) concluded the IC lacked efficient and effective, multi-INT information-sharing mechanisms. The 9/11 Commission was established by Congress, and interviewed numerous senior intelligence and national security leaders. This Commission cited fragmented information-sharing practices in the IC as the

main factor that contributed to the successful attacks in New York and Washington. In addition, meticulous evidence gathered by the Commission supported this conclusion. Moreover, the Joint Inquiry into Intelligence Community Activities Before and After the Terrorist Attacks of September 11, 2001 (Joint Inquiry) also specified this failure:

> *Within the Intelligence Community, agencies did not adequately share relevant counterterrorism information, prior to September 11. This breakdown in communications was the result of a number of factors, including differences in agencies' missions, legal authorities and cultures. Information was not sufficiently shared, not only between Intelligence Community agencies, but also within agencies, and between the intelligence and law enforcement agencies.*[20]

Furthermore, the 9/11 Commission and Joint Inquiry highlighted the lack of information sharing and interagency coordination, and latency of information dissemination to decision-makers within the IC. Henceforth, through legislation and oversight controls, Congress created the NCTC as the "primary organization in the United States Government (USG) for integrating and analyzing multi-INT pertaining to terrorism and to conduct strategic operational planning by integrating all instruments of national power."[21] As the Mission Manager for Counterterrorism (CT), NCTC collocates personnel from IC organizations to immediately produce analysis for decision-makers. Daily, sometimes hourly, Scrum sessions yield insightful, holistic, integrated intelligence. As a fusion center, NCTC represents the single integration point for CT information. This Scrum framework was a key recommendation of the 9/11 Commission. The Commission stated:

> *We recommend the establishment of a National Counterterrorism Center (NCTC), built on the foundation of the existing Terrorist Threat Integration Center (TTIC). Breaking the older mold of national government organization, this NCTC should be a center for joint operational planning and joint intelligence, staffed by personnel from the various agencies...*[22]

Thus, this Scrum approach to integrated multi-INT has improved counterterrorism analysis, information sharing, and dissemination within the USG. This same framework can be implemented to improve multi-INT integration throughout the IC.

HOW DOES A MULTI-INT SCRUM TEAM WORK?

The foundation to integrated, multi-INT Scrum teams is collaboration, collocation, and communication. During the Scrum intelligence cycle, these three pieces must leverage certain inputs, processes, and outputs within each sprint. As new information is collected, each time-boxed sprint will deliver robust multi-INT assessments to decision-makers. This iterative process occurs over and over again until the integrated team achieves its described objective. When followed systematically, successful multi-INT Scrum teams can deliver insightful conclusions to decision-makers in reduced time frames. Moreover, to increase success, home agency network/system reach-back is necessary.

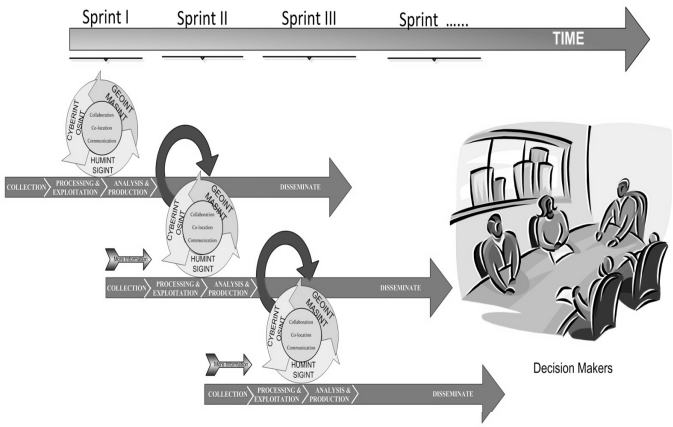


Figure 7. Multi-INT SCRUM Process

SPRINT I

Sprint I centers on setting goals, objectives, and overall success criteria. Sprint I also identifies the right people with the essential skills and unabridged access to home systems/resources. The Scrum team analyzes all relevant intelligence from each specialized intelligence agency.

- Inputs: Clearly defined problem/challenge, success criteria, expectations, and identification of team members
- Process: Analyzed, exploited, and synthesized multi-INT
- Output: Initial, integrated intelligence assessments, disseminated to decision-makers

SPRINT II

Sprint II centers on rapid analysis of data while incorporating new information—further reducing uncertainty. Within the Scrum team, information is synthesized, exploited, analyzed, and disseminated to decision-makers—taking into account emerging data collected.

- Inputs: Previous evaluated analysis and intelligence assessments, emerging data collected
- Process: Analyzed, exploited, and synthesized multi-INT
- Output: Refined, integrated intelligence assessments, disseminated to decision-makers

SPRINT III

Sprint III focuses on continued refinement to produce intelligence assessment details while reducing uncertainty and providing the best information immediately to decision-makers.

- Inputs: Previous analysis and intelligence assessments, and emerging data collected
- Process: Analyzed, exploited, and synthesized multi-INT
- Output: Refined, integrated intelligence assessments, disseminated to decision-makers

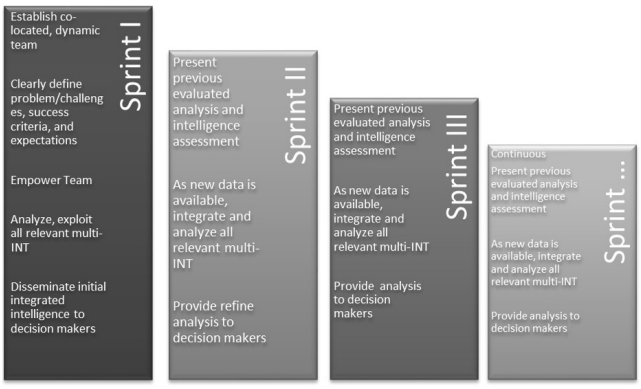


Figure 8. Sprint Stages of Integration

SPRINT …

Sprint … continues until objectives/goals are achieved. Continuous focus is on refinement to produce assessment details while reducing uncertainty and providing the best information immediately to decision-makers.

- Inputs: Previous analysis and intelligence assessments, and emerging data collected
- Process: Analyzed, exploited, and synthesized multi-INT
- Output: Refined, integrated intelligence assessments, disseminated to decision-makers

CONCLUSION

In the near future, the IC will face tremendous impediments meeting national security requirements. These challenges will include operating in a very constrained fiscal environment while needing accelerated exploitation, analysis, and dissemination capabilities. This new routine will stipulate that the IC rethink how to increase the speed of multi-INT, blending analysis as capabilities decline. Patterning the intelligence cycle within the Scrum framework can encourage rapid delivery of multi-INT knowledge to decision-makers, assist in understanding uncertainty, and provide holistic assessments, including multiple viewpoints to problems. Obvious within the IC, there are similar organizations (e.g., NCTC, NCPC, Mission Managers, etc.) currently operating in an efficacious Scrum-like framework. Nevertheless, the majority of the IC is lacking this standardized process to tackle intelligence problems. At various scales, this same technique has been used to converge and swiftly respond to emerging national security threats. During crisis situations, agencies establish individual teams to analyze and produce intelligence products. Implementing a Scrum multi-INT team will enable a combined view of intelligence to decision-makers.

The requirement to fuse all-source intelligence rapidly will continue to be a critical success factor for the IC. Terrorist threats, cyber attacks, proliferation, aggressive state actors, and plots against the homeland will dictate the IC's need to expedite the intelligence cycle. As a prevailing shift from the Cold War, real-time information is not only needed but expected. Unfortunately, in its entirety, the IC lacks the mechanism and ability to quickly collocate (with the appropriate system reach-back) multi-INT interagency personnel to efficiently and effectively respond to emerging national security challenges (except

during National Special Security Events, Special Security Events, or other planned activities). Because of the benefits of collocation, information sharing, and precise communications among analysts, these deliberately planned operations are typically successful. The Scrum framework will address process and personnel, but technology/network accesses will be an issue to overcome. Therefore, built on a proven record of success, a Scrum multi-INT structure should be instituted throughout the IC.

In conclusion, as budgets and resources decrease, duplicate collection mechanisms, single agency assessments, and funding for overlapping capabilities will decline. Within this new atmosphere, decision-makers will need to understand the intent of aggressors, discern patterns in big data holdings, and demand that predictive knowledge be disseminated as soon as possible. Multi-INT knowledge consolidation will be a relevant solution to solve numerous emerging, hard, and complex problems in the future. This new operational environment will ensure true integration across agency domains. Henceforth, the IC can achieve the DNI's vision of taking advantage of diversity and the strength of different organizations and intelligence disciplines to meet national security objectives.

Notes

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Predictive Threat Analysis of American Espionage

by Ric Craig and Dr. James Hess

EXECUTIVE SUMMARY

The purpose of this study was to conduct a predictive threat analysis by extrapolating, projecting, and forecasting future target models in order to answer the research question, "What will the future of American espionage look like?" A target-centric, predictive approach consisted of two steps: (1) the creation of past and present target models, and (2) the creation of extrapolated, projected, and forecasted target models. The results showed there will be an increase in the percentage of Americans who commit espionage for ideological motivations (specifically, espionage committed for rebel dissonance will increase), and a decrease in the percentage of Americans who commit espionage for extrinsic motivations. Further, there will be a greater diversification of ethnicities represented by Americans committing espionage against the U.S. There will also be a slight increase in the number of espionage cases between 2014 and 2020, to between 12 and 20. The research also shows that the percentage of Americans committing espionage for money will decrease, as well as the amount of money received will decrease between 2014 and 2020. Another key research conclusion is that American espionage can likely be reduced by 40 percent with the aggressive use of advanced communications intelligence as a means for detecting foreign intelligence services' human intelligence operations within the U.S.

INTRODUCTION

Research Problem

Espionage committed by Americans poses problems on several levels and in extreme cases is exceptionally grave[1] to the security of the U.S. First, the commission of espionage breaks the national trust bestowed upon the person committing the act of espionage. Second, there are large financial implications. When an intelligence program is compromised, all monetary contributions to the intelligence program are wasted. Also, additional finances are required to mitigate the loss of the intelligence program. Third, there is a loss of intelligence. Robert Hanssen provided the Russians 6,000 pages of classified intelligence,[2] and Aldrich Ames provided the Russians classified intelligence that would stack up to 15-20 feet high.[3] This loss can be compounded by the lack of knowledge of its loss. Fourth, in some situations lives can be lost as a direct result of acts of espionage.[4]

The purpose of counterespionage is to deter, detect, exploit, and neutralize espionage activity. Conducting predictive analysis on American espionage promotes the detection of future espionage because it creates indicators of what future espionage looks like. Additionally, predicting what future espionage looks like reduces uncertainty[5] and allows policymakers to establish policies to curtail espionage.

HYPOTHESIS

First and foremost, the research question is, "What will the future of American espionage look like?" The research sought to identify past and present target models in order to extrapolate, project, and forecast future target models. Brainstorming resulted in identifying forces acting upon the target models. These forces are the key variables. The research will likely show that between 2014 and 2020 there will be an increase in the diversity in the ethnicity of spies as well as an increase in ideologically motivated spies. Also, the research will likely show an overall increase in espionage activities.

DEFINING TERMS

Not only are there several different forms of espionage, various state, federal, and international organizations have differing definitions. Legally speaking, there are two forms of espionage. The first (the one with which this research is concerned) is covered under Title 18, United States Code, Part 1, Chapter 37, Espionage and Censorship. This espionage primarily concerns itself with national defense information and government classified documents. Violations of this law jeopardize the strategic and tactical defense of the U.S. The second (not addressed in this research) is covered under Title 18, United States Code, Part 1, Chapter 90, Paragraph 1831, Economic Espionage. This espionage deals with the theft of proprietary or intellectual property, usually referred to as trade secrets.

The research showed an emergence of, and future increase of, a motivating factor that was not seen in earlier cases of espionage. Motivation can be divided into intrinsic and extrinsic forms. Extrinsic factors are things such as money, diamonds, or honorary military rank. Intrinsic motivations consist of things such as disgruntlement, ingratiation, coercion, thrills, recognition/ego, and ideology. Ideology has traditionally consisted of loyalty to an adversarial country, political form, or culture. However, a new motivation has been identified that does not fit within traditional ideologies. Since no current terms accurately describe this motivation, the term "rebel dissonance" will be used. Rebel dissonance is defined as opposing the government (generally, or intelligence community specifically), due to a belief the government is not acting in accordance with applicable law. Rebel dissonance suggests a loyalty to the U.S. above (or in lieu of) loyalty to the government. The media have used the term "whistle-blower" to describe these recent activities. However, whistle-blower describes the person, not the motivation. Further, an argument can be made that espionage cannot fall within the definition of whistle-blowing because whistle-blowing is a legal act exposing an illegal (or unethical) act, whereas divulging classified material in order to expose alleged illegal practices is inherently illegal.

THEORETICAL FRAMEWORK

The theoretical framework was a predictive analysis based on historical and present target models of American espionage to determine future target models. The predictive analysis resulted in an Extrapolated Future Target Model, Projected Future Target Model, and Forecast Future Target Model.

There were two key assumptions used in this research. One assumption made was that a majority of all acts of espionage have been identified in existing literature. There can be no certainty one way or another. However, making this key assumption allows for the past target models to be based on all statistical data, or at least a large cross-sample of espionage activity. The second assumption is that the tactics, techniques, and procedures to carry out espionage will not drastically change from current trends.

The key variables were the major forces affecting espionage in America. This research identifies the two major forces which influence espionage activities as a shift in counterintelligence focus to cyber-espionage and international conflict.

LITERATURE REVIEW

Introduction

The body of research on predictive analysis of espionage is nonexistent, at least in the public domain. It stands to reason that any such research could be found in a more limited government collection due to the sensitive subject matter. Research on historic espionage can be found in both qualitative and, to a far lesser extent, quantitative research. The qualitative research is often anecdotal and incomplete. Quantitative research has indeed been produced only by one organization, the Department of Defense Personnel Research Center in Monterey, California.

In order for a source to be of value to this research, it must be expansive in its inclusion of subject data. Research sources that focus on narrow segments of espionage cases would skew results, attributing results from a narrow, defined group onto all espionage cases as a whole. For example, research on motivations of U.S. Army soldiers who committed espionage would not necessarily accurately predict the motivations of all American spies due to the percentage without security clearances, job functions and, more importantly, the culture and atmosphere in which the persons work and spend a majority of their time.

Reviews

In 2005 Kramer and Heuer wrote, "America's Increased Vulnerability to Insider Espionage" in the *International Journal of Intelligence and CounterIntelligence*. Lisa A. Kramer has a PhD in Sociology and is a project manager at the Department of Defense Personnel Security Research Center. Richards Heuer is a former CIA officer and published author. Kramer and Heuer outline the technological and motivational trends affecting American espionage. Their research indicates an increased vulnerability to American espionage (referred to by Kramer and Heuer as insider espionage) due to smaller digital memory devices, an expanded market for American secrets, "internationalization of scientific research and commerce," and frequent international travel.[6] Their research also indicates an increased vulnerability due to trends in motivation, to include upward trend of personal finance problems and gambling, decrease in organizational loyalty, increase in ethnic diversity, and a growing international community.

This research adds to the knowledge pool by identifying motivational and technological forces that act on espionage activity. This research is different from other research into motives for espionage. Most research into motivations focus on those of the individual spy and quantitatively identify the most preventive characteristics. This research

uses key assumptions of individual motivations and identifies community trends to hypothesize the trend in individual motivations.

Kramer and Heuer's research was not designed to predict what the future target model of espionage would look like, only to identify trends in vulnerability. Therefore, the research does not identify indicators of espionage. Nor does the research provide a description of character traits of a future spy.

In 2008 Katherine L. Herbig authored "Changes in Espionage by Americans: 1947-2007," an outstanding quantitative research work on espionage committed by American citizens. Herbig has a doctorate and has been published numerous times. She co-authored "Reciprocity: A Progress Report," which outlines the progress in relationships between government agencies dealing with personnel security issues (e.g., security clearances). She also co-authored "Model for a Future Defense Personnel Security System," which researched internal and external factors in an effort to increase the effectiveness of the personnel security system, which investigates citizens to determine if they can be trusted with national secrets. Both of these research projects, along with "Changes in Espionage by Americans: 1947-2007" and "Espionage Against the United States by American Citizens 1947-2001," were published by the Defense Personnel Security Research Center in Monterey, California. Herbig has also published research with the Naval Postgraduate School, Monterey, California.

Herbig's research was a continuation of her previous research, "Espionage against the United States by American Citizens 1947-2001," co-authored with Martin F. Wiskoff. Both the research in 2002 and 2008 clearly identified a model of the American spy. However, in 2008, the research showed a shift in the espionage model occurring around 1990. This research breaks down the data on each spy based on many criteria, such as duration of espionage, date imitated, date arrested, beneficiary nations, recruitment versus volunteerism, motivations, along with biographical data, such as marital status, age, gender, employment, rank or grade, etc. This is the only quantitative research on espionage activity. The research provides a very descriptive model of persons who have been caught spying. It further identifies that there are three separate and distinct models based on the time frames: (1) 1947-1990, (2) 1990-2000, and (3) 2000-2007.

One major flaw with the research is the arbitrary division of the data by decade. Three time frames are used to display the trends: 1947-1979, 1980-1989, and 1990-2007. First, the data between 2002 and 2007 are statistically incomplete. Sixty percent of espionage cases last longer than one year,[7] which means that the data represent only 40 percent of the actual espionage cases. Second, and more importantly, the division of time frames appears to be somewhat arbitrary. It is more likely that world events would influence a spy's motivation than the numerical year. An example of a more appropriate division would be: (1) 1947-1991 (Cold War), (2) 1992-2000 (Southern Europe turmoil), and (3) 2001-present (War on Terror). This division presents a picture of espionage trends across international conflicts rather than arbitrary time frames.

This research is extremely good at establishing a model of a spy (regardless of the time frame); however, it admittedly does not seek to depict a future espionage model. Additionally, this research was not designed to present or depict a model of spy handlers of foreign intelligence services.

Peer-reviewed research has few inherent drawbacks. The biggest drawback, as it relates to this particular research, is the inherent timeliness, particularly relating to diagraming the present model of American espionage. As such, no peer-reviewed research data exist for espionage cases between 2007 and the present. As a result, news articles from well-known news publishers were searched for recent espionage cases. Since close to one hundred news articles were used, it is not appropriate to review the merits of each individually. Instead, news media were reviewed as a whole.

Journalists are trained to be unbiased in their reporting. News publications strive to be unbiased in their coverage. In spite of that training and effort, some news agencies, news publications, and even some journalists have reputations for being slanted toward one political view or another. In addition to bias, factual errors sometimes occur, particularly in early reporting, as journalists and news publications attempt to be the first to cover a particular news item or fact.

During the research, two steps were taken to overcome these potential pitfalls. First, only respected and well-known news publications were used. It is more likely a respected and well-known news publication would have a larger staff to prevent such bias or inaccuracies. It would also have more to lose from making such mistakes, and therefore would be more diligent in preventing them. Second, only quantitative data were obtained from the news publications. Limiting the retrieved data to facts, such as arrest date, citizenship, and charges, eliminates any potential of bias. Also, cross-checking the data with multiple news publications reduces the inaccuracy.

Conclusions

Due to the secretive nature of espionage and counterespionage, research literature in the public domain is

difficult to locate. Two pieces of literature have been identified which add to the foundation of research into a future target model of American espionage. The current research literature does not answer the research question. However, the literature does establish the fundamental data that allow past target models to be created. The past target models can then be used in predictive analysis to predict the future of American espionage.

METHODS

Research Design

The methodology employed during this research was mixed mode, using both quantitative and qualitative research. The qualitative methodology is ineffective at predicting the future,[8] but is effective at describing and explaining events and experiences. Quantitative methodologies were used to establish future predictions, based on historical statistical data. Qualitative methodologies were used to describe probable future events of espionage.

Only Americans convicted of espionage were studied in an effort to draw a clear and distinct line of inclusion.

Robert Clark's "predictive approach"[9] was followed. This is a "target-centric analytic approach to prediction,"[10] designed to present three different versions of future target models, based on past target models, a present target model, and influencing forces. This analytic method was chosen due to its holistic and tried and true methodology. Subject selection will include all known convicted American spies. Cross-section and samplings reduce the statistical accuracy. Only Americans convicted of espionage were studied in an effort to draw a clear and distinct line of inclusion. The single exception is the inclusion of Edward Snowden, who has publicly admitted to his release of classified information,[11] [12] [13] and espionage charges have been filed against him.[14]

There was a data collection stage and an analysis stage. The collection of data stage was performed in two steps. First, the data used to develop the past target models were obtained through qualitative reviews of existing research material. Second, the data used to develop the past target models were collected during the research process. Currently, there is no research literature identifying the data needed to prepare a present target model. These data were collected from individual news sources and populated into a database. When the database was complete, the cumulative data were used to develop the present target model.

The analysis stage consisted of ten steps:

Step 1: Past target models were developed using descriptive conceptual models.[15] These past target models presented a verbal description of what espionage cases looked like in the past.

Step 2: Historical forces were identified. These forces could be such things as "issues, trends, factors, or drivers,"[16] which could manifest themselves as national policy, international conflicts, media, and the success or failure of espionage and counterespionage activity.

Step 3: A present target model was developed, also using a descriptive conceptual model.

Step 4: All previous historical forces were presumed to continue unaltered and in their current state.

Step 5: An extrapolated future target model (scenario) was developed using an extrapolation method. In order to develop an extrapolated future target model, the previously identified forces were assumed not to change.[17] A prediction was made of what the future target model would look like based on the past target models, present target models, and unchanged influencing forces.

Step 6: An estimate was made in the most likely changes in the existing forces.[18]

Step 7: A projected target model (scenario) was created. The projected target model was a prediction of what the future target model would look like based on the assumed changes in the influencing forces[19] identified in Step 6. To help create the projected target model, influence trees were created generating alternative outcomes.[20]

Step 8: Brainstorming was conducted to identify new forces that would have an effect on the target. During the brainstorming session, political, economic, military, and social factors, plus infrastructure, were evaluated. In addition, during brainstorming, synergy, feedback, inertia, contamination, and countervailing forces[21] were considered.

Step 9: A forecast future target model (scenario) was developed. These target models were descriptive scenarios based on projected target models and the newly identified forces in Step 8, written in a cause and effect style.

Step 10: Each forecast future target model was evaluated based on clarity, intrinsic credibility, plausibility, relevance, urgency, comparative advantage, and technical quality.[22] Those forecast future target models that did not pass the

evaluation criteria were discarded. Those forecast future target models that did pass the evaluation criteria were deemed possible target models describing the future of espionage in America.

This methodology will present three specific future target models of American spies. The results will go directly to answering the question, "What will American espionage look like in the future?"

There are a few limitations to this research. First, the time constraints limited the detail available in the constructed database. Second, influencing factors which were factored into the forecast future target model were limited to a single brainstorming session of the single author. Additional researches and additional brainstorming sessions could lead to more influencing forces.

ANALYSIS AND FINDINGS

Past Target Model 1

The Cold War between the Soviet Union and the U.S. increased the need for intelligence against one another. To support this need, the U.S. created its first peacetime intelligence organization. Spies for each country were cultivated and, as a result, the period between 1947 and 1979 presents the classic view of espionage. There were 66 American spies identified during this period.

Between 1947 and 1979, almost all American spies were white males.[23] Although age and education appear to have little correlation, slightly more spies had only a high school education than higher degrees.[24] A large majority of the spies were married, and few were homosexual.[25] Four-fifths of them were natural-born U.S. citizens and just over half had foreign attachments.[26] The typical job sets for those convicted of spying were Communications/Intelligence, General Technical, Scientific/Professional, and Functional Support/Administrative.[27] Over half were in the military while almost one-fifth did not work for any government organization at all.[28] Well over half of all spies had a TOP SECRET clearance, while one-fifth (the non-government workers) did not have a security clearance.[29]

Just over half of all spies approached foreign intelligence services and volunteered to spy for them, while just under half were recruited.[30] Of those who were recruited, three-quarters were recruited by a foreign intelligence service, while the remainder was recruited by friends and family.[31] During this period, sole motivation outpaced multiple motivations two to one.[32] Money was the primary motivation between sole motivators and multiple motivators and accounted for nearly half of all spies.[33] Divided loyalties and disgruntlement were nearly tied for second in both groups.[34] It should be noted that approximately one-tenth of all spies were coerced into espionage.[35] Only one-third received no monetary compensation, while a half received over $10,000.[36] Six percent received over a million dollars.[37]

Between 1947 and 1979, the typical American spy was a married white male in the military with a TOP SECRET clearance. Just as many Americans spied due to divided loyalties or disgruntlement as did for monetary gains. The average spy earned over $10,000 for his illicit efforts. Foreign intelligence services worked diligently and recruited nearly half of all the spies, while the other half volunteered.

Past Target Model 2

The 1980s is frequently referred to as the "Decade of the Spy." This is due to the fact that there were more Americans committing espionage in the 1980s than in the previous three decades combined. There were 70 American spies reported during this period.

While the average American spy during the 1980s was a white male, there was a growing number of ethnically diverse spies. The percentage of female spies doubled, the percentage of Asian (ethnicity) spies tripled, and the percentage of Hispanic spies doubled.[38] During this period, nearly half of all spies were between the ages of 20 and 29.[39] The number of spies with an education commensurate with a bachelor's degree dropped, but those with an education equivalent to a master's degree rose.[40] The marital status evened out between those who were married compared to those who were single.[41] Spies who were separated or divorced doubled as a percentage.[42] The number of homosexual spies dropped in half.[43] A large percentage of spies were natural-born citizens.[44] The instances of foreign attachments slightly decreased, but the instances of foreign connections and foreign cultural ties slightly increased.[45] Half of all spies were military, while about one-fifth did not work for any government organization.[46] The level of security clearance had become more diversified with almost half having a TOP SECRET clearance, a quarter with a SECRET clearance, and a quarter with no clearance at all.[47] The job sets for the individual spies evened out a little with a notable doubling in the percentage of General/Technical jobs.[48]

There was a dramatic increase in volunteer spies, with two-thirds of all spies volunteering, while only one-third were recruited.[49] Of those recruited, foreign intelligence services had less recruitment (only about half) while those recruited by friends more than doubled as a percentage.[50] Of those who had a single motivation, money represented three-quarters of the total, while divided loyalties and coercion remained steady.[51] Far fewer persons spied because of disgruntlement and ingratiation, while ego/recognition

increased.[52] Of those with multiple motivations, the percentage motivated by monetary gains increased to sixty percent, while divided loyalties and disgruntlement decreased.[53] The percentage that spied for ingratiation tripled as a percentage.[54] Interestingly, although there was an increase in the percentage that spied specifically for monetary gain, the amount earned dramatically decreased.[55] Well over half received no compensation, and only one-fifth earned over $10,000.[56]

Between 1980 and 1989, the typical American spy was a white male between the ages of 20 and 29 in the military with a TOP SECRET clearance volunteering to spy for money. While white males constituted the vast majority, there was a growing diversity in gender and ethnicity. Marital status and sexual preference are statistically insignificant. Just as many people spy for a single reason as do for multiple reasons but, in either case, monetary gains were the primary reason.

Past Target Model 3

The period between 1990 and 2007 produced several international conflicts, many of which involved Western and Middle Eastern nations. The Cold War had ended and U.S. and foreign intelligence services shifted focus from predominantly single opposition to multiple potential adversaries. There were 37 American spies reported during this period.

Most American spies were married males, and all were heterosexual.[57] Regarding the ethnicity of the spy, the plurality was still white but now less than half.[58] A quarter of all spies now were Hispanic, and the percentage of Asian and black spies had doubled.[59] Almost half of all spies were over the age of 40.[60] Education levels had leveled out to about one-third with a high school degree, one-third with a master's degree, and one-quarter with a bachelor's degree.[61] One-third of all spies were naturalized U.S. citizens and half or more had foreign attachments, connections, or cultural ties.[62] Employment had leveled out with about one-third in the military, one-third civil servant, and one-third having no employment with the government at all.[63] The occupation Communications/Intelligence among spies was reduced in half, while miscellaneous categories dramatically increased to about a quarter of all spies.[64] These occupations consisted of such things as boat pilot, housewife, student, entrepreneur, truck driver, shop owner, and translator.[65] The TOP SECRET security clearance comprised only about one-third, with one-quarter having a SECRET clearance, and one-third not having a clearance at all.[66]

Recruitments remained at about one-third, with two-thirds of all spies volunteering.[67] Of those who were recruited, less than two-thirds were recruited by a foreign intelligence service and fewer than one-third were recruited by a friend.[68] Very few spies who had a singular motivation were motivated by money.[69] More than half of them were motivated by divided loyalties, and a quarter were motivated by disgruntlement.[70] The motivation of ingratiation saw a significant increase.[71] Of those with multiple motivations, both money and divided loyalties were equal and together made up four-fifths of the motivations.[72] Coercion, thrills, and ego as motivators were non-existent.[73] A vast majority of spies, four-fifths, received no monetary compensation.[74]

A large and growing majority of American spies conduct espionage due to divided loyalties.

Between 1990 and 2007, the typical American spy was a civilian, heterosexual, married male over the age of 40. However, the diversification of many traits had widened, such as ethnicity, education, occupation, and security clearance. A large and growing majority of American spies conduct espionage due to divided loyalties.

Present Target Model

Between 2008 and 2013, there were 11 cases of espionage convictions. These data are statistically incomplete given that 26 percent of American espionage cases lasted for more than five years. During this time, approximately half of the espionage cases were rebel dissonance cases. Approximately half of the espionage cases consisted of one specific spy ring operated for the benefit of China.

Most American spies were white males over the age of 40. Half were married and, of the education levels identified, most had doctoral degrees. One quarter of all spies were Asian. Two-thirds were born in the U.S. One-quarter of all American spies were civil servants, one- quarter were government contractors, and one-third were unrelated to the government. This leaves a small percentage employed by the military. One-quarter worked in the intelligence field, one-quarter worked in a technical field, and one-quarter worked in unrelated jobs, such as a furniture store. Just over half had TOP SECRET clearances, while the rest had no clearance at all.

One-third of all American spies during this period volunteered. Of all those who volunteered, they did so due to rebel dissonance and provided the classified material to the media rather than to a foreign country. Two-thirds of all spies were recruited, all of whom by foreign intelligence services rather than friends or family. Over one-quarter

committed espionage because of divided loyalties and one-fifth did so for money. Of those who did so for money, most actually received no money and a few received less than $10,000.

Between 2008 and 2013, the typical American spy was a white heterosexual male over the age of 40. There has been a drastic drop in the number of military spies and a continuation in the upward trend in unrelated occupations. The level of security clearances has decreased to just two categories: TOP SECRET and none. The amount paid has drastically decreased to under $4,650.

Historic Forces

According to Clark, the Predictive Approach[75] requires the identification of Unchanging Forces and Changing Forces. The primary force is the manifestation of U.S. policy, in other words, how U.S. CI policy is actually carried out by the various CI organizations within the IC and the public.

The 2009 National Intelligence Strategy outlines four main counterintelligence focuses: detect insider threats, penetrate foreign services, integrate CI with cyber, and assure the supply chain.[76] Guided by the National Intelligence Strategy, the National Counterintelligence Executive created the 2009 National Counterintelligence Strategy, which lays out an 8-point game plan[77]:

- Secure the nation against foreign espionage and electronic penetration
- Protect the integrity of the U.S. intelligence system
- Support national policy and decisions
- Protect U.S. economic advantage, trade secrets, and know-how
- Support the U.S. Armed Forces
- Manage the counterintelligence community to achieve efficient coordination
- Improve training and education of the counterintelligence community
- Expand national awareness of counterintelligence risk in the private as well as public sector

This broadly worded strategic plan does little to motivate the counterintelligence community toward systematic success (rightly so due to its unclassified nature and wide distribution). The policy is akin to the general manager of a baseball team putting out a strategic strategy promoting more base hits, fewer errors, and better defensive plays. Neither provides the low-level employees with guidance beyond the inherent actions toward the mission.

Unchanged Forces

Given the time covered by the past and present target models, it is difficult to identify unchanged forces. As time progresses, technologies, politics, and international relations make change inevitable. The one particular force that has not changed, and will not change, is the need of one country to obtain the secrets of another. Further, the human intelligence discipline has been around since ancient times and nothing suggests its demise. Unlike technologically-based disciplines such as signals intelligence and measurement and signature intelligence, human intelligence is not affected by technological revolutions over time. Human intelligence tradecraft has changed little over time.

Kramer and Heuer[78] identify five specific trends affecting opportunities for espionage. They are (1) removable media and storage devices getting smaller, (2) an expanding market for U.S. intelligence information, (3) the internationalization of scientific research and communications, (4) increasingly frequent international travel, and (5) the expansion of the Internet. In short, they consist of internationalization and technology.[79]

Kramer and Heuer[80] also identify five specific trends affecting motivations for espionage. They are (1) increase in personal financial problems in Americans, (2) increase in gambling problems in Americans, (3) a diminishing loyalty among Americans, (4) an increasingly diverse workforce, and (5) an increasingly global community.[81] The internationalization in general combined with diminishing loyalties causes Americans to empathize with other countries and non-state actors. This makes a person a softer target for a foreign intelligence service's human intelligence collector.

Extrapolated Future Target Model

The Extrapolated Future Target Model is an estimation based on analysis of past and present target models with the assumption that historic forces will remain in effect. Between 2014 and 2020, two major threats to the U.S. will be tensions in the Middle East and Chinese espionage against several different countries, to include the U.S. specifically. There will likely be eight espionage cases during this period.

With the increase in female spies it is estimated that three-quarters of American spies will be male. The racial diversity among spies will continue, with a slight increase in Arabs and Asians. This will cause a slight decrease in whites to about three-fifths, resulting in Asians at one-third.
When analyzing the age ranges in past and present target models, a trend can be observed identifying a specific generation with higher occurrences of espionage. This trend would result in 20 percent of spies being between 20 and 29,

15 percent of spies being between 30 and 39, and 65 percent of spies being over 40. The mathematical trend suggests half will be married, while a growing one-fifth will be divorced. The trend in citizenship has no identifiable pattern. However, if the 1980 to 1989 dataset is removed, a slight upward trend is observed. The citizenship of the 1980 to 1989 dataset is skewed as a direct result of family-centric spy rings. Therefore, the slight upward trend in naturalized citizens will continue and result in two-fifths of all spies. There will continue to be an increase (as high as three-quarters) in foreign attachments, connections, and cultural ties. The downward trend in military spies will continue to a low of one-tenth. The sum of contractors and unrelated employment will outpace the sum of civil servants and military. The occupation Communications/Intelligence will produce one-quarter, while General/Technical and Miscellaneous will produce one-third each. Half of all spies will hold TOP SECRET clearances while the other half will hold no clearance at all at the time of the commission of espionage.

Divided loyalties will produce almost half of all motivations for espionage during this period. Over one-third of all spies will do so due to rebel dissonance. The remaining one-fifth will conduct espionage for monetary gain; however, they will receive less than $10,000.

Between 2014 and 2020, espionage cases will generally fall into two categories. The first category will be white males committing espionage for ideological reasons. They will predominantly provide classified material to media outlets as retribution for government agencies carrying out actions the spy believes were against the public interest. The second category will be persons carrying out espionage due to a mix of ideological reasons and monetary gain. This category will be a mix of both Asian and white males and females. The ideological reasons will be a mix between divided loyalties to an Asian government or unwittingly providing classified material.

Changing Forces

To create a Projected Target Model, the Extrapolated Target Model must be analyzed in the context of estimated changes in the forces acting upon the espionage. Brainstorming developed two new forces: (1) increased counterintelligence focus on cyber-attacks and (2) a rise in international conflict. This is certainly not an exhaustive list.

In August 2009, the Director of National Intelligence published the National Intelligence Strategy. This strategy specifically mandated counterintelligence efforts to focus counterintelligence assets "across the cyber domain to protect critical infrastructure." This was followed up by the Office of the National Counterintelligence Executive publishing the National Counterintelligence Strategy of the United States of America. The National Counterintelligence Strategy mandates an increased effort in counterintelligence in the cyber domain. Job postings for Counterintelligence Cyber Analyst have increased on intelligence job boards. The increased efforts into cyber counterintelligence could detract from current counterespionage efforts resulting in fewer detections (and therefore neutralizations).

The Intelligence Community should establish an awareness program identifying appropriate methods to "blow the whistle" without releasing classified material to the public. With an anticipated increase in rebel dissonance, providing multiple avenues for personnel to air grievances against perceived illegal intelligence activities will likely reduce instances where whistle-blowers provide classified intelligence to U.S. media.

With conflict comes a need for intelligence. If tensions between the U.S. and another country increase, the intelligence needs of the adversary will increase. This increased intelligence need will likely manifest itself in an increase in all intelligence disciplines, to include human intelligence. Even in situations where the U.S. is not involved in the international conflict, foreign intelligence services may deem U.S. intelligence valuable to their cause.[82]

Alternatives

While the Extrapolated Future Target Model is the most logical probability, there are alternatives that need to be considered for other Future Target Models. The generated alternatives are intended to "expand one's perspective"[83] and increase awareness of indicators of other scenarios:

- Foreign intelligence services will increase human intelligence collection efforts against the U.S. by adding resources and personnel.
    - Foreign intelligence services will be successful against U.S. counterintelligence.
    - U.S. counterintelligence will be successful against foreign intelligence services.

- Foreign intelligence services will decrease human intelligence collection efforts against the U.S. by removing resources and personnel.
    - Foreign intelligence services will terminate active sources.
    - Foreign intelligence services will deactivate sources.

- Foreign intelligence services will maintain human intelligence collection efforts against the U.S. without adding additional resources and personnel.
    - ♦ U.S. counterintelligence will identify most or all existing espionage networks.
    - ♦ U.S. counterintelligence will identify some or none of the existing espionage. Networks

Influence Tree

The Influence Tree is designed to systematically analyze influences on potential outcomes and examine the relationships.[84] Two forces have been identified as affecting the future of foreign human intelligence operations inside the U.S.: increased focus by U.S. counterintelligence on the cyber domain and international conflict. International conflict has at least a minor effect on U.S. counterintelligence, and both have an effect on human intelligence directed at the U.S. The following chart depicts the relationship between each force and the statistical influence on American espionage.

Projected Future Target Model

The Projected Future Target Model is an estimation based on past and present target models and factoring in the potential changing forces of international conflict and shifting counterintelligence focus. Between 2014 and 2020, there will be approximately 20 cases of American espionage.

International Conflict	CI Cyber Focus	Outcome		Outcome Probability
0.3 Increase	0.4 Detractor	FIS Success	0.5	0.060
		CI Success	0.3	0.036
		FIS Terminate Sources	0.0	0.000
		FIS Deactivate Sources	0.0	0.000
		CI Identify Networks	0.1	0.012
		CI Doesn't Identify Networks	0.1	0.012
	0.6 No effect	FIS Success	0.4	0.072
		CI Success	0.4	0.072
		FIS Terminate Sources	0.0	0.000
		FIS Deactivate Sources	0.0	0.000
		CI Identify Networks	0.1	0.018
		CI Doesn't Identify Networks	0.1	0.018
0.4 Maintain	0.6 Detractor	FIS Success	0.5	**0.120**
		CI Success	0.3	0.072
		FIS Terminate Sources	0.0	0.000
		FIS Deactivate Sources	0.0	0.000
		CI Identify Networks	0.1	0.024
		CI Doesn't Identify Networks	0.1	0.024
	0.4 No effect	FIS Success	0.4	0.064
		CI Success	0.4	0.064
		FIS Terminate Sources	0.0	0.000
		FIS Deactivate Sources	0.0	0.000
		CI Identify Networks	0.1	0.016
		CI Doesn't Identify Networks	0.1	0.016
0.3 Decrease	0.7 Detractor	FIS Success	0.3	0.063
		CI Success	0.2	0.042
		FIS Terminate Sources	0.1	0.021
		FIS Deactivate Sources	0.1	0.021
		CI Identify Networks	0.2	0.042
		CI Doesn't Identify Networks	0.2	0.042
	0.3 No effect	FIS Success	0.2	0.018
		CI Success	0.3	0.027
		FIS Terminate Sources	0.1	0.009
		FIS Deactivate Sources	0.1	0.009
		CI Identify Networks	0.2	0.018
		CI Doesn't Identify Networks	0.2	0.018

Figure 1. Influence Tree

A majority of spies will be white; however, they will comprise less than half of all races. Asians will comprise less than one-third, and blacks, Arabs, and Hispanics will continue to increase in percentage. This is a direct reflection of the increase in ethnic diversity in the workplace.[85] The percent of Asians will decrease as a result of an anticipated increase in Chinese cyber-espionage designed to counter increased U.S. counterintelligence efforts in the cyber arena.

The motivations for the Projected Future Target Model would be the same as for the Extrapolated Future Target Model. The continuance of the present level of international conflict would not change the motivations. The change in focus of counterintelligence to the cyber domain would likely change motivations very little, if at all. If motivations were to change, it would likely increase the percentage of rebel dissonance due to a potential perception of U.S. involvement in the affairs of other countries.

The Projected Future Target Model for the period between 2014 and 2020 suggests that there will be a 25 percent increase in the number of Americans committing espionage against the U.S. There will also be a greater diversity in ethnicity. All other statistics would remain the same, with the possible exception of an increase in espionage committed because of rebel dissonance.

NEW AND CHANGING FORCES

The Forecast Future Target Model seeks to identify new forces that may be caused by second- and third-order effects, resulting in a change to the Projected Future Target Model. One such operation that could potentially affect foreign intelligence services' human intelligence operations inside the U.S. is PRISM. PRISM is a National Security Agency database designed to connect to nine of the largest Internet providers.[86] With access to this level of communications intelligence, identifying potential foreign intelligence service agents will be much easier and quicker. If this communications intelligence is utilized by counterintelligence, it could potentially speed up the detection process, shortening the average duration of individual spies.

Forecast Future Target Model

Through the aggressive counterintelligence use of advanced communications intelligence programs, such as PRISM, between 2014 and 2020, there will likely be 12 cases of Americans committing espionage. The Forecast Future Target Model is based on the Extrapolated Future Target Model, but filtered through an analysis of new changing forces (e.g., the aggressive counterintelligence use of communications intelligence programs, such as PRISM).

The use of communications intelligence programs to detect espionage would not in any way change the overall traits or characteristics of the American spy. However, there would be slightly more cases of espionage during the time period. Two factors would weigh in on this. First, more espionage cases would be detected than otherwise would have been. As stated previously, 25 percent of all espionage cases last for more than five years. Therefore, one can assume that 25 percent of the espionage cases from the Present Target Model have not yet been identified. Monitoring and identifying the communications of spies and spy handlers would increase the rate of detection, thereby increasing the number of cases for the 2014-2020 time period. However, the publication of the capture and potential conviction for espionage may have at least a small impact on persons initiating espionage, thereby lowering the overall numbers.

Motivations for persons would change little in the Forecast Future Target Model from the Extrapolated Future Target Model. The method of detection of espionage has no influence on collective individuals in regard to committing espionage.

The Forecast Future Target Model differs only slightly from the Extrapolated Future Target Model. The main difference lies in the number of anticipated espionage cases. This would be increased by a more effective detection method and slightly decreased by acting as a deterrent to potential spies.

DISCUSSION

Explanation of the Results

The results show that between 12 and 20 espionage cases will be identified between 2014 and 2020. The three key variables are: (1) Will there be an increase in international conflicts? (2) Will the refocus of counterintelligence assets on the cyber domain reduce counterespionage efforts? (3) Will counterespionage assets make aggressive use of advanced communications intelligence databases, such as PRISM? The three variables are most important because they directly affect the total number of espionage cases. However, they have little to no effect on other statistical data.

The natural progression of the internationalization, the downward trend of loyalties, and the increase in international attachments, connections, and cultural ties directly affect not only the statistical data but also the anticipated number of espionage cases.

Deduction

Certainly, this research alone cannot and will not convince policymakers to avoid future international conflict. However, the research does advise allowing counterintelligence assets access to advanced communications intelligence in an effort to identify potential foreign intelligence services' use of human intelligence sources in the U.S. Secondly, the research advises the shift in focus to counterintelligence on the cyber domain does not allow any detraction from the current available assets, resources, personnel, and training in counterespionage.

CONCLUSIONS

Key Points

First, the results answer the research question of what will the future of American espionage look like. Three versions are presented. This allows analysts to view each target model along with an associated set of indicators. An Extrapolated Future Target Model depicts the future of American espionage if existing forces remain in effect. A Projected Future Target Model depicts the future of American espionage if specific current forces change. The Forecast Future Target Model depicts the future of American espionage should new forces be introduced.

The research proves the first hypothesis correct. There will be a greater diversification of ethnicities represented by Americans committing espionage against the U.S. Further, there will be an increase in the percentage that commits espionage due to ideological motivations, and a decrease in the percentage that commits espionage due to extrinsic motivations. Specifically, espionage committed for rebel dissonance will increase. The research proves the second hypothesis correct. There will be a slight increase in the number of espionage cases between 2014 and 2020. The research also shows that the percentage of people committing espionage for money will decrease, as well as the amount of money received by spies will decrease between 2014 and 2020. Another key research conclusion is that American espionage can likely be reduced by 40 percent with the aggressive use of advanced communications intelligence as a means for detecting foreign intelligence services' human intelligence operations within the U.S.

Further Research

Since the Church and Pike Committees' investigation into the Intelligence Community overreaching its assigned mission, there have been established intelligence oversight organizations. Several intelligence oversight organizations investigate allegations of misconduct and illegal intelligence activities:

- Office of Intelligence Programs, National Security Council
- Intelligence Oversight Board
- President's Intelligence Advisory Board
- House Permanent Select Committee on Intelligence
- Senate Select Committee on Intelligence
- Office of the Inspector General

In recent years, three Americans have released classified information to the media. Each appeared to be motivated not by loyalties other than to the U.S. but rather by loyalties to the American people above that of their loyalties to the U.S. government. These spies released classified material due to rebel dissonance. It would benefit the Intelligence Community for research to be conducted on potential awareness programs. Specifically, the awareness programs should deal with methods of informing the IC of the numerous available means to report illegal activity in the intelligence field at the strategic or policy levels. This research shows that rebel dissonance motivations will increase espionage cases by 25 percent, which could be drastically reduced with awareness programs.

Figure 2: Threat Models Data from 1979 to 2007 (Herbig, 2008)* ***Next Page***

Notes

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[5] Robert M. Clark, *Intelligence Analysis: A Target-Centric Approach* (Washington, DC: CQ Press, 2007), 9.
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		1947 to 1979	1980 to 1989	1990 to 2007	2008 to 2013	Extrapolated	Projected	Forecast
Total		66	70	37	11	15	20	12
Gender	Male	95%	90%	86%	82%	75%	75%	75%
	Female	5%	10%	14%	18%	25%	25%	25%
Race	White	89%	84%	46%	73%	57%	45%	57%
	Black	7%	4%	11%	0%	0%	8%	0%
	Arab	0%	1%	8%	0%	5%	10%	5%
	Asian	2%	6%	11%	27%	33%	30%	33%
	Hispanic	2%	4%	24%	0%	5%	7%	5%
	Native American	0%	1%	0%	0%	0%	0%	0%
Age	Less than 20	5%	9%	0%	0%	0%		0%
	20 to 29	36%	49%	17%	18%	20%		20%
	30 to 39	33%	17%	37%	18%	15%		15%
	40 or more	26%	25%	46%	64%	65%		65%
Education	10 years	6%	7%	0%	0%			
	12 years	36%	37%	35%	9%			
	14 years	20%	20%	5%				
	16 years	27%	11%	25%				
	18 years	11%	25%	35%	27%			
Marital Status	Married	70%	48%	66%	50%	52%		
	Single	24%	40%	22%	50%	30%		
	Separated or divorced	6%	12%	12%	0%	18%		
Sexual Preference	Heterosexual	93%	96%	100%	91%	92%		
	Homosexual	7%	4%	0%	9%	8%		
Citizenship	Born in US	79%	84%	65%	64%	60%		
	Naturalized	21%	16%	35%	36%	40%		
	Had foreign attachments	53%	34%	58%		45%		
	Had foreign connections	15%	17%	51%		75%		
	Had foreign cultural ties	0%	10%	49%		60%		
Characteristics	Sole motive	65%	50%	38%		10%		
	Multiple motives	35%	50%	62%		90%		
Employment	Military	52%	50%	31%	9%	10%		
	Civil Servant	21%	20%	34%	27%	20%		
	Contractor	10%	11%	9%	27%	30%		
	Unrelated	17%	19%	26%	36%	40%		
Occupation	Communication/Intelligence	38%	31%	16%	27%	24%		
	General/Technical	15%	33%	28%	27%	32%		
	Scientific/Professional	24%	17%	17%	9%	7%		
	Functional Support/Admin	18%	13%	14%	9%	5%		
	Miscellaneous	5%	6%	25%	27%	32%		
Security Clearance	Top Secret/SCI	16%	15%	17%	0%	0%		
	Top Secret	46%	28%	20%	55%	50%		
	Secret	16%	24%	26%	0%	0%		
	Confidential	2%	5%	0%	0%	0%		
	None	20%	28%	37%	45%	50%		
Recruitment	Volunteer	52%	66%	63%	36%	55%		
	Recruit	48%	34%	37%	64%	45%		
Recruited by	Family	7%	14%	8%	0%	5%		
	Foreign Intelligence	77%	45%	62%	100%	70%		
	Friend	16%	41%	30%	0%	25%		
Payment	None	34%	59%	81%	82%			
	$50 – 999	6%	11%	0%	0%			
	$1,000 – 9,999	13%	11%	8%	18%			
	$10,000 – 99,999	28%	12%	4%	0%			
	$100,000 – 999,999	13%	6%	7%	0%			
	$1 million or more	6%	1%	0%	0%			
Sole Motivations	Money	47%	74%	7%	18%			
	Divided Loyalties	16%	11%	57%	45%			
	Disgruntlement	16%	6%	22%	0%			
	Ingratiation	9%	3%	14%	0%			
	Coercion	9%	0%	0%	0%			
	Thrills	3%	3%	0%	0%			
	Recognition/Ego	0%	3%	0%	0%			
	Rebel Dissonance	0%	0%	0%	37%			
Multiple Motivations	Money	43%	60%	39%				
	Divided Loyalties	27%	14%	39%				
	Disgruntlement	22%	9%	13%				
	Ingratiation	4%	17%	9%				
	Coercion	4%	0%	0%				
	Thrills	0%	0%	0%				
	Recognition/Ego	0%	0%	0%				
	Rebel dissonance	0%	0%	0%				

Figure 2: Threat Models* Data from 1979 to 2007 (Herbig, 2008)

http://www.theguardian.com/world/2013/jun/09/edward-snowden-nsa-whistleblower-surveillance (accessed September 2, 2013).
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[15] Clark, *Intelligence Analysis: A Target-Centric Approach*, 38.
[16] Ibid., 189.
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Locally Nuanced Actionable Intelligence:
Operational Qualitative Analysis for a Volatile World

by Dr. John Hoven and Joel Lawton

> Conventional-force companies learned much over the past 12 years as they executed missions historically reserved for Special Forces. War is fundamentally a human endeavor, and understanding the people involved is critically important. (Cone and Mohundro, 2014: 5)
>
> Context is critical… Aggregated and centralized quantitative methods…lack context and fail to account for qualitative inputs. Consequently, such reports often produce inaccurate or misleading findings. (Connable, 2012: xviii)
>
> U.S. forces have many opportunities to interact with the local population in the normal course of their duties in operations. This source perhaps is the most under-utilized HUMINT collection resource. (Army FM 2-22.3, 2006: 5-22)

EXECUTIVE SUMMARY

Qualitative analysis has two extraordinary capabilities: first, *finding answers to questions we are too clueless to ask*; and second, *causal inference – hypothesis testing and assessment – within a single unique context (sample size of one)*. These capabilities are broadly useful, and they are critically important in village-level civil-military operations. Company commanders need to learn quickly, "What are the problems and possibilities *here and now*, in this specific village? What happens if we do A, B, and C?" – and that is an ill-defined, one-of-a-kind problem.

The core strategy of qualitative analysis is fast iteration between information-gathering and analysis, *rapid-fire experimentation that generates rapid learning*. That is also the core strategy of an iterative product development approach called Agile Management/Lean Start: make small changes in product features that address specific, poorly understood problems and possibilities; solicit customer feedback; iterate rapidly; and pivot sharply as needed to explore more promising opportunities.

This is the approach we are taking to adapt qualitative research methods to an operational tempo and purpose. Our principal innovation partner is the U.S. Army Pacific Command (USARPAC, the Army's component command headquarters in the Pacific), in a project that is just getting launched at the time of this writing. The ultimate goal is to promulgate the use of operational qualitative analysis throughout the intelligence communities and military force structure as a viable means to enhance situational awareness rapidly, accurately, and collaboratively.

In the article's opening vignette, the need for *locally nuanced actionable intelligence* is illustrated by an incident in Afghanistan where a single day's interviews revealed the presence of an insurgent element that had escaped the notice of carefully collected database evidence.

PART ONE

by Joel Lawton

OPERATIONAL QUALITATIVE ANALYSIS: A VIGNETTE

I deployed twice to Afghanistan as a Human Terrain Analyst, conducting socio-cultural research in support of Intelligence Preparation of the Operational Environment (IPOE) requirements with the Human Terrain System (HTS), U.S. Army Training and Doctrine Command (TRADOC) G2. Qualitative interviewing was our primary means of analysis and collection.

In 2011 I worked with a German Provincial Reconstruction Team (PRT) in Kunduz Province. Its working hypothesis was that fewer significant activities (SIGACTs) means fewer insurgents in an area. In those areas that are assessed as safe, the Germans could start pouring money into development—bridges, roads, schools, etc.

The PRT had a very structured way of assessing this task, through a questionnaire called TCAPF (Tactical Conflict Assessment Planning Framework), developed by the U.S. Agency for International Development (USAID). The TCAPF asked a simple set of questions: What would you do

to improve your village? Give me three things. How would you prioritize it? To whom would you go to get these things done? One enters the answers in a database, and the PRT can use it to prioritize resources.

I was one of the enablers identified by the PRT to use such questionnaires to assist in development strategy planning. I used it essentially as just a starting point for probing and open-ended questions. After asking "Who would you go to?" I would ask "Why would you go to this guy? Who's the best person in this scenario?" Hence, I'd get the answers for the PRT database, and I'd get my qualitative response.

I went to this one village in the northwestern part of Kunduz Province. It was assessed as safe, due to the general absence of SIGACTs. During my very first interview for the day I noticed something was not right. I had conducted hundreds of interviews at this point. Afghans are a very narrative society. Because most of them cannot read and write, they like to talk to you. That day, however, something was off. My first interviewee gave very short, quick answers, did not want to answer my follow-up questions, and appeared uncomfortable talking to me. It seemed very odd.

There was an 8- to 10-year-old boy next to me. He said something to my interpreter and then ran off. That was strange, so I asked my interpreter, "What did the boy say?" He replied, "We are not allow to talk to you today; the men with beards are here today."

I said, "Aha, this now makes sense; there's probably Taliban in this village."

I knew some things about Afghans in that region. I knew it had an agrarian base, subsistence farming, very malnourished individuals—and being malnourished, smaller and bent over. Working in the fields, they tended to have bulging knees. They wore sandals and were largely unclean.

I noticed there were 10-15 men who did not fit the stereotype. They were almost German-like Afghans: big, six-foot, clean, no calluses on their hands from typical working in the fields, and wearing boots as opposed to sandals (everyone else in the village wore sandals). I said, "I know who these guys are." In order to get any value out of this, I knew I had to prove that these individuals were not from this village.

I did not know the names of the village elders, what sub-tribes were present, the crops they grew, or the time of their last harvest. However, I knew that somebody from that village would know all those answers, just like that. I decided to ask the suspected insurgents these sorts of questions. I talked to about five of them. All five of these guys gave me a completely different set of answers.

I wrote up my notes and observations and briefed the PRT's commander and G2. The G2 immediately passed the information to a U.S. Army Special Operations Forces (SOF) element in proximity. That information led to a complete cordon and search of that entire village the very next day, and then an adjacent village to it.

Qualitative can be actionable. If I had just used the TCAPF questions to fill in a database, I would never have discovered any of that information. By using TCAPF as a starting point, going down the follow-on questions, probing questions, one gets very contextually rich, locally nuanced information that can reveal things that one never even thought to ask in the first place. The value of this technique is reflected in an Army Field Manual (FM) titled "Soldier Surveillance and Reconnaissance" (FM 2-91), which states:

> Interaction with the local populace enables Soldiers to obtain information of immediate value through conversation… Every day, in all operational environments, Soldiers talk and interact with the local populace and observe more relevant information than technical sensors can collect. (Army FM 2-91.6, 2007: 1-16, 1-48)

Operational qualitative analysis can provide a means to conduct rapid and tactically- oriented assessments. Commanders assigned at the battalion level and below command echelons can quickly impact their operational area of responsibility (AOR) through this simple and revealing approach.[1]

PART TWO

by John Hoven

I. INTRODUCTION

Agile intelligence is a daunting challenge in a volatile, locally nuanced world. Computers can analyze massive amounts of data, but key factors are often unmeasurable. Those key factors are also, like the swirl of a tornado, remarkably specific to each time and place. Discovering key issues may be the most urgent priority, and that may require answers to questions we are too clueless to ask.

On the other hand, ordinary social conversations routinely reveal undiscovered issues. Follow-up questions yield answers to questions we had not thought to ask. This is familiar territory for the human mind. Qualitative interviewing builds on this, seeking "more depth but on a narrower range of issues than people do in normal conversations." (Rubin and Rubin 2012: 6) If the project is a collaborative effort—a team of analysts, interviewers, and other data collectors—the team members constantly discuss what they have learned, what they need to learn next, and where to get it.

Qualitative analysis is explicitly designed for fast learning in poorly understood situations with "confusing, contradictory…rich accounts of experience and interaction." (Richards, 2009: 4; cf. Ackerman et al., 2007: xvii) Moreover, the focus in qualitative analysis is on one specific context (or several, for comparison studies). That context-specific focus is especially critical for civil-military operations, which need to understand quickly how and why the various actors and actions interact in a specific, rapidly evolving context. (Kolton (2013) and Carlson (2011) are especially insightful examples.)

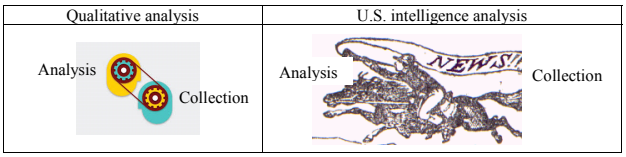
Operational qualitative analysis is qualitative analysis adapted to an operational tempo and purpose, e.g., for civil-military operations. This is a multi-step challenge. The first hurdle is inherent in any radical innovation: none of my professional peers is considering it; hence, it is not worth considering. That hurdle was overcome through hundreds of brief conversations with military and intelligence professionals at conferences and meetings in the Washington, DC, area, constant revision of the concept and the search, and the eventual discovery of a "first user" innovation partner, the U.S. Army Pacific Command (USARPAC, the Army's component command headquarters in the Pacific). Progress has accelerated greatly in recent months, as a growing community of interest generates feedback and makes it easier to recruit others. That, too, is a common phenomenon in radical innovation: progress is slow until all the pieces come together, and then innovation takes off.

In short, *the role of operational qualitative analysis is to facilitate rapid and accurate decision-making in one-of-a-kind, poorly understood contexts—for example, for locally nuanced civil-military operations. The core strategy is fast iteration among information-gathering, analysis, and action.*

Section II asks, "When is operational qualitative analysis the right tool for the job?" and highlights four key considerations: (a) concurrent collection and analysis, (b) "unknown unknowns," (c) richly nuanced data from a single context, and (d) causal inference and assessment within a particular context. Section III is a brief tutorial in two basic skills: qualitative interviewing and making sense of the data. Section IV describes our project to adapt qualitative analysis to an operational tempo and purpose, in partnership with USARPAC. Section V concludes the discussion.

II. WHEN IS OPERATIONAL QUALITATIVE ANALYSIS THE RIGHT TOOL FOR THE JOB?

A. Concurrent collection and analysis



In the U.S. intelligence system, collection and analysis are typically separate endeavors, as the Pony Express delivering news from one place to the other. They work together, but they keep their distance unless there is a pressing need to work more closely together.[1]

> I have argued for many years that collectors and analysts should work more closely together, but at the CIA all the efforts to make that happen have failed. (Hulnick, 2008: 632)

> ... the heretofore separate endeavors of collection and analysis… It's certainly appropriate at the agency levels to keep them separate... But at the level of ODNI [Office of the Director of National Intelligence] I believe they should be integrated. (Clapper, 2010)

> The doctrinally "correct" process for customer-collector interface via Ad-Hoc Requirements (AHRs), HUMINT Collection Requirements (HCRs), and evaluations is too slow and cumbersome. (Gallagher, 2011: 7)

> …information evaluation and analysis are highly interdependent… it would be interesting to determine in future interviews whether or not a feedback loop exists between analysts and collectors. (Derbentseva, 2010: 19)

In contrast, qualitative analysts constantly go back and forth between analysis and data collection. Even the term "qualitative analysis" is normally understood to mean qualitative *data-collection-and-analysis*. The two are practically inseparable. Analysts read documents and interview transcripts looking for search terms to focus the search for additional documents and interviewees. After each interview, investigators discuss what they have learned and say, "Now we need to interview *these* people and ask *these* questions." Hypotheses are discovered, tested, revised, and discarded. As they evolve, they redirect the search for relevant information.

> In some kinds of social research you are encouraged to collect all your data before you start any kind of analysis. Qualitative research is different from this because there is no separation of data collection and data analysis. (Gibbs, 2007: 3)
>
> A striking feature of research to build theory from case studies is the frequent overlap of data analysis with data collection… The central idea is that researchers constantly compare theory and data—iterating toward a theory which closely fits the data… Case study theory building is a bottom up approach… Such theories are likely to be testable, novel, and empirically valid, but they…are essentially theories about specific phenomena. (Eisenhardt, 1989: 538, 541, 547)

Connable (2012) argues that, when locally nuanced intelligence is critical (as in counterinsurgency), local commanders should direct both collection and analysis:

> Local commanders are best positioned to direct the collection of information over time for several reasons: (1) They understand the immediate cost and risk of that collection; (2) they and their staffs can analyze that information in context; and (3) they can adjust collection and reporting to meet current local conditions and context… COIN [counterinsurgency] information is best analyzed at the level at which it is collected. (Connable, 2012: 229, xx)

Army field manuals illustrate how tantalizingly close the U.S. Army has come to integrating locally nuanced collection and analysis:

> US forces have many opportunities to interact with the local population in the normal course of their duties in operations. This source perhaps is the most under-utilized HUMINT collection resource. (Army FM 2-22.3, 2006: 5-22)

In that spirit, the Army's "Soldier Surveillance and Reconnaissance" Field Manual states, "Interaction with the local populace enables Soldiers to obtain information of immediate value through conversation… Every day, in all operational environments, Soldiers talk and interact with the local populace and observe more relevant information than technical sensors can collect." (Army FM 2-91.6, 2007: 1-16, 1-48) It also advises, "Well-crafted open questions…serve as an invitation to talk – They require an answer other than 'yes' or 'no'." (Army FM 2-91.6, 2007: 3-9)

And then … it instructs Soldiers to *ask only basic fact-finding questions*.[2] No conversational questions. No follow-up questions. No opportunity to discover answers to questions they are too clueless to ask:

- EXAMPLE QUESTIONS (Army FM 2-91.6 2007: 3-11, 3-35)
- What is your name (verify this with identification papers and check the Detain/ Of Interest/Protect Lists)?
- What is your home address (former residence if a dislocated civilian)?
- What is your occupation?
- Where were you going (get specifics)?
- Why were you going there (get specifics)?
- What route did you travel to arrive here?
- What obstacles (or hardships) did you encounter on your way here?
- What unusual activity did you notice on your way here?
- What route will you take to get to your final destination?
- Whom do you (personally) know who actively opposes the U.S. (or multinational forces)? Follow this up with "who else?" If they know of anyone, ask what anti-U.S. (multinational force) activities they know of, where they happened, and similar type questions.
- Why do you believe we (U.S. or multinational forces) are here?
- What do you think of our (U.S. or multinational force) presence here?

DO NOT—

- Take notes in front of the person after asking the question…

DO—

- Ask only basic questions as described in this section.

B. *Unknown* unknowns

Qualitative analysis starts with	*U.S. analysis starts with*
• *unknown* unknowns	• Known unknowns
• no hypotheses to test[4]	• A full set of alternative competing hypotheses

U.S. intelligence directs collection efforts at *known* unknowns:

> PIR [Priority Intelligence Requirements] should…[i]dentify a specific fact, event, activity (or absence thereof) which can be collected… PIR are further broken down into *specific information*

> *requirements* (SIR) and *specific orders and requests* (SOR) in order to tell an intelligence asset exactly what to find, when and where to find it, why it is important, and how to report it. (Spinuzzi, 2007: 19)

Moreover, the focus is on well-understood problems for which a full set of plausible hypotheses can be articulated, and used as the basis for collection requirements:

> Analysis of Competing Hypotheses [ACH]…requires analysts to start with a full set of plausible hypotheses… ACH is particularly effective when there is a robust flow of data to absorb and evaluate. For example, it is well-suited for addressing questions about technical issues in the chemical, biological, radiological, and nuclear arena. (Heuer & Pherson, 2011: 32, 160)[1]

By contrast, qualitative analysis expects the unexpected. The problem is ill-defined (or a poorly understood aspect of an otherwise well-understood problem) and the goal is to make it a well-defined problem:

> Quantitative methods assume that researchers already know both the key problems and the answer categories; these types of questions…often missed turning points, subtleties, and cross-pressures…
> In exploratory studies…follow-up questions may dominate the discussion…to explore unanticipated paths suggested by the interviewees… These questions are at the heart of responsive interviewing, because they allow you to achieve the depth of understanding that is the hallmark of this approach to research. (Rubin and Rubin, 2012: 9, 122, 150)

> Any given finding usually has exceptions. The temptation is to smooth them over, ignore them, or explain them away. But *the outlier is your friend*… Surprises have more juice than outliers. (Miles, Huberman, and Saldaña, 2013: 301, 303; emphasis in original)

Qualitative analysis does not usually articulate hypotheses at the start of a project, when so little is known. When our understanding is so frail, one interview is enough to find that we are looking at this all wrong—as this paper's opening vignette so strikingly demonstrates. Relevant concepts and hypotheses are discovered, tested, and revised repeatedly as evidence accumulates about actors, actions, relationships, etc.

> Finally and most importantly, theory-building research is begun as close as possible to the ideal of…no hypotheses to test…
>
> The central idea is that researchers constantly compare theory and data—iterating toward a theory which closely fits the data. (Eisenhardt, 1989: 536, 541)

> Qualitative research refrains from…formulating hypotheses in the beginning in order to test them. Rather, concepts (or hypotheses, if they are used) are developed and refined in the process of research. (Flick, 2007: xi)

Ill-defined problems are often seen as atypical and unusual. They are not. They are the commonplace problems that routinely emerge from specific contexts of everyday life:

> Ill-structured problems are typically situated in and emergent from a specific context. In situated problems, one or more aspects of the problem situation are not well specified, the problem descriptions are not clear or well defined, or the information needed to solve them is not contained in the problem statement (Chi & Glaser, 1985). Ill-structured problems are the kinds of problems that are encountered in everyday practice… (Jonassen, 1997: 68)

C. Richly nuanced data from a single context

Data for qualitative analysis	*Data for U.S. intelligence analysis*
• Interviews and other *richly nuanced data from a single context* (sample size = 1)	• *Indicators from various contexts*
⇨ *Qualitative analysis can*	⇨ *U.S. intelligence can*
• explain and predict what happens, here and now, if we do A, B, C ...	• view trends, and compare the value of indicators in different contexts

Qualitative analysis focuses on richly nuanced data from a single context (or several, for comparison studies). This is especially critical for civil-military operations, which have an urgent need to understand problems and possibilities *here and now*, in a specific village:[1]

> A primary goal of within-case analysis is to describe, understand, and explain what has happened in a single, bounded context—the "case" or site… Qualitative analysis…is unrelentingly *local*, and deals well with the *complex* network of events and processes in a situation. (Miles, Huberman, and Saldaña, 2013: 100, 223; emphasis in original)

> Qualitative researchers deal with, and revel in, confusing, contradictory, multifaceted data records, rich accounts of experience, and interaction. (Richards, 2009: 4)

U.S. intelligence has a different focus. A dataset that starts out richly nuanced is converted to indicators. For example, transcripts of weekly sermons at a mosque would be valuable data for qualitative analysis. The tenor of these

sermons, just the *tenor*, is an indicator for U.S. intelligence. (RAND, 2009: 11) Indicators are valuable for comparisons and trends, but they provide only the most superficial understanding of any one particular context:

> [T]he first casualty of coalition forces engaging in transition is often situational awareness… [O]bjective criteria expressed in measures of effectiveness and measures of progress will have an important role in the transition. However, more subjective or qualitative reporting, the type based on a first-hand understanding of an operating area…will be more valuable in most cases. (L'Etoile, 2011: 10)

> SNA [Social Network Analysis] tools…while they may be useful for identifying prominent members of networks…most have very little to say about the influence these members may exercise over others in the network. (RAND, 2009: 120)

D. Causal inference and assessment within a particular context

Qualitative analysis can investigate cause-and-effect in a way that statistical analysis cannot. Maxwell explains:

> Experimental and survey methods typically involve a "black box" approach to the problem of causality; lacking direct information about social and cognitive processes, they must attempt to correlate differences in output with differences in input and control for other plausible factors that might affect the output…
> Process theory, in contrast, deals with…the causal processes by which some events influence others. (Maxwell, 2004: 248)

A core strategy of causal inference within a specific context (the "case") is known as *process tracing* or *causal process tracing*.[2] (Bennett and Checkel, 2012; Langley, 2009; Maxwell, 2004) In essence, the strategy is simply to examine a string of related events and ask *how* and *why* each one leads to the next.

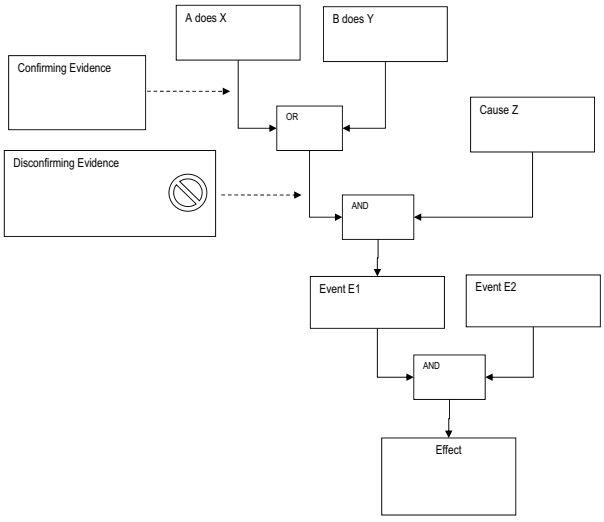
Process tracing may proceed either forward or backward in time. *Tracing forward* starts with causes, and traces the chain of actual (or theoretically plausible) events forward to final outcomes. At every step, the analyst looks for alternative hypotheses, intervening variables, supportive evidence, and contrary evidence. One option here is a probing action by one actor (perhaps even with a control group of some sort) to see how others respond. *Tracing back* is essentially the same strategy, in reverse, i.e., start with an outcome and trace the causal chain of events backward in time. Typically, the analyst does both.

- *Tracing forward* (effects-of-causes): What happens if we do A, B, C?
- *Tracing back* (causes-of-effects): What worked here? Will it work elsewhere?

The goal of this analysis is to discover and test a *theory of change*—a specific pathway of cause-and-effect—that is valid in a particular context. Tracing forward and tracing back are alternate strategies leading to the same goal. However, as the questions illustrate, tracing forward is especially relevant to operational *planning*, while tracing back applies most directly to operational *assessment*. A clearly articulated theory of change is especially important in assessment, because a key question is *whether* and *how* the intervention contributed to the outcome. (White and Phillips, 2012; Stern et al., 2012)

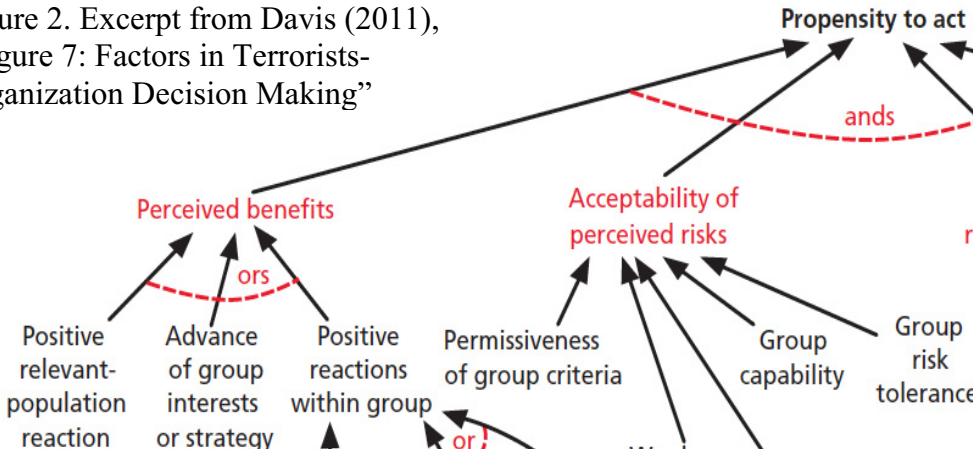
Visual charts (Figures 1 and 2) are a good way to discipline oneself to think about the logic and evidence behind a theory of change. With minor changes, essentially the same chart as Figure 1 may be used to diagnose the causes of a problem, or solutions to the problem, as in McVay and Snelgrove (2007). Figure 2, on the following page, offers a specific example.

Figure 1



Note: The published literature uses the term *sufficient causes* for causes linked by "OR" connections, and *necessary causes* for causes linked by "AND" connections.[8]

Figure 2. Excerpt from Davis (2011), "Figure 7: Factors in Terrorists-Organization Decision Making"



"Counterterrorism that attacks only one of several 'or' branches will likely prove ineffective because of the substitutions. On the other hand, successful attacks on any of the 'and' branches might prove to [be] quite effective." (Davis and Cragin, 2009: xxxix)

To illustrate the need for a clearly articulated theory of change, here are two quite different observations on how to succeed in Afghan village stability operations:

> *First, demonstrate power (Zerekoh Valley)*
> On 8 May 2010…Taliban directly attacked the locals and Special Forces teams. Our response—with its speed, violence of action, and effective but discretionary use of indirect fires—was…a decisive moment in coalescing the support of the villagers. When the villagers perceived such strength, maliks (village elders) became responsive to measures like construction projects, representative shuras, and conflict resolution mechanisms…
> The people must believe it is in their interest to resist Taliban threats. They will only do this if they believe that a more dominant and lasting authority will prevail… (Petit, 2010: 27)

> *First, demonstrate benefits (Adirah)*
> In Adirah, jump-starting a representative shura helped to reinstall local governance councils that had been attrited over the past 30 years of conflict. The key to generating momentum in these shuras was the skilled introduction of development. A Special Forces team sponsored community elders who executed over 55 small projects… The locally run projects—culverts, irrigation, retaining walls, foot bridges—produced clear benefits to the community and quickly galvanized the locals against insurgent encroachment… Critically, projects were nominated and started in hours and days, not weeks or months. (Petit, 2010: 29)

Each of these reports articulates a theory of change, and they are polar opposites:

Theory of Change: Afghan Stability Operations	
Zerekoh Valley	*Adirah*
Demonstration of power ↓ ***Popular support*** ↓ ***Development projects*** ↓ Village stability	***Development projects*** ↓ ***Popular support*** ↓ Village stability

Here are some candidate explanations for the contrary theories:

A. *Each theory is valid for that village only*: In both villages, the chosen strategy led to village stability, and the alternate strategy would not have.
B. *Each theory is valid for both villages*: In both villages, the chosen strategy led to village stability, and the alternate strategy would have succeeded too.
C. *One or both theories ignore other contributing factors*: In one or both villages, stability was achieved for other reasons, in addition to or instead of the articulated theory of change.

To sort out the confusion, qualitative causal inference urges the analyst to clearly articulate a theory of change (a specific pathway of cause-and-effect in a particular context) and alternative competing hypotheses, to search for observable evidence (necessary clues and sufficient clues) that confirm or reject one or another of these, and to keep iterating toward better explanations.

For practical insight into why and how to do this, economic development is a good source because so many problems are identical to those in civil-military operations:

> The evolving nature of the aid relationship and shifts in aid priorities and modalities have many consequences for IE [impact evaluation] designs. Such designs have to be:
>
> - Appropriate to the characteristics of *programmes*, which *are often complex, delivered indirect through agents, multi-partnered* and only a small part of a wider development portfolio.
> - Able to answer *evaluation questions* that *go beyond "did it work" to include explanatory questions such as "how did it work,"* and equity questions *"for whom do interventions make a difference?"*
>
> (Stern et al., 2012: 2.27; emphasis added)

In addition, as (Connable, 2012: xix) observes, "Effective assessment depends on capturing and then relating contextual understanding in a way that is digestible to senior decisionmakers." For that, Connable (2012) proposes a bottom-up assessment process, in which higher-level reports contain each of the lower-level reports, with built-in summaries at each level.

Inferring general conclusions. When theories of change differ for each specific context, how can one generalize what has been learned? One practical strategy is to develop "typologies of contexts" that behave similarly, and then describe what happens "under these conditions":

> Causal mechanisms operate in specific contexts … but typologies of context are a useful intermediate step towards generalisation… Contexts may include related programmes affecting the same target population; socio-economic and cultural factors; and historical factors such as prior development initiatives. Developing typologies of context … can support "under these conditions" types generalizations. (Stern et al., 2012: 3.40; cf. Rohlfing, 2012: 8)

III. THE BASICS: QUALITATIVE INTERVIEWING AND MAKING SENSE OF THE DATA

A. Qualitative interviewing

Rubin and Rubin (2012) is an excellent guide to all aspects of qualitative interviewing.[1] For example, here is some basic guidance on follow-up questions:

> Follow-up questions ask for missing information, explore themes and concepts, and test tentative explanations. They allow you to examine new material, get past superficial answers, address contradictions, and resolve puzzles. They help you put the information in context. (Rubin and Rubin, 2012: 169)

Table 1. Basic follow-up questions (from Rubin and Rubin, 2012: 137-169)

Purpose	Questions
Missing pieces Unclear concepts Broad generalizations	Such as…? Can you give me an example? How would you compare …? (broad, then specific) How is that the same or different than …? How does this compare with the way things were in the past?
Why? (causation)	Could you tell me how…? How do you go about…? Can you step me through that? What happens step by step? What happens during…? What led up to …? What contributed to …? What influenced …?
How do you know?	You said… Could you give me an example? How did you find that out? Your unit did… Did you personally have anything to do with it?

B. Making sense of the data

Qualitative analysis is a probe-and-learn process, much the same whether the investigation lasts three years or three hours. It is like putting together an especially diabolical jigsaw puzzle without a picture, like the one that ensnared my family over the Christmas holidays. It pretty much instantly refuted our prior hypotheses. None of the edge pieces fit together directly—only indirectly, through connector pieces ("intervening variables") that are not themselves edge pieces. Color was a weak clue of close attachment, because pieces with no shared colors often fit together. On the other hand, clusters of pieces often came together in interesting shapes—e.g., a bicyclist, boat, or hot air balloon. And as the puzzle came together, other constructs surfaced as useful ways to define concepts and relationships—windows on a building, bridge spans, a flower stall—and, finally, a fully integrated picture of San Francisco landmarks.

Miles, Huberman, and Saldaña (2013) is the essential reference. It is a good choice for a required textbook in a first introduction to qualitative analysis, just to ensure that it becomes a ready reference on the student's bookshelf.

Vakkari (2010: 25) explains the key elements in the process: "[T]here is some evidence of how conceptual construct changes when actors' understanding grows. In general, it changes from vague to precise. The extension of concepts decreases, the number of sub-concepts increases, and the number of connections between the concepts increases."

Miles, Huberman, and Saldaña (2013) aptly characterize this step of qualitative analysis as "data condensation":

> *Data condensation*…refers to the process of selecting, focusing, simplifying, abstracting, and/or transforming the data…which data chunks to code

and which to pull out, which category labels best summarize a number of chunks, which evolving story to tell…in such a way that "final" conclusions can be drawn and verified. (Miles, Huberman, and Saldaña, 2013: 12)

Data condensation is a challenging task for groups that share information but work independently, because the category labels for data are constantly in flux. However, the challenge is manageable. (Ane, 2011; Dungan and Heavey, 2010; Portillo-Rodríguez et al., 2012) One need not default to a standardized database with preset categories that preclude learning and locally nuanced intelligence.

Developing a less vague, more precise understanding of relationships between individuals and organizations is often a key issue for investigation—i.e., not just who is connected to whom, but *why* and *how*. This is especially the case for non-transient relationships in which both parties expect to benefit from repeated interactions (Figure 3). The business literature calls this a *relational contract*. (MacLeod, 2007). Cabral (2005) calls it *trust*: "Trust...is the situation 'when agents expect a particular agent to do something.' … The essence of the mechanism is repetition and the possibility of 'punishing' off the equilibrium actions."

Saunders et al. (2010) ask, "How can Party A from Culture #1 develop a trust relationship with Party B from Culture #2?" and emphasize the need to investigate the specific context and the sub-organizational culture. Greene (2013: 26, 61) underscores the role of *social norms for moral behavior*: "Morality is nature's solution to the problem of cooperation within groups, enabling individuals with competing interests to live together and prosper… Empathy, familial love, anger, social disgust, friendship, minimal decency, gratitude, vengefulness, romantic love, honor, shame, guilt, loyalty, humility, awe, judgmentalism, gossip, self-consciousness, embarrassment, tribalism, and righteous indignation… All of this psychological machinery is perfectly designed to promote cooperation among otherwise selfish individuals…"

Figure 3 is applicable to almost any sort of relationship. The relationship can be distant (a trusted brand with a loyal following). It can even be coercive ("your money or your life").

The diagram serves as a roadmap and visual file cabinet for evidence on questions like these:

- *What* does each entity get out of the relationship? (GoodA for ActorB, GoodB for ActorA)
- "Actor" names an entity, "Attributes" describe it, "Actions" list what it does.
- "Key capabilities" are essential, uncommon, and hard to acquire.
- Each actor gives something and gets something. (Actor A gives GoodA and gets back GoodB.)
- Each actor expects to benefit from repeated interactions.
- "RelationshipType" names a type of relationship.
- Compliance is enforced through monitoring, unilateral actions (ending the relationship, taking violent action), and social norms for moral behavior (love, honor, guilt, gossip).

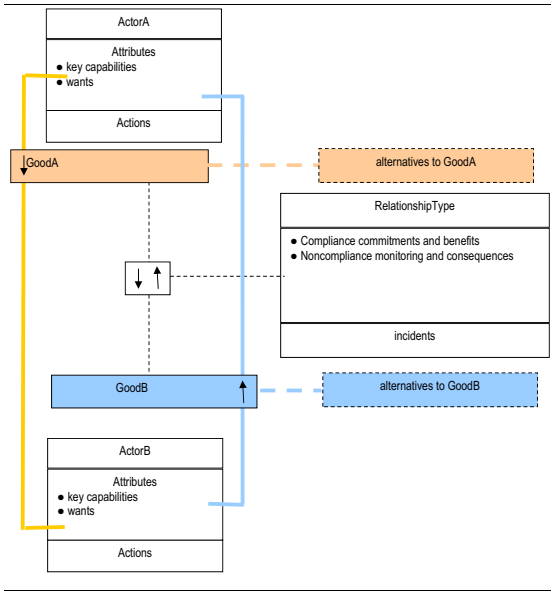


Figure 3. Nontransient Relationships—i.e., both parties expect to benefit from repeated interactions

- *Why* do they value those goods? (ActorA's wants and alternatives to GoodB, Actor B's desires and alternatives to GoodA)
- *How* are they able to provide those goods? (ActorA's capabilities to provide GoodA, ActorB's capabilities to provide GoodB)
- What *future commitments and expectations* sustain the relationship (compliance commitments and benefits)?
- What mechanisms exist to *monitor compliance*? What are the *consequences of noncompliance*? What *incidents of noncompliance* have occurred?

Data condensation is not a step that can be evaded by asking computer algorithms to screen contextually rich data for relevance and meaning. It is just "one of the realities of case study research: a staggering volume of data." (Eisenhardt, 1989: 540) Moreover, "Whereas coding in quantitative analysis is for the explicit purpose of reducing the data to a few 'types' in order that they can be counted, coding in qualitative analysis…adds interpretation and theory to the data." (Gibbs, 2007: 3)

To manage the process, Miles, Huberman, and Saldaña (2013) recommend developing a simple *conceptual framework* at the beginning of a study, and revising it continually:

> A conceptual framework explains … the main things to be studied – the key factors, variables, or constructs – and the presumed interrelationships among them… As qualitative researchers collect data, they revise their frameworks – make them more precise, replace empirically weak bins with more meaningful ones, and reconfigure relationships. (Miles, Huberman, and Saldaña, 2013: 20, 24)

IV. ADAPTING QUALITATIVE ANALYSIS TO AN OPERATIONAL TEMPO AND PURPOSE

A program management framework for civil-military operations called the District Stability Framework (DSF) specifies five sequential steps. (Derleth and S. Alexander, 2011: 127) These are steps in a pathway of cause and effect leading to a desired outcome (Theory of Change), as in Section II.D:

- Situational awareness
- Analysis
- Design
- Implementation
- Monitoring and evaluation

Essentially the same steps appear in a more iterative framework published by the Mennonite Economic Development Associates (MEDA). Their methodology emphasizes easy-to-use techniques (conversational interviewing, worksheets, and visual charts like Figure 1) to diagnose causes of a problem, and to develop solutions. The authors emphasize that "the toolkit concentrates on *qualitative* research tools" (Miehlbradt and Jones, 2007: 2) and "program design is an iterative, ongoing process." (McVay and Snelgrove, 2007: 2)

Fast iteration between information-gathering and analysis is the core strategy of qualitative analysis. MEDA's "iterative, ongoing process" extends this to the operational phase. That lets it discover and respond to problems and possibilities continually, through every stage of the program from Situational Awareness to Analysis, Design, Implementation, and Monitoring and Evaluation.

Agile Management/Lean Start is a similarly interactive strategy for developing products *while you discover what features the product should have*. It is used primarily in software design, but other industries are beginning to try it. Here are its four basic principles (Blomberg, 2012:22; Ries, 2009):

- Offer small changes in product features that produce rapid learning about problems and possibilities (these small changes are called "Minimum Value Products"). Often this actually is just an offer: "Hey, would you like this new feature?"
- Solicit customer feedback.
- Iterate rapidly.
- Validate learning. Pivot as necessary to explore more promising opportunities.

Much of this is common practice among active duty U.S. Army Civil Affairs soldiers, as we learned from a series of interviews with soldiers in the 83rd Civil Affairs Battalion at the invitation of the Battalion S3, Jonathan Bleakley. (Hoven, interviews conducted July 2015) Their training and practice particularly emphasizes the importance of relationship building as a key element of conversational interviews.

Figure 4 draws from these varied research and operational strategies to define a basic framework for Operational Qualitative Analysis. It has two key elements:

> *Why*: When is Operational Qualitative Analysis the right tool for the job?
>
> - One-of-a-kind situations
> - Unknown unknowns
> - Help wanted

How: What are the essential tools in the toolkit?

- Fast feedback, fast focus
- Building trusted relationships
- Hypothesis testing and assessment for one-of-a-kind situations

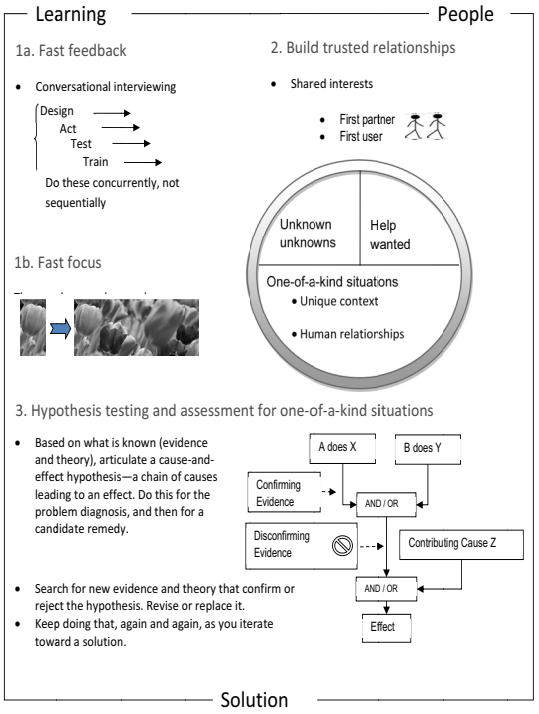


Figure 4. Basic framework for Operational Qualitative Analysis

V. CONCLUSION

It seems counterintuitive that one can search systematically for answers to questions we are too clueless to ask, and it is quite impossible to test hypotheses with a sample size of one. Nevertheless, that is what qualitative analysts do.

The role of *operational* qualitative analysis is to facilitate rapid and accurate decision-making in one-of-a-kind, poorly understood contexts—for example, in locally nuanced civil-military operations. That helps commanders quickly identify and act on locally derived and context-specific information, subsequently developing a theory of change tailored to that area.

USARPAC is our principal innovation partner in a project to accomplish this. The core strategy is fast iteration among information-gathering, analysis, and action through all phases of the operation—planning, implementation, and assessment. Our goal is to develop a simple, low-cost methodology and training program, particularly for local civil-military operations conducted by non-specialist conventional forces.

That goal is fairly concrete and specific. It is also a rare opportunity to develop and test a Theory of Change for the largely unexplained phenomenon of bottom-up military innovation:

> …a consensus (if tacit) definition of military innovation… has three components. First, an innovation changes the manner in which military formations function in the field… Second, an innovation is significant in scope and impact… Third, innovation is tacitly equated with greater military effectiveness.
> …all of the major models of military innovation operate from the top down… the senior officers and/or civilians are the agents of innovation...
> …there is an entire class of bottom-up innovations that have yet to be explored, understood, and explained… This is the major challenge, and opportunity, for future military innovation studies.
> (Grissom, 2006: 907, 920, 930)

Addressing the need for improved understanding of the operational environment is the goal of the Theory of Change. The Agile methodology, our innovation partners, and feedback received through engaging a community of interest have matured this concept from the "bottom up." The ultimate goal is to promulgate the use of operational qualitative analysis throughout the intelligence communities and military force structure as a viable means to enhance situational awareness rapidly, accurately, and collaboratively.

Notes

[1] Hoven and Lawton (2015) applies operational qualitative analysis to Army Warfighting Challenge #1: "How to develop and sustain a high degree of situational understanding while operating in complex environments against determined, adaptive enemy organizations." (http://www.arcic.army.mil/Initiatives/army-warfighting-challenges.aspx)

[2] Civil Affairs specialists in the active military are a singular exception, comfortable and skilled at fast iteration among information-gathering, analysis, and action for civil-military operations, as we learned from a series of interviews with soldiers in the 83rd Civil Affairs Battalion. So, too, are Special Operations Forces: "SOF field collectors are able to immerse themselves within an area and have daily contact with numerous sources. With their analytical skills, they develop a capacity for judgment, and they may be in the best position to comprehend indicators or warnings that likely would not set off the same alarms within the larger intel apparatus." (Boykin and Swanson, 2008; cf. Turnley, 2011) We have also heard that the Intelligence Community is beginning to facilitate some interaction between collectors and analysts. [Editor's Note: Recent reorganization efforts at both

DIA and CIA, creating regionally-focused "centers," suggest this is in fact occurring.]

[3] Cf. Marchionini's (2006) distinction between "lookup tasks" and "learning searches."

[4] Qualitative analysis may start with tentative hypotheses to guide the investigation, but these evolve or are discarded as the evidence comes in. Analysts may even articulate a clear hypothesis that is surely wrong, to help focus an investigation into *why* it is wrong.

[5] It is worth noting that in a bureaucratic setting one can hardly articulate a full set of alternative competing hypotheses one day and report the next day that we are looking at this all wrong. In that setting, it is especially important to be aware that premature application of Alternative Competing Hypotheses may create the confirmation bias it aims to eliminate.

[6] "Insurgents and terrorists evolve rapidly in response to countermeasures, so that what works once may not work again, and insights that are valid for one area or one period may not apply elsewhere." (Kilcullen, 2010: 2; cf. Ojiako et al., 2010: 336)

[7] The boundaries of a specific context, or "case," are not prespecified. They are discovered through investigation. That is because "at the start of the research, it is not yet quite clear…which properties of the context are relevant and should be included in modelling the phenomenon, and which properties should be left out." (Swanborn, 2010: 15; cf. Miles, Huberman, and Saldaña, 2013: 28, 100) This analytic step can be considered a filter, with two distinct uses in investigation:

- It puts bounds on the investigation's search for relevant actors and activity, causes and effects, evidence and theory;
- It puts bounds on the validity of the investigation's findings, for the benefit of other investigators seeking useful insights.

[8] Confusingly, the literature also uses the term *sufficient clues* for confirming evidence (evidence that is *sufficient* to infer that a theory is true, as it will be observed with probability *only if* the theory is valid in that context) and *necessary clues* for disconfirming evidence (evidence that is *necessary* to infer that a theory is true, as it *will be observed* with some probability *if the theory is valid* in that context). (Collier, 2011; Mahoney, 2012; Humphreys and Jacobs, 2013)

[9] Eckert and Summers (2013) includes a well-designed checklist of the entire process—preparing for interviewing, conducting t

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Propositional Diagrams for Intelligence Sensemaking:

Examples and Case Studies

by Dr. Robert R. Hoffman, Tom Eskridge, Simon Henderson, Jonathan Jenkins, and Brian Moon

INTRODUCTION

Newspaper reports of intelligence-related activities conducted by the U.S. Intelligence Community have occasionally referred to large "Pens and Post-Its" wall charts that were created, for example, to understand and represent adversarial networks or the structures of NGOs. Similar practices have been reported in other nation's intelligence services, such as in the UK. Another rationale for such diagramming is that collaboration requires the externalization of understanding and supporting conversations, to achieve a shared understanding in which concepts and their meanings are made precisely clear. Team creation and analysis of meaningful diagrams encourage, even force, people to achieve consensus and clarity. When the information that is being shared is critical understanding or intent, upon which lives may depend, there is a clear imperative that both sender and receiver do everything in their power to ensure that shared information leads to shared, and accurate, understanding.

Recent guidance on analytical methodology has included recommendations regarding the applications of such meaningful diagrams (Heuer and Pherson, 2011), but recommendations have not been accompanied by realistic, detailed examples showing how to make good diagrams and how they can be used to best results. This article presents guidelines on what makes for a good meaningful diagram, and expresses how meaningful diagrams can support the process of intelligence sensemaking.

MEANINGFUL DIAGRAMS

Research on diagrammatic reasoning, from fields spanning geography, statistics, and instructional design, has investigated the value of maps, schematic diagrams, and many other forms of diagram. It has converged on a set of conclusions concerning the value of diagramming, and offers an explanation for why diagramming has value (see Mandl & Levin, 1989; Vekirl, 2002). Diagrams can "externalize" cognition, guide reasoning, reduce cognitive demands, support working memory, present information "at a glance," and shift some of the burden of text processing over to the visual perception system. In a team context, diagrams can support dialogue, help uncover hidden assumptions, facilitate the development of shared understanding, and act as a tool for supporting the communication of meaning and intent.

Concept Maps are meaningful diagrams composed of labeled nodes (concepts) and relational links. The original form of meaningful diagram called Concept Mapping was invented in the 1970s by Joseph Novak of Cornell University, who was interested in capturing the knowledge of school children (Novak and Gowin, 1984). Since then, an extensive background and substantive research foundation has validated Concept Mapping for a variety of applications spanning primary education to professional brainstorming (Moon, Hoffman, Cañas, & Novak, 2011). Concept Mapping encourages critical thinking (Mintzes, Wandersee & Novak, 2000), and results in measurable gains in knowledge. Building good Concept Maps leads to longer retention of knowledge and greater ability to apply knowledge in novel settings (Cañas et al., 2003; Mintzes et al., 2000; Novak, 1991, 1998). Of particular interest in this article is the use of Concept Maps to express expert knowledge and to capture the complex concepts and relations involved in analytical problems (Crandall, Klein and Hoffman, 2006).[1]

An example Concept Map is presented in Figure 1. This diagram represents an attempt to explain a contradiction about refugee status—why the Bhiari refugees do and do not qualify as refugees under international law (Faranza, 2008). The icons beneath some of the nodes hyperlink to text pieces and URLs that present supporting evidence. The full set of diagrams that captured the analysis of the Bihari situation consisted of 15 Concept Maps, including this one.

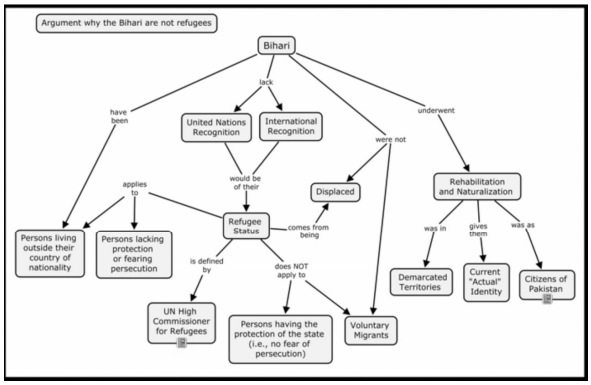

Figure 1. A Concept Map used in the process of sensemaking about the Bihari refugee situation.

Concept Maps include concepts and relationships among concepts indicated by lines linking two concepts. Linking phrases specify the relationships. The most important concepts and the context are generally toward the top and the more detailed concepts and relations generally toward the bottom. The diagram morphology is generally hierarchical (although the cross-links mean that the diagram is not a hierarchy in a graph-theoretic sense). In a well-formed Concept Map, each node-link-node triple can be read as a stand-alone proposition, a feature that renders Concepts Maps searchable on the basis of more than just a "bag of words."

It should be noted that Concept Maps are not "argument maps." Concept Maps do not restrict the propositions in terms of semantics of argument structure. Therefore, for instance, Concept Maps can represent causal relations or temporal structures as well as arguments.

With the support of the "CmapTools" freeware, Concept Mapping is being used around the world, at all levels of education (Cañas, 1999; Cañas et al., 2003) and in many locations as part of the core infrastructure in schools and entire school systems (Ford, Coffey, Cañas, Andrews & Turner, 1996). Concept Mapping has come to be used in numerous government and business applications as well (Moon et al., 2011). Concept Mapping is being used to create and edit ontologies for intelligent decision aids and use on the semantic Web (Eskridge and Hoffman, 2013).

ADVANTAGES FOR ANALYTICAL WORK

Consider the practical advantages of such diagrams over typical analytical worksheets or data matrices. While spreadsheets or synchronization matrices make an analyst record and analyze certain kinds of information in certain ways, they are usually not a useful tool for conveying meaning to others—i.e., what the "big picture" is, or the "so what?"

Concept Mapping supports a number of cognitive processes that are crucial to critical thinking and fluid intelligence (Hoffman et al., 2011): Assimilation (changing current knowledge as a result of the discovery of new knowledge), differentiation (distinguishing sub-concepts and their relations), superordination (seeing how previously unrelated concepts are in fact related), subsumption (seeing how previously unrelated concepts actually fall under a higher-order concept), and reconciliation (achieving coherence and consistency). Concept Maps made by domain experts tend to show high levels of agreement (see Gordon et al., 1993; Hoffman, Coffey & Ford, 2000). Reviews of the literature and detailed discussion of methods for making good Concept Maps can be found in Cañas et al. (2004), Crandall, Klein & Hoffman (2006), and Moon et al. (2011).

It is important to think of Concept Mapping as a process, versus the qualities of finished Concept Maps. Technically stated, when creating a Concept Map, the Mapper uses spatiality (i.e., different areas of the diagram space) as a tool to de-convolute meanings. As nodes and partially-linked sets of nodes are grabbed and moved around in the diagram space, the Mapper considers various relationships and ideas to be expressed. The Mapper struggles to add in cross-links while avoiding the creation of a "spaghetti graph" having too many overlapping cross-links. Clusters of nodes will be parked somewhere, and that region of the Concept Map space becomes, in effect, a memory aid.

In a study conducted with the support of DARPA's "Rapid Knowledge Formation" project, Concept Maps were made by domain experts but were subsequently "tidied up" overnight by computer scientists. Upon next seeing their Concept Maps so tidied up, the experts were upset because things "weren't where they were supposed to be" (Hayes, personal communication, 2003). The Mappers had been using diagram spatiality as a tool.

Node-link-node triples essentially make Concept Maps a surface notation for propositional logic. The expression of meanings in terms of propositions is central to the construction of effective Concept Maps and the meaningful capture of knowledge. CmapTools includes capabilities for extracting and sorting propositions, automated suggestions of related concepts through searches on the Web, automatic layout tools, recording and playback of the stages involved in diagram construction, validation of map coherence, and automatic fixing of broken links.

Additional advantages of Concept Mapping for analytical work stem from the capabilities of the CmapTools freeware. For example, the ability to hyperlink digital "resources" such as text documents, images, video clips, and website addresses is a significant capability. Hyperlinks to resources are indicated by the small icons underneath concept nodes

(see Figure 1). Indeed, a Concept Map explaining the situation under analysis and integrating the resources can be the analyst's report. This represents a potential major gain in efficiency, perhaps eliminating the need to turn an analysis into a slide presentation.

CmapTools has a number of capabilities that aid networking. This includes the ability to search on the occurrence of a concept to see if the same concept also appears in other people's Concept Maps. If it does, then there exists the ability to "pull in" another Concept Map to incorporate within one's own, or to point to the other Concept Map with a link attached to the concept of interest. In this manner, knowledge literally becomes networked and the capability for knowledge reuse is created. CmapTools contains a range of functions for data import and export that can assist with better understanding of the data (for example, concept propositions and hierarchies can be exported as text).

Example #1: Thinking in Terms of Propositions

We use this case study to illustrate the process of creating a Concept Map-based analysis.

> **"Thai protesters build barricades and toy with talks." BBC News Website, April 21, 2010**
>
> *Thai anti-government protesters have built formidable barricades of tyres and sharpened bamboo canes in Bangkok as tensions build in the capital. But tentative hints of possible new talks between protesters and the government have emerged, as parliament met for the first time in two weeks. Troops remain behind lines nearby in an increasingly militarised standoff. The red-shirts are demanding that Prime Minister Abhisit Vejjajiva step down and parliament is dissolved. However, analysts say both sides might feel the need for talks as the prospect of another bloody crackdown looms. A failed attempt to clear protesters on 10 April left 25 people dead. [http://news.bbc.co.uk/1/hi/world/asia-pacific/8633893.stm]*

The first step is to extract the concepts of interest (Figure 2). (In CmapTools, clicking on the diagram space creates a concept node, ready for typing the concept label.)

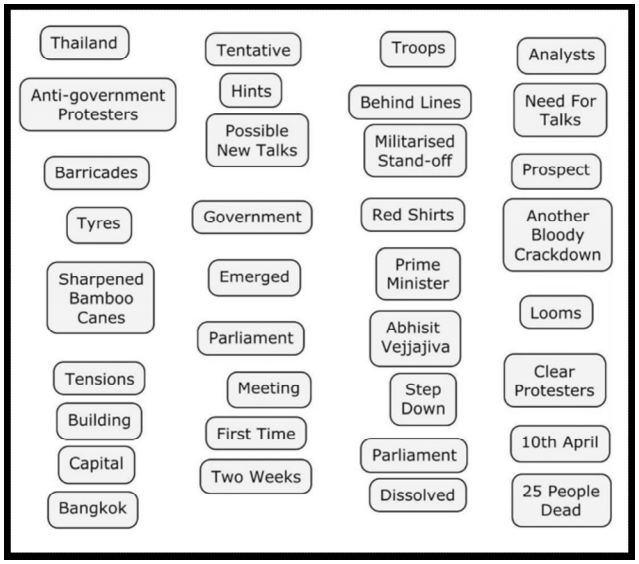

Figure 2. Concepts in the Thai Protest article.

The next step involves grouping related concepts spatially. This helps direct thinking about the relationships that exist among concepts that are related to each other.

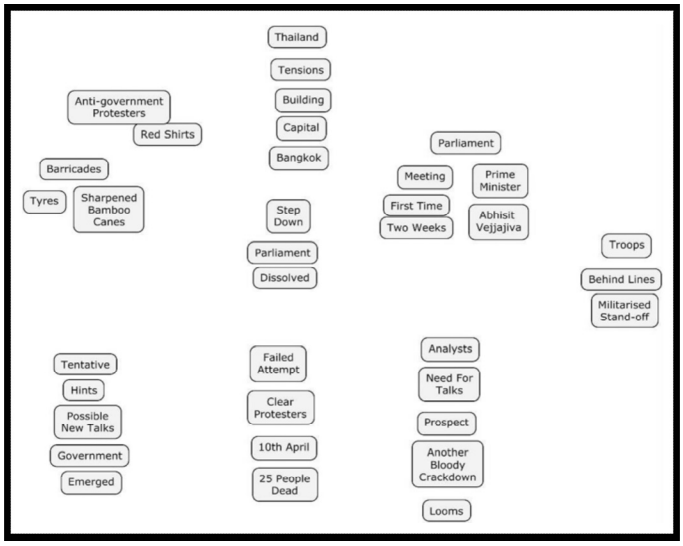

Figure 3. Concepts are grouped.

The next step is to link the concepts and label the relationships (links are easily created in CmapTools by point and drag, and then the typing of the linking phrase). The Concept Map should seek to exhibit "propositional coherence." This means that every node-link triple should make sense when read alone, for example,

[Anti-Government Protesters] <are known as> [Red Shirts]

Thinking in terms of propositions is a skill that takes some practice. Learners often fall back on the inferences and concepts that are tacit in ordinary syntax. For example, the phrase *parliament met for the first time in two weeks* has the concept of "meeting" expressed as a verb, and when going from text to propositions people sometimes mistakenly make all the verbs into linking relations. Those who are new to Concept Mapping might craft the phrase *protesters have built formidable barricades of tires* as

[protesters] <have built> [formidable barricades] <of> [tires]

when propositionally the source text reads as:

[protesters] <have built> [barricades]
[barricades] <are> [formidable barricades]
[formidable barricades] <are made of> [tires]

Note also that the expression:

[formidable barricades] <of> [tires]

does not read as a stand-alone proposition.

Another crucial activity is the creation of cross-links; Concept Maps are not "pure" hierarchies, but instead accommodate the complexity and interconnectedness of ideas and events. A Concept Map representing all of the propositions in the Thai protest text is presented in Figure 4. The reader is invited to look for things in Figure 4 that might be improved, our point being that there is not necessarily one single "best" or "right" way to decompose and represent open text.

Example #2: Hypothesis Exploration

As CMappers review and reorganize their thinking, the Concept Map undergoes various transformations, revisions, additions, and deletions. The Concept Map can also support the representation of causality, temporality, uncertainty, and inference—all features that are critical in analysis. An assertion (in contrast with a "fact") is a statement or declaration, often expressed without supporting evidence or accompanying reasoning. A suggested graphical method for capturing assertions is to code assertions in the linking phrase using both color and symbology since redundant encoding is easier to process. This is illustrated in Figure 5. In this case, we know that it has been asserted that Tribe X has been accused of political corruption, but we do not know where this assertion has come from, or whether it is true.

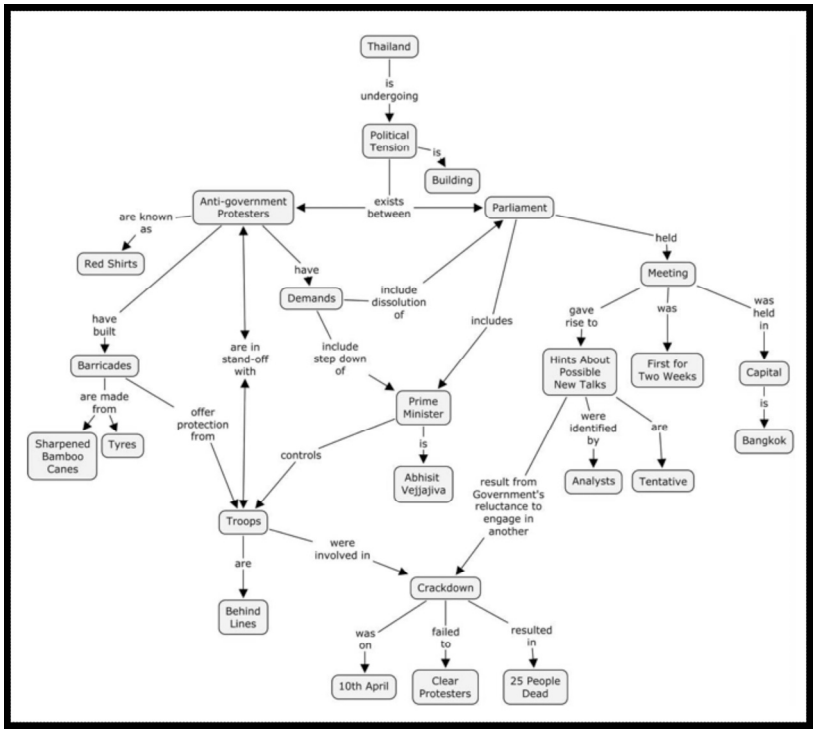

Figure 4. A completed Concept Map based on the "Thai protests" article.

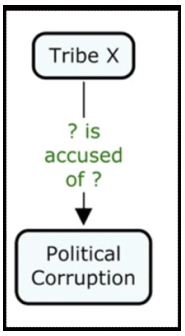

Figure 5. Assertions can be represented using color coding and together with front and back question marks.

In Figure 6, an inference is made that, if there is political corruption present in Tribe X, then there are officials within the tribe who are themselves corrupt. Note that Figure 6 also indicates that two linked concepts are inferred from the premise of political corruption. The inference is not just that Tribe X has officials but that those officials are corrupt. Thus, the proposition is "nested," indicating that it is a proposition that is inferred. As with the representation of assertions, the use of the double question mark to label the linking phrase in an inference enables it to be output collectively as ordered triples for intelligent search.

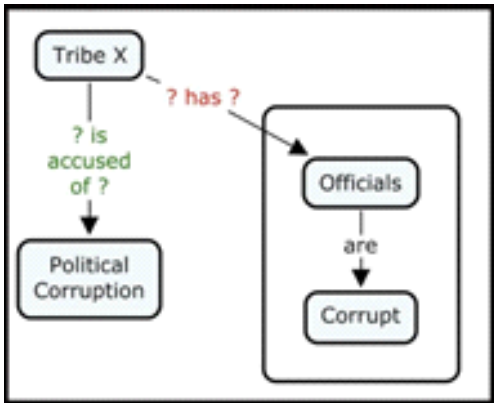

Figure 6. Inferences can be represented using color coding along with front- and back-end question marks

Example #3: Inferencing

These techniques will now be exemplified by analysis of the following text. Although this is comprised of a simple sentence, it contains a great deal of information and can be used to speculate about a wide range of issues. The analysis involves not just extracting the key information contained in the text, but converting the information into a form that is propositionally coherent and inferring additional concepts and relationships.

BBC News Website, July 13, 2010

An Iranian nuclear scientist at the centre of an abduction row between the United States and Iran is free to leave, the US State Department says.
[http://www.bbc.co.uk/news/10617656?utm_source=twitterfeed&utm_medium=twitter]

In Figure 7, a number of relationships are inferred and diagrammed explicitly. For example, while the nuclear scientist is said to be at the center of the abduction dispute, it is not explicitly stated that it was he who was abducted. However reasonable it might be to infer this, the relationship is expressed and color-coded as an inference. Notice also the creation of (and notation for) an inferred concept (? Released ?), and also the use of intersecting nested nodes to capture relationships among sets of concepts. This analysis shows clearly how even simple assertions can contain many implications and entailments, which get "hidden" by the syntactic conventions of ordinary language. It also shows how one proposition can refer to, or comment on, another proposition.

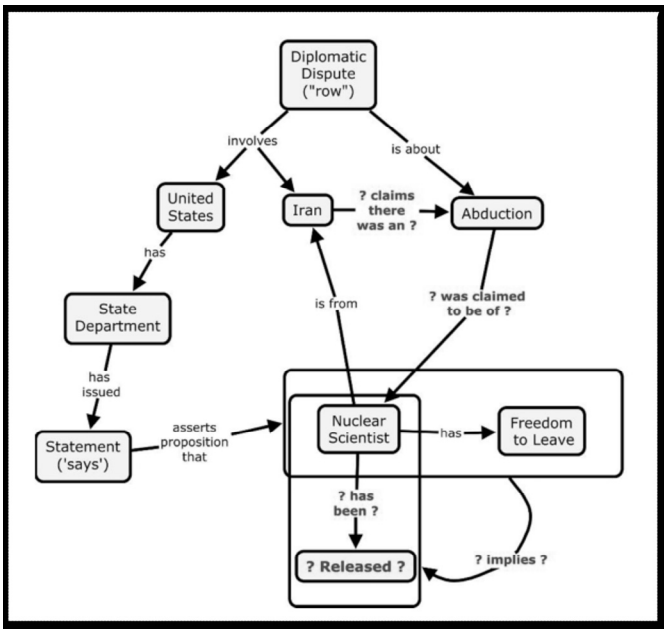

Figure 7. A Propositional-Inferential representation.

Taking the analysis a step further can involve adding annotations, comments, and questions to make the analyst's thinking process an explicit part of the representation. In Figure 8 a range of questions has emerged, which are recorded as their own supplementary Concept Map.

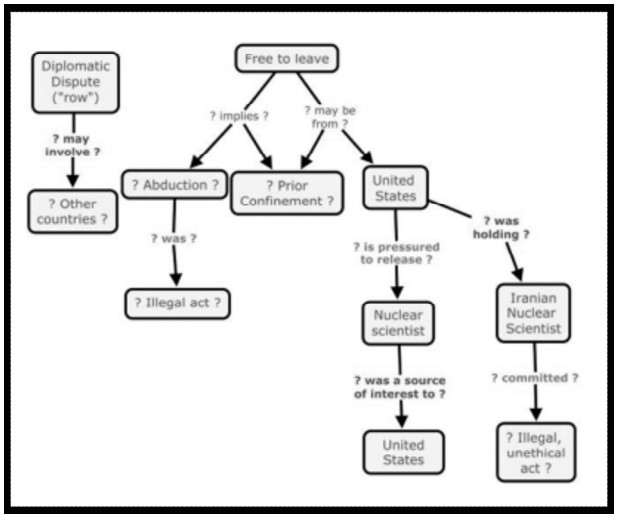

Figure 8. Questions that emerge from the inferences.

COMMUNICATING THE BIG PICTURE

When mapping a large domain or more extensive set of material, a single Concept Map can become unmanageable for the user to comprehend, display, and manipulate. To facilitate the construction of large representations, the CmapTools allows the user to create and hyperlink collections of Concept Maps, enabling the navigation from one Concept Map to another. Another capability is that different authors (for example, from different functional desks or technical disciplines) can support the generation of integrated collections of Cmaps, each from its own perspective, and show explicitly how their map relates to those produced by others. Cmap Tools provides the ability collaboratively and synchronously or asynchronously to construct a joint Concept Map (see Cañas, Suri, Sánchez, Gallo, & Brenes, 2003).

Hyperlinks can connect Concept Maps to other Concept Maps; a set of Concept Maps hyperlinked together is regarded as a "Knowledge Model." The hyperlinking permits navigation among the Concept Maps and serves as a navigational tool that prevents "getting lost in hyperspace." Within the context of a Knowledge Model, an overarching Concept Map can be created to communicate the "big picture." Individual concepts within this Cmap then link to detailed Cmaps that expand the concept into a series of lower-level components. Also part of the big picture, any digital resource can be hyperlinked into a Cmap, bringing in the supporting evidence: imagery, reference documents, video, and websites. Knowledge Models can serve as living repositories of expert knowledge to support knowledge sharing as well as knowledge preservation. This too represents a significant capability for preserving and sharing organizational expertise (Ford et al., 1996). In capturing the expert knowledge within an organization, practitioners can always add to and modify the Concept Maps in the existing pool.

One such Knowledge Model is called STORM (System To Organize Representations in Meteorology) (Hoffman et al., 2001, 2006). It consists of two dozen Concepts Maps created by forecasters at the Naval Training Oceanographic and Meteorology Facility at Pensacola Naval Air Station, FL. Although the project involved creating many dozens of Concept Maps about all aspects of weather and weather forecasting, the knowledge model focuses on weather of particular concern to naval aviation in the Gulf Coast region (e.g., turbulence, fog, thunderstorms, and hurricanes). It covers forecasting processes, such as the use of the radar. STORM Cmaps can be viewed at [http://cmapspublic.ihmc.us/rid=1147120059423_996189320_18181/ROCK-TA%20Navigator.cmap]. Another, and larger, Knowledge Model called ROCK (Representation of Conceptual Knowledge) was created for the U.S. Army and focuses on intelligence preparation of the battlefield (Eccles et al., 2003). It consists of about 200 Concept Maps and has hyperlinked topographic maps, aerial photos, photointerpretation keys, and information about trafficability of such terrain features as types of dunes. Cmaps can be viewed at [http://cmapskm.ihmc.us/rid=1103739939432_102411597_6499/STORM-LK].

An example STORM Concept Map is shown in Figure 9 and an example ROCK Cmap (with a screen shot of some open resources) is shown in Figure 10. Note that Cmaps in Knowledge Models can have many hyperlinks. The STORM hyperlinks include digital videos of expert discussion of weather forecasting procedures and links to real-time weather and radar data. The ROCK hyperlinks stitch the many Cmaps together and link to text pieces including aerial photos and text about trafficability. The ROCK Cmap also has, at its left side, a "Cmap piece" that shows the place of the particular Cmap within the larger Knowledge Model. Using this piece, and the hyperlinks within it, the user can always tell where he/she is in the Knowledge Model, and how he/she can get from anywhere to anywhere in the model, in only one or two mouse clicks. More information about the construction of knowledge models can be found in Cañas, Hill, & Lott (2003); Crandall, Klein, & Hoffman (2006); and Moon et al. (2011).

CAUSAL REASONING

Concept Maps can express causality and temporality. Of particular concern in analysis is "indeterminate causation" where the goal is to anticipate individual

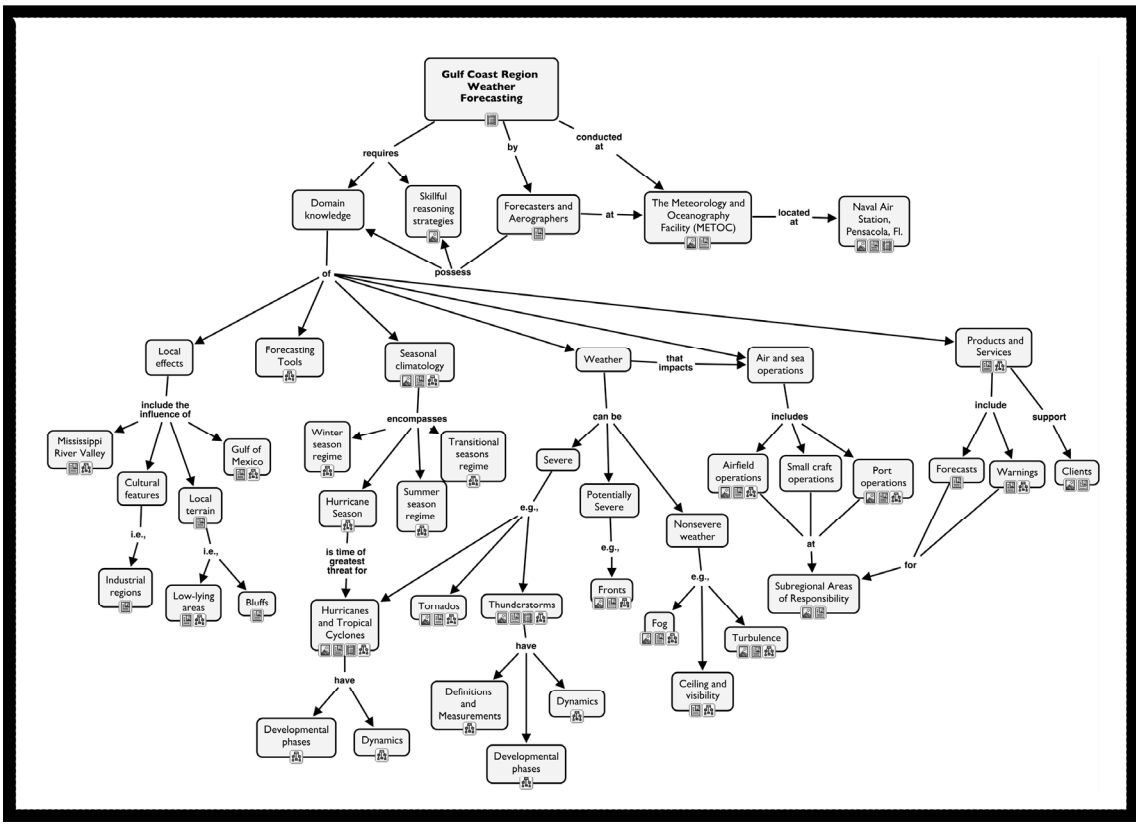

Figure 9. A Concept Map from the STORM Knowledge Model about Navy weather forecasting.

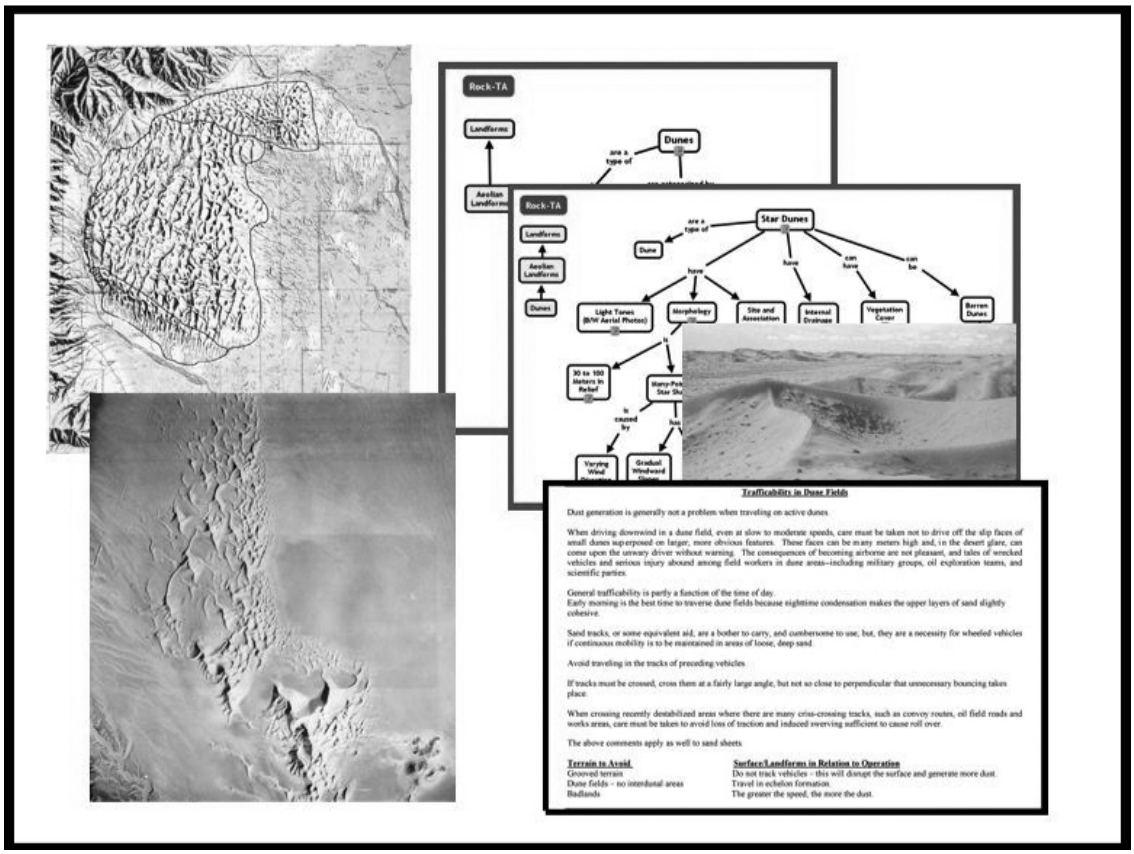

Figure 10. A Concept Map from the ROCK Knowledge Model for intelligence preparation of the battlefield.

or aggregate human activity (Moore and Hoffman, 2011). Causal analysis helps explain how the current situation "came to be," and on this basis supports analysis of where the situation is likely to go (and the impact that different actions might have on shaping that path). Research on the causal reasoning strategies used by practitioners across a range of domains, including economic, political, and military, revealed a dozen patterns (Hoffman and Klein, 2009). A few of these are:

The Abstraction. This is a generalization over evidence (events or conditions). This causal attribution takes several causes, sometimes including counterfactuals, and synthesizes these into a single-cause explanation.

The Domino. This is a chain or sequence of causes and effects culminating in the primary effect or phenomenon that is to be explained.

The Swarm. This is when a number of independent causes converge to bring about some effect.

The Spiral. Events X and Y were both causal of Event Z, but Event X increased (or decreased) the power of Event X.

The Clockwork. This is when one or more causes have effects that influence other causes, culminating in the primary effect or phenomenon that is to be explained.

The Onion. This is when the analyst wonders about what caused the effect that is used to explain the primary effect or phenomenon that is to be explained.

The Snark Hunt. The Snark is a mythical animal for which one can search, but which can never be found because it does not really exist. The Snark Hunt is when the explainer is seeking some particular kind of cause when in fact the to-be-explained effect has some cause that is hidden or might be unknown. The Snark Hunt can be considered a form of counterfactual or disconfirmational reasoning.

All of these themes, and more, can be expressed as a Concept Map, or as a simple "Concept Map Piece" that can be embedded in a larger Concept Map. Awareness of the different causal structures can support critical thinking, that is, the search for alternative causes or causal structures. An example "clockwork" is from economics: bank deregulation permitted mortgaging that entailed relaxed lending criteria; these resulted in risky loans that were used to leverage mortgaging. In other words, the key causal factors interacted. An example "chain," also from economics, would be: Low interest rates caused people to purchase homes they could not really afford, which caused the housing "bubble," which in turn caused the economic decline.

We present three somewhat richer examples in the following figures. Figure 11 presents both a generalized form for the "abstraction"—a template if you will—and a specific example. Figures 12, 13, and 14 illustrate the "onion," "spiral," and "snark hunt," respectively.

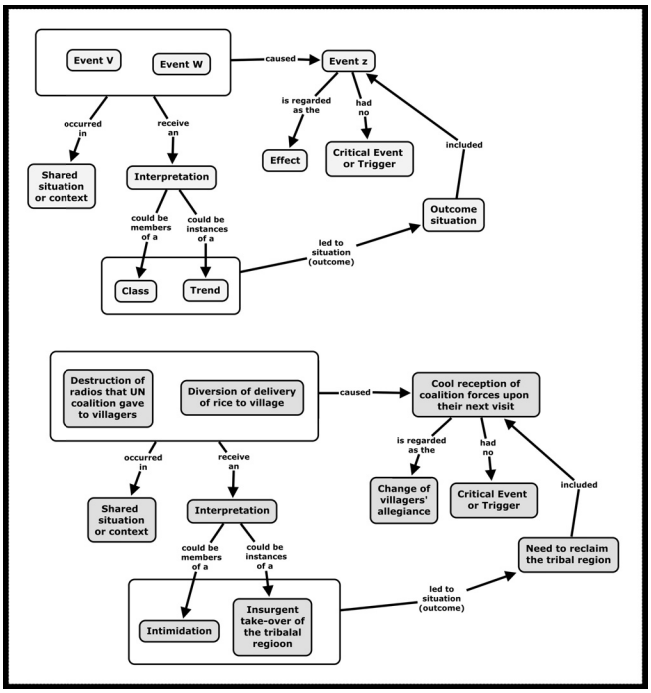

Figure 11. A generic form for the Abstraction causal structure, along with an example.

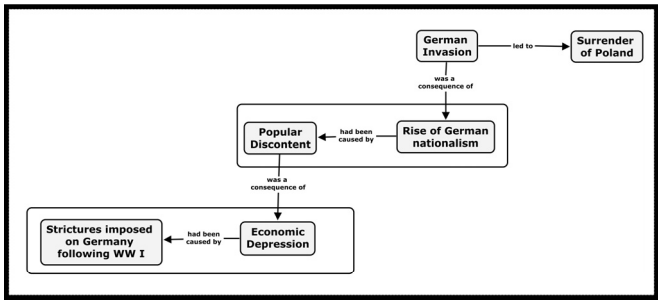

Figure 12. An example of an Onion causal structure, focused on the primary phenomenon of the surrender of Poland to Germany.

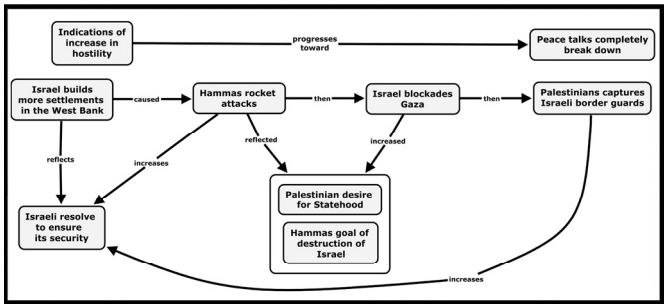

Figure 13. An example Spiral causal structure involving the Israeli-Palestine relation.

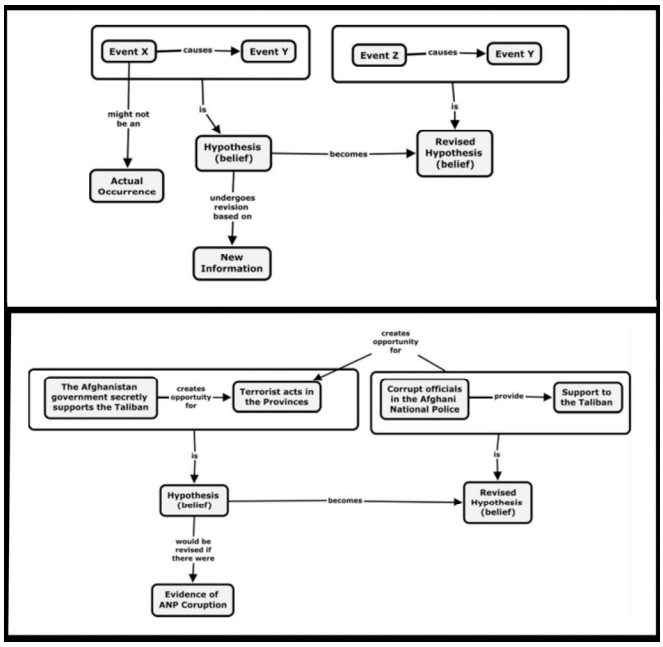

Figure 14. A template plus an example for the Snark Hunt causal structure.

Our final case study brings many of these ideas together, and also hints at the richness and complexity that can be involved in conducting analytical work using meaningful diagrams.

Case Study: The Klathu Scenario

We illustrate the Cmap-based analysis method using the "Klathu Scenario" developed by David Moore (Moore, 2010). While hypothetical, it is a detailed, rich, and realistic scenario about a regional conflict.[2] The text is 13 pages, covering history and background, current situation, assets, recent events, and culminating events as reported by open sources and intelligence sources. The scenario includes maps and listings of evidence, followed by an invitation to the reader to apply such methods as Analysis of Competing Hypotheses. The challenge is to decide what is most likely to happen in the regional conflict, annotated by conflicting evidence. The realism of the scenario is highlighted by the fact that there is no single, clear best answer, and analyses of the scenario by experienced analysts not only do not always agree, but result in hypotheses and findings that were not anticipated by the scenario's creator (Moore, personal communication).

An attempt was made to represent the scenario text exhaustively in propositionally-coherent Concept Maps. The first result was 14 Concept Maps, each representing one of the major paragraphs of the scenario (four Cmaps for each of the four main paragraphs in the "Background," three Cmaps for scenario sections that each focused on one of the hypothetical nations, a Cmap for a paragraph about "mysterious events" occurring on an island in the region, a Cmap covering the discussion of the regional religions and historical religious conflicts, a Cmap about recent news reports, a Cmap about events at a particular shrine, and a Cmap about regional wars). As these were created, separate diagrams were made expressing the hypotheses and speculations that occurred during the analysis (in the manner of Figure 8, above, but not unlike the process involved in the Analysis of Competing Hypotheses). Next, versions of all of the Cmaps were created that expressed assertions and hypotheses (in the manner of Figures 5-7, above). All this took time—the better part of three days of full-time effort.

The Concept Map about one of the nations is presented in Figure 15 (next page). This diagram is representative of the degree of detail one would expect in a useful Concept Map in analytical work. Our heuristic is that for the clearest presentation of meaning a good Cmap should have no more than about 40 concepts (or about 45 propositions). As a Cmap gets larger than this, it is appropriate to break it up into meaningfully appropriate smaller Cmaps that are then hyperlinked together.

One of the Concept Maps about the analyst's hypotheses is presented in Figure 16. A majority of other analysts who had attempted the scenario (up to the time that the Cmap-based analysis was conducted) had attempted conclusions about whether or when a war would break out (Moore, personal communication). The conclusion for this Cmap-based analysis was that a war had already broken out.[3]

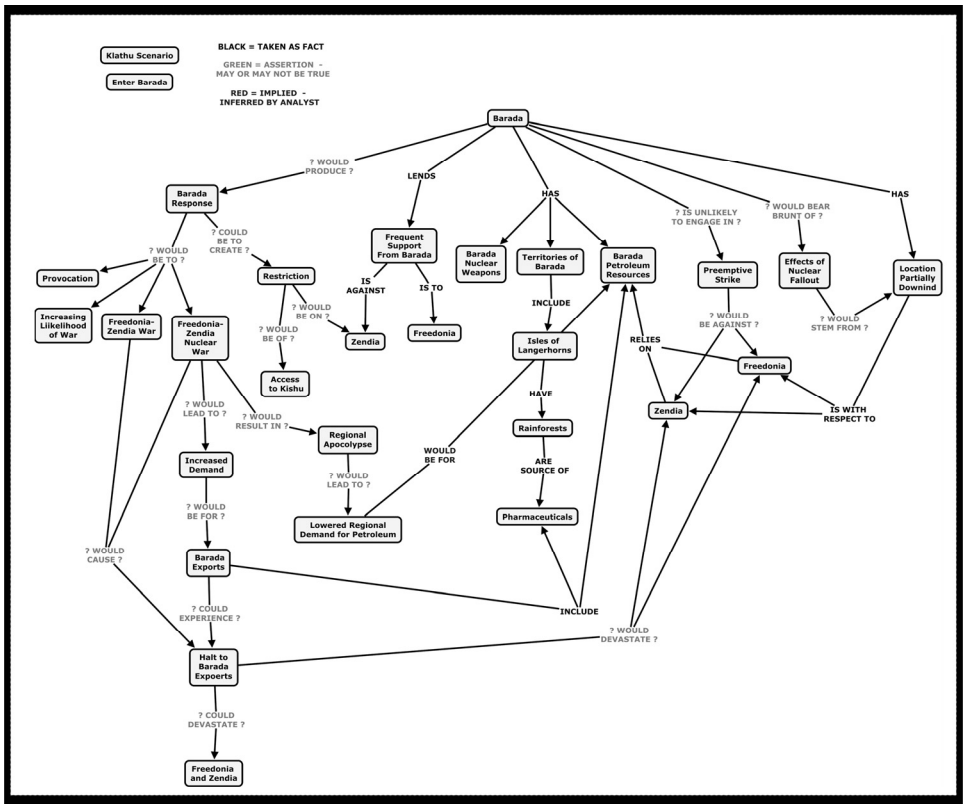

Figure 15. A Concept Map expressing the evidence, assertions, and inferences about one of the nations in the Klathu Scenario.

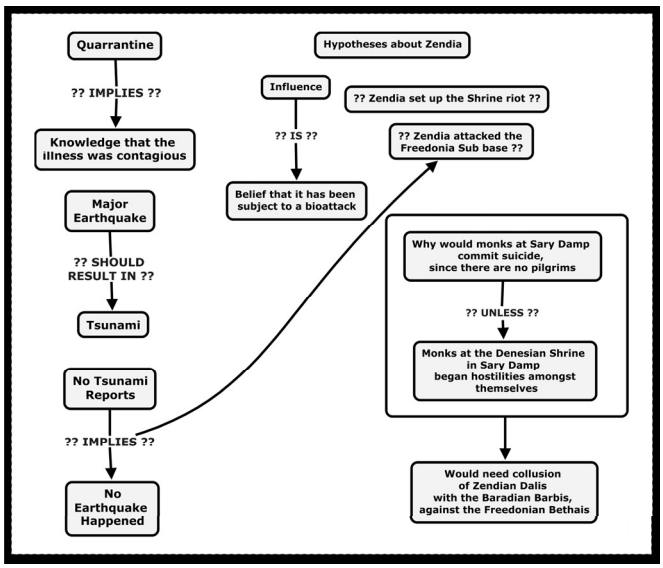

Figure 16. A Concept Map used to express some of the questions and hypotheses formulated by the analyst.

It is not our contention that Cmap-based analysis will uniquely support the creation of high-value analytical products or results. We only suggest, as do Heuer and Pherson (2010), that analysis using meaningful diagrams has its appropriate and valuable uses. While we have focused primarily on Concept Mapping we note also that meaningful diagrams of other kinds can be useful in analytical work.

REPRESENTING ANALYTICAL INTENT

The Analyst's Intent diagram is designed to help practitioners set out, at the beginning of problem analysis, their intended strategy and "line of attack." This can serve a number of purposes. It can enable analysts to return to their foundation during time of information overload or distraction, in order that they can help keep themselves on track. It can help other analysts understand how the problem is being tackled (for example, if the problem was handed over to somebody else midway through). It can also serve as a training device to help communicate tough cases and exemplars to less experienced analysts. By filling in the blanks in the template for Analyst's Intent, the analysts address a range of considerations and captures their resultant thought process. When drafted at the beginning of an analytical activity, the Intent Diagram helps frame and contextualize the work process, but it can be iteratively refined as the analytical work progresses. It can be used to frame reports on, and other products associated with, the activity.

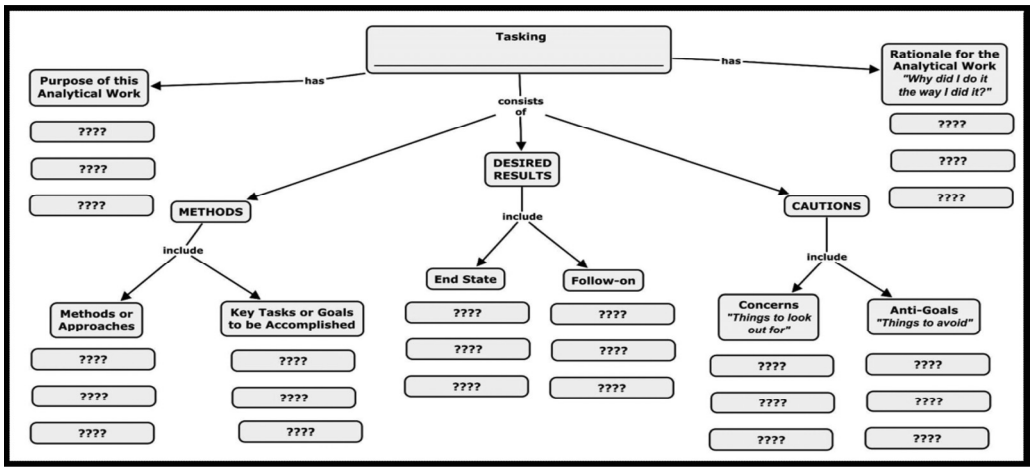

Figure 17. A template for a meaningful diagram to express "Analyst's Intent."

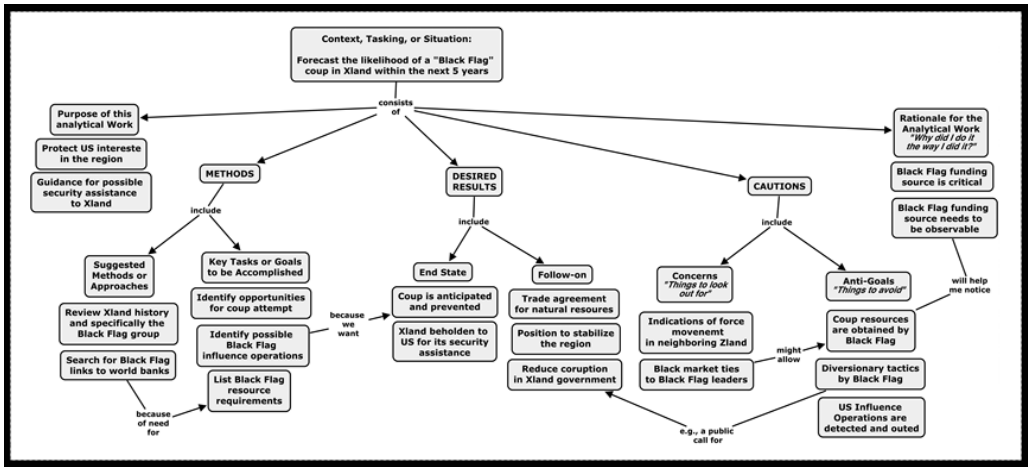

Figure 18. An instance of a completed "Analyst's Intent" diagram.

A template Analyst's Intent diagram is presented in Figure 17 (note that this is not a Concept Map though it is easily created using Cmap Tools). In using this template, the nodes are filled by phrases or short sentences and then meaningful relationships among nodes are added, as deemed useful, using linking phrases to express interrelationships, contingencies, or dependencies. An example of a completed Analyst's Intent diagram is presented in Figure 18 (descriptions, templates, and examples of other causal explanation structures can be provided upon request).

CONCLUSION

The methodology of analysis includes techniques of diagramming. Uses of meaningful diagrams within the Intelligence Community include: eliciting knowledge from experts' analysis, designing new technology by domain experts (bridging the gap between analysis and systems engineering requirements and needs statements), revealing expert-novice differences, acquiring software-assisted knowledge, brainstorming, knowledge sharing (getting data points and information for others who view Cmaps), contrasting alternative perspectives, training, identifying knowledge gaps, creating new knowledge (for example, turning tacit knowledge into an organizational resource), representing team knowledge, constructing and representing shared understanding, structuring conceptual queries, expressing and comparing methodologies, structuring linguistic definitions, designing competency questions, representing networks and organizations, and decomposing analytical problems.

Thus, we have seen a great diversity of diagrams, posted on walls and workboards/workplaces such as command posts and analyst cubicles. Diagrams range from the well-composed and formatted, to nearly useless "spaghetti graphs." There has been little discussion of what makes for a good diagram, and why. Thus, in this article we have presented some principles or heuristics for the creation of *meaningful* diagrams used in problem decomposition, based

on findings from research on diagrammatic reasoning in psychology and other disciplines. We have illustrated a variety of forms of meaningful diagrams that have been and are being used in analytical work, accompanied by templates and examples (for a discussion of the use of meaningful diagrams in structuring conceptual queries and forming ontologies, see Eskridge and Hoffman, 2012).

One of the most potentially valuable and effective uses of meaningful diagrams may stem from the fact that the diagram supports the analytical activity and at the same time can serve as a key part of the analyst's report. It is widely known that report preparation can be a huge drain on an analyst's time, and that reporting is a major bottleneck. For an example of using Concept Maps to summarize material, see the synoptic diagrams for the chapters in Hoffman and Militello (2006).

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Notes

[1]Other diagramming schemes have been created. Some of these borrow Novak's ideas. Most are limited, for example, by not using labelled links or not having a principled layout or morphology.
[2]Readers may benefit by attempting to work the Klathu Scenario on their own, using their preferred method, before reading about the Cmap-based analysis.
[3]While our figures offer some hints as to how this conclusion was reached, we do not present the full details, by way of inviting readers to conduct their own analysis.

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decision-making; methods for the enhancement of team debriefing and self-learning approaches; and methods for the design and evaluation of team support technologies. Work over the past five years has focused on studying the psychological basis of collective problem solving in complex settings, with particular emphasis on the development of knowledge mapping and representational systems. This work has been widely published. Simon has been the UK representative on a number of NATO and other international panels on decision making and teamwork.

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A Novel Computer-Assisted Personality Profiling Methodology:

Illustrating Psychological Analysis via Former Egyptian President Morsi's Speech to the United Nations

by Yair Neuman, Yohai Cohen, and Golan Shahar
Ben-Gurion University of the Negev, Israel

EXECUTIVE SUMMARY

Personality profiling of political leaders constitutes an important aspect of modern military intelligence, and psychologists/psychiatrists who serve in various intelligence agencies are well familiar with the practice of personality profiling. However, there are serious methodological difficulties associated with this practice. In this article, we introduce a novel computer-assisted methodology for leader profiling. The methodology is illustrated through a case study analysis—the speech given by former Egyptian President Mohammed Morsi to the UN General Assembly in 2012. The analysis, conducted through state-of-the-art procedures in computational semantics and expert psychological analysis, reveals Obsessive-Compulsive Personality Disorder (OCPD) features. These features provide a powerful interpretative context for retrospectively understanding the speech's themes and Morsi's political failure.

INTRODUCTION

Personality assessment of political leaders is a common practice in intelligence agencies, one that heavily draws on the diagnostic expertise of psychologists and psychiatrists. From the assessment of Adolf Hitler (Mayer, 1993) to the seminal work of Jerrold Post on Saddam Hussein (Post, 2005) and up to the recent analysis of Kim Jong-il (Coolidge and Segal, 2009), the psychological literature is rich in details about the personality of those who may change the course of the world, for better or for worse. Given that a political leader cannot be the object of a direct personality assessment, he/she should be studied at a distance (Winter, 2005). There are two main approaches for conducting a long-distance assessment.

The first approach is the more "impressionist" and "informal" approach used by Post, for instance. By "impressionist" and "informal," we mean that the assessment is conducted "with the opinion of a single person, with standardized psychological assessment measures infrequently employed, and with official psychiatric diagnosis often ignored" (Coolidge and Segal, 2009, p. 196). In this context, issues of validity present a serious challenge to the personality assessment.

The second approach employs informants' reports of others through the use of standard inventories. The quite recent analysis of Kim Jong-il epitomizes this approach (Coolidge and Segal, 2009). The appeal of informants' reports is in using well-established tools of psychological personality assessment. However, the validity of these instruments is contingent upon their convergence with self-reports (Winter, 2005). Because, in the case of political leaders, there are no data as to the magnitude of such convergence, the validity of the approach using informants' reports is questionable.

The question of validity is particularly crucial for the practitioners and stakeholders—the intelligence analysts and decision-makers—who seek not only to explain, but also to predict, leaders' behavior. Diagnosing Saddam Hussein through Sadistic Personality Disorder (Coolidge and Segal, 2009), for instance, is of minor, if any, incremental validity to the intelligence analyst over and above what is known from Hussein's biography and behavior. It is, therefore, incumbent upon a useful profiling of political leaders to go beyond what is gleaned from the immediate data, and to use conceptually clear, evidence-based approaches that shed new light on leaders' dynamics and behavioral determinants.

Another problem of the common profiling methodologies concerns the "personality features" that can be identified in the leaders' behavior given a specific context where the assessment is performed. For instance, during the second Lebanon war between Israel and the Hezbollah terrorist

organization, Israeli political commentators, probably the same as intelligence analysts and political leaders, were striving to understand the speeches given by Hezbollah's leader Hassan Nassrala in order to find signs indicating an approaching tipping point of weakness.

Analyzing Nassrala's personality at a distance would have contributed nothing to this urgent need unless there was a methodology enabling the analyses of (1) *themes* that emerge from the text in a given socio-political context as well as (2) the way in which these themes, which may have been pre-formed by the leader and probably by his close circle, intermingle with the leader's personality to produce a synergetic output.

Put differently, an informative analysis of the leader's speech, that is, of a text-in-context, should take into account the way in which the context-given themes interact with the leader's personality as represented in the text. The aim of the proposed methodology is precisely to address this challenge by introducing a novel approach for personality profiling. The methodology does not aim to replace traditional methods for leader profiling but instead to enrich the toolkit of the analysts who are involved in personality assessment.

The main target audience of this article is psychologists and psychiatrists dealing with personality profiling for military intelligence. However, the methodology presented is more general and can be applied to various situations of personality assessment through text analysis. To explain the methodology, we focus on a single case study which is an important speech given by the former Egyptian president, Mohammed Morsi.

MORSI'S SPEECH: THE PERSON AND THE CONTEXT

To analyze the speech, we first have to be familiar with Morsi's biography[1] and the context of his speech.[2] Mohammed Morsi (born 1951) rose through the ranks of the Muslim Brotherhood to become its candidate for the presidency. He was a U.S.- trained engineer with a PhD from the University of Southern California (1982) and was "known for being pragmatic" (Sharp, 2012, p. 2), a conception that will be later challenged.

Following the uprising in Egypt, the resignation of President Hosni Mubarak, and the first democratic elections, Morsi was elected to the presidency and served as the fifth president of Egypt, from June 30, 2012, to July 3, 2013. His election has been an important change in the political map of the region and of great concern to the U.S. as, "Between 1948 and 2011, the United States provided Egypt with $71.6 billion in bilateral foreign aid, including $1.3 billion a year in military aid from 1987 to the present. Since 1979, Egypt has been the second-largest recipient, after Israel, of U.S. bilateral foreign assistance" (Sharp, 2012, p. 15).

After becoming president, Morsi granted himself additional—some might even say unlimited—powers such as the decision that "the constitutional declarations, decisions and laws issued by the president are final and not subject to appeal."[3] Morsi declared that such powers were essential in order to protect the nation from the political power structure of his predecessor—Hosni Mubarak—and dismissed some of the army's leading officers.

Morsi's acts led to mass demonstrations commencing in November 2012. On June 30, 2013 (the first anniversary of Morsi's presidency), demonstrations erupted across Egypt calling for him to resign. Finally, on July 3, 2013, Morsi was ousted by the Egyptian military, backed by a council consisting of defense minister Abdul Fatah al- Sisi, opposition leader Mohammed El Baradei, and others.

It seems that Morsi's failure to solve some crucial problems of the Egyptian people, such as the increase in food prices (Friedman, Albino, and Bar-Yam, 2013) significantly contributed to his removal. This failure seems to contradict the early image of Morsi as a "pragmatic" leader.

THE SPEECH

The speech analyzed in this study is the one given by Mohammed Morsi on September 26, 2012, before the 67th session of the General Assembly of the United Nations. This speech attracted intense media coverage, not only due to the fact that it was a speech given by Egypt's new president addressing the UN after more than a decade but also because this was the first speech given for the first time by a democratically elected president of Egypt.

Moreover, just prior to the delivery of the speech, the region was swept with anti-American propaganda, fueled by a recent anti-Islamic movie which was considered to be an insult to the Prophet Mohammed. The movie triggered riots that included a violent attack on the American embassy in Cairo.[4] The anti-American sentiments, combined with the recent instability in Egypt, made many world leaders worried about the stability of the entire region.

Morsi's speech was an opportunity to shed some light on what was to come in the region, helping the West to better understand and evaluate potential risks emanating from Egypt as well as opportunities related to the transformation of existing regimes. In sum, we chose to analyze this specific speech and to use it as a case study, because it was a politically important speech that could have been used to

better understand Morsi's personality and the expected trajectory of Egypt under his leadership.

Surface-Level Themes of the Speech:

A "naïve" and simple reading of the speech by the authors reveals five key themes/topics:

1. The Palestinian-Israeli conflict and Egypt's support of the Palestinian side.
2. Establishing Egypt as an Arabic-African leader of the developing world.
3. Egypt's efforts in helping to end the violence in Syria.
4. The Iran-Israeli tension and Egypt's goal to "clean" the region from nuclear weapons, while preserving the right for peaceful use of nuclear energy.
5. The relationship with the Western world which was defined as marred with double standards. Specifically, in the putative speech, Morsi redefined freedom of expression by presenting a more limited version of it, anchoring it in the necessity to prevent violence.

Why is it important to reveal the "surface themes" resulting from a simple and naïve reading of the text? The answer is that the methodology presented in this paper should be judged by its ability to support a deeper reading of the text, a reading that goes beyond what can be seen with minimal cognitive efforts or that which can be gained though human expertise per se or through common tools of automatic keywords or topic extraction (e.g., http://www.alchemyapi.com/products/demo/). For instance, a superficial reading of the speech may be influenced by salient words and topics. The Wordle™ below (http://www.wordle.net/create) figure presents the most frequent words in the speech. The more frequently the word is used the bigger its visual representation:

As is gleaned from the above, words such as "international", "Egypt", and "freedom" are salient. Based on this saliency, when closely reading the speech several topics can be clearly identified: the legitimacy of Morsi's election, the Palestinian issue,the civil war in Syria, and so on. However, as proposed earlier, a thematic analysis may reveal a deeper layer of the speech.

The Methodology

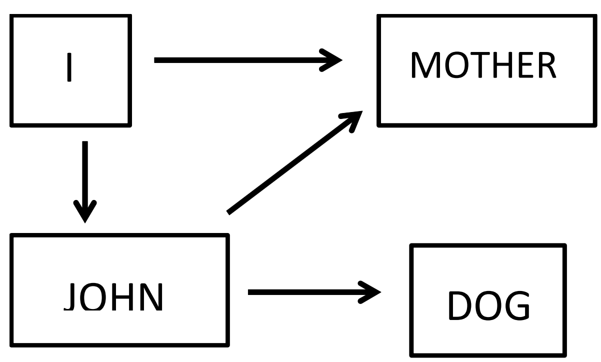
Themes as Network Motifs

A novel methodology for identifying themes in a text has been recently proposed by Neuman, Assaf, and Cohen (2012), who suggest that textual themes may be conceptualized as "motifs"—or sub-graphs—of a semantic network. The idea is simple and will be presented without elaborating the technical details that are beyond the scope of the article and its intended audience.

A text may be represented as a graph of words. That is, we take a text that we would like to analyze and automatically translate it into a graph which is a representation of a set of *objects* and *links*. For instance, let us assume we have the following sentences comprising our target text:

1. I love my mother.
2. John loves my mother.
3. I don't like John because he dislikes my dog.

Reading these sentences, we can easily identify the following objects: I, mother, John, dog. We can also identify the relations that exist between these objects: love, like, dislike. Based upon this list of objects and relations we can draw the following semantic graph where the directed arrow denotes the relations between the objects:



The methodology developed by Neuman, Assaf, and Cohen (2012) translates a text into a graph by first automatically representing the sentences as a set of *binary relations* between words. By binary relations we mean relations between pairs of words. This representation, which is called in the literature the "Dependency Representation" of the text, is automatically produced by the Stanford Parser (de Marneffe & Mannin, 2008), which is a well-known and valid algorithm. To explain and illustrate the meaning of a dependency representation of a text, let us take the

sentence: “The sweet baby chased after the cat.” Have a look at the representation below. The word pairs appear inside the brackets and the syntactic relation between them appears outside the brackets:

(1) amod (baby-3, sweet-2)

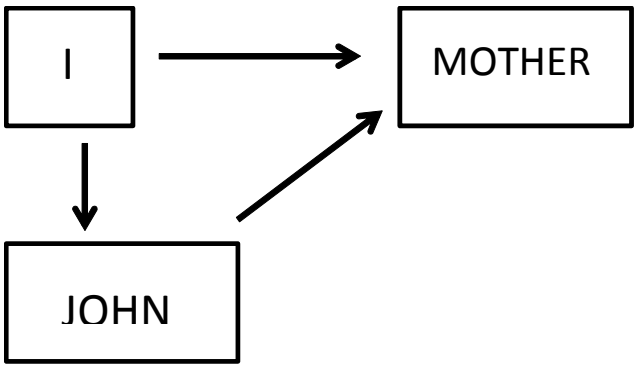
(2) nsubj (chased-4, baby-3)

This is a partial representation of the sentence. In the first line, we can see two words inside the brackets: baby and sweet. Outside the brackets, to the left, we can see the relation between these words which is “amod,” a professional linguistic term used to denote the fact that the word “sweet” is the adjective modifying the noun “baby.” Along the same line we can see in the second line two words inside the brackets: “chased” and “baby.” Outside the brackets we see the relation “nsubj,” which means that the subject of the sentence is the baby who chased after the cat. In sum, using the dependency representation allows us to automatically represent the text as a set of relations between pairs of words. That is, the first phase of the methodology is to produce a dependency representation of the target text.

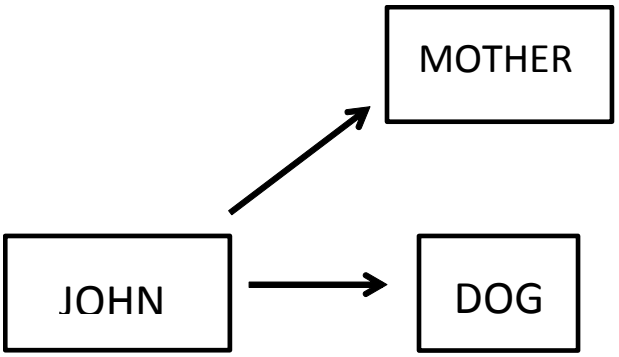
The second phase involves the application of a set of rules that convert the dependency representation into a graph with nodes/words and their *subject-object relations*. Let us move to the third phase of the methodology in which we automatically identify themes/motifs in the graph.

Motifs Extraction from the Graph

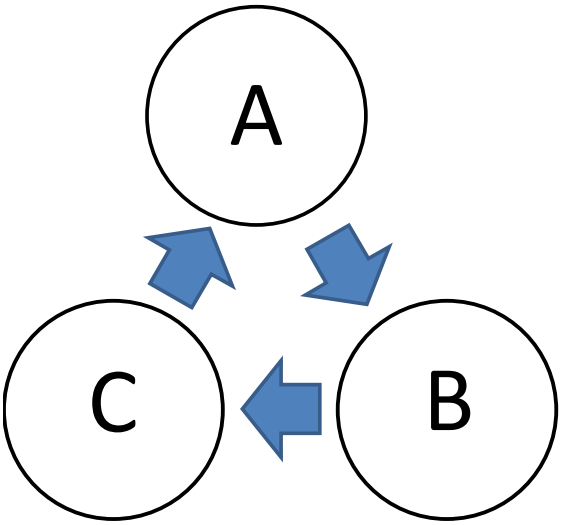
The semantic graph we have constructed may involve a large number of objects and relations. This semantic graph can be broken into the possible sub-graphs that comprise it. For instance, the simple semantic graph that we have presented above can be broken into the following three objects/nodes sub-graphs:



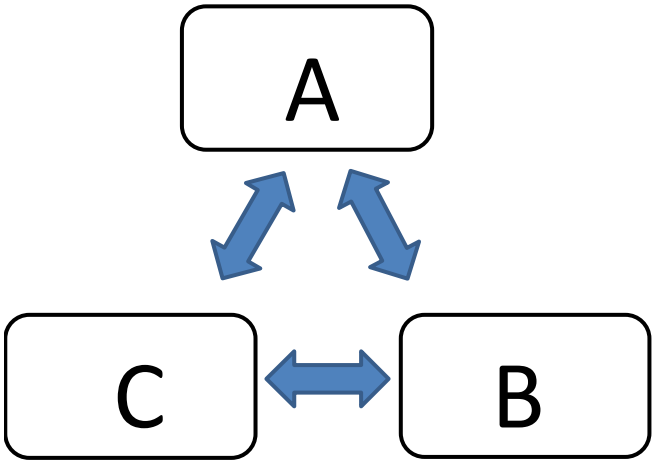
and



Now the problem is that when we partition a graph into all possible sub-graphs, we may get a huge number of sub-graphs that express all of the statistically possible combinations/configurations that can be produced by the partition. Here the idea of “motifs” gets into the picture. Motifs are sub-graphs that appear in a *significantly higher frequency* than what could have been expected by chance (Alon, 2007; Kashtan & Alon, 2005; Milo et al., 2004). Through algorithms and a software developed specifically for the identification of motifs (e.g., Wernicke & Rasche, 2006), these sub-graphs are identified and processed further. In other words, researchers, mainly those who are working in computational biology, have built algorithms and softwares that allow us to identify the statistically significant combinations (i.e., sub-graphs) of n-nodes’ configurations in a graph. For example, the following motif is one possible 3-node configuration that can appear in the graph (the nodes’ shape is not important):



Here is another 3-node configuration that can appear in the graph:



Deciding whether a certain configuration appears in a graph in a statistically significant way is not a simple task and several sophisticated algorithms have been developed to address this challenge.

After identifying the motifs of a semantic graph, Neuman, Assaf, and Cohen (2012) move to the next step and identify the most frequent words located at the motifs' nodes. In other words, by identifying the *words* comprising the nodes of significant motifs, they actually identify *themes* in the text, or patterns of significant semantic relations. That is, we first identify the statistically significant configurations of objects and relations, and then search for the most frequent words that populate the nodes of our motifs. Interestingly, this procedure is along the same vein as McWilliams' (2012) proposal to study personality as intersubjective themes, because the motifs identified by our analysis are interpreted as hypotheses of personality themes, as will be illustrated below.

It is very important to realize, though, that the common motif analysis as usually practiced in computational biology is purely *structural* and focuses on the identification of statistically significant patterns of sub-graphs. This form of analysis is totally indifferent to the semantics of the nodes populating the motif. In contrast, traditional textual analysis is usually *semantic* and focuses on the "meaning" of signs or texts without taking into account statistical structural regularities of the words comprising the text.

What is unique about the methodology developed by Neuman, Assaf, and Cohen (2012) is that it merges *form* (i.e., structural motifs) and *content* (i.e., semantics of nodes) in order to identify meaningful patterns of *relations* in the text. This is a highly important point that clearly differentiates the methodology from other methods of lexical analysis (e.g., Cohen et al., 2008) specifically those used for psychological research. For instance, LIWC, developed by Peenbaker and his colleagues (Pennebaker and Chung, 2007; Tausczik and Pennebaker, 2010), is purely semantic software that simply categorizes the words in the text according to an existing dictionary comprised by human beings. In this sense, it is purely a verysimple semantic engine for categorization. In quantitative narrative analysis (e.g., Franzosi, De Fazio, and Vicari, 2012), as another example, the text is converted by human beings into propositions and the emerging network is analyzed for finding general and hence purely structural characteristics of the network. The above methodology analyzes both structural regularities that exist in between the macro and the micro level of the text (i.e., at the *mesoscopic* level) and identifies their complementary semantic content. This methodology has been successfully applied to the analysis of group dynamics and served as the basis for a novel and powerful methodology for Cultural Intelligence Analysis (CULINT) (Livshits, Howard, and Neuman, 2012).

Results of the Motifs' Analysis

We applied the above methodology to Morsi's speech through the FANMODE[5] (Wernicke and Rasche, 2006) software. This enabled the identification of 3-node motifs. The motifs identified by FANMODE appear in the next table where the identification that appears in the left column signifies the specific sub-graph, followed by the visual representation of the motif, its frequency, and ending with the Z-score and p-value of the motifs' statistical significance. For instance, we can see that motif number 46 has 0.62% frequency in the graph and that the probability that it appears by chance, given the null hypothesis, is extremely low ($z = 26, p < .001$).

ID	Adj-Matrix	Frequency [Original]	Mean-Freq [Random]	Standard-Dev [Random]	Z-Score	p-Value
46		0.62303%	0.40154%	8.514e-005	26.014	0
166		0.72697%	0.48634%	9.9061e-005	24.291	0
38		10.712%	9.2629%	0.00074049	19.572	0
238		0.01664%	0.00089439%	1.394e-005	11.295	0

After identifying the motifs and by automatically identifying the words populating most of the motifs' edges/nodes, three words emerge: *Rights*, *Principles*, and *Vision*. What is the meaning of these three "keywords"?

Getting back into the text, we find that when talking about *Vision*, Morsi is mainly talking about the vision of Egypt, the new Egypt, the vision of Egyptian national security, or the Egyptian people, and the vision of a steady democratic transfer.

When talking about Rights, Morsi mainly refers to the rights of the Palestinians, and when talking about *Principles*, we find keywords such as "law", "justice", and "righteousness."

The big question is "So what?" Here we move to the interpretation phase, which is purely the responsibility of the analyst. Based on the motifs' analysis, our own interpretation and hypothesis was that in between the lines Morsi is a man of principles and justice, committed to the grand vision of a Muslim nation, and one who takes control over the Palestinian issue. However, the important issue is what might be said, psychologically, about a person who is talking about Rights, Principles and Vision.

Based on the above thematic analysis, we have raised the hypothesis that Morsi's speech reflects what psychoanalysis has traditionally described as an "anal character," or what may be described today as Obsessive Compulsive Personality (for a recent review, see Haslam, 2011). In other words, we have used the thematic and purely automatic analysis of the speech in order to produce the hypothesis that will be further used for the analysis. The hypothesis, however, is firmly grounded in our thematic analysis and was unanimously accepted by two of the authors who have a very strong background in psychological diagnosis and profiling, and by a third expert who is not a co-author but an expert in profiling. It must be emphasized again that the thematic analysis does not give us the answer regarding who Morsi is but just extracts from the text the relevant, empirically grounded themes that may be used for generating the relevant hypothesis concerning Morsi's personality. In addition, we must emphasize that our reference to the psychodynamic concept of the "anal character" does not oblige us to the psychoanalytic theory, as the concept of Obsessive-Compulsive Personality Disorder is widely accepted in various diagnostic manuals.

As suggested by Millon et al. (2012), this type of personality seeks opportunity to prove himself as selflessly committed to the "greater cause." Characterized by the DSM IV (http://www.biologicalunhappiness.com/DSM-OCPD.htm), it is a rigid and dogmatic personality, occupied with details, and presents an overly conscientious and scrupulous attitude toward matters of morality and values.

This personality type seems to fit Morsi perfectly, the *engineer* who led the religious organization of the Muslim Brothers. The second major phase of our methodology involves the test of our research hypothesis through another novel methodology.

Diagnosing Personality Traits through Automatic Personality Analysis

To test the hypothesis that traits or more accurately *themes* of OCP appear in the speech, we have used a novel methodology of personality analysis through text analysis (Neuman and Cohen, 2014). This methodology has been developed and validated against thousands of texts written by human subjects (Neuman and Cohen, 2014).

We surmised that, if the features of OCP are evident in the speech, then the document should be semantically similar to the "vector" of words characterizing the official DSM's definition of OCP. To explain this point, let us first introduce the idea of "vectorial semantics" (Turney and Pantel, 2010) and the way it is used in the field of Natural Language Processing (NLP) to measure the similarity between texts.

The basic idea underlying vectorial semantics models is that statistical patterns of human word usage can be used to "figure out what people mean." If units of text have similar vectors then "they tend to have similar meanings" (Turney and Pantel, 2010, p. 146 and p. 153 respectively). For instance, if we would like to understand the meaning of being "depressed," we can examine the adjectives co-located with it in texts. Using a corpus of the English language we find that the two adjectives most co-located with "depressed" are: Anxious (FREQ = 1) and Sad (FREQ = 6). Now, we can consider these two words as dimensions defining the semantic space of "depressed." In this semantic space, the meaning of "depressed" is represented as a point, or a vector, in a two-dimensional space defined by "anxious" and "sad." See the next figure where the X-axis signifies the dimension of "Anxious" and the Y-axis signifies the dimension of "Sad." Next we may find that "Lonely" and "Suicidal" are two other words residing in this space as follows:

Suicidal	Lonely	Depressed	
3	3	1	Anxious
2	3	6	Sad

Table 1.

The next figure is a graphical representation of the above table where the dashed line represents "Depressed" and the bold line "Suicidal":

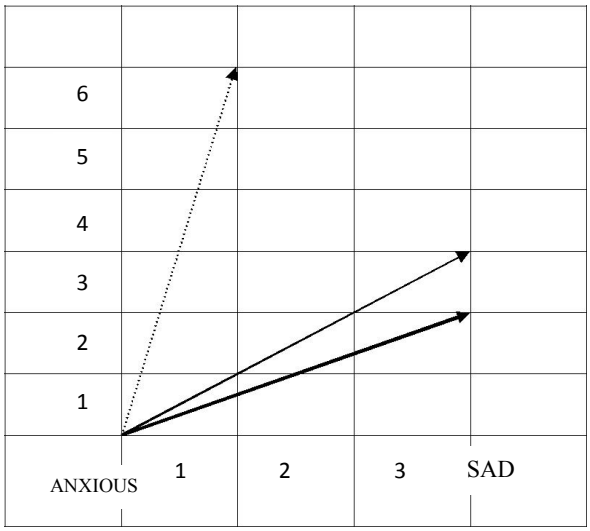


Figure 1. A Graphical Representation of Table 1

We can see that "Suicidal" is closer, and therefore more similar, to "Lonely" than to "Depressed." In reality the situation is much more complex as each word is accompanied by a very large number of other words. However, the basic idea of representing the meaning of words as a vector in a high-dimensional semantic space has been proven to be extremely powerful, specifically for measuring the similarity between texts. For example, let us assume that we would like to determine the extent to which a certain sentence expresses depression (e.g., I feel hopeless). The vectorial semantics approach would propose to us to represent the words comprising the sentence as a vector in a high-dimensional semantic space and to measure the distance between the vector of these words and the vector of the word "depressed." This is the logic of vectorial semantics in a nutshell.

Now, let us return to the task of testing the hypothesis that Morsi's speech expresses characteristics of OCP. The logic of our approach is that expert psychologists and psychiatrists can characterize personality types by using a minimal set of words that grasp the essence of the disorder. For instance, while describing Paranoid Personality (PP), the adjective "suspicious" emerges as a prototypical keyword of the disorder. Using a set of adjectives that describe a certain PP, we may automatically analyze the dimensions of a given text by simply representing it as a vector and measuring its similarity with the vector formed from the words that characterize the PP. In our case, we have identified a set of words describing OCP and measure the similarity of the vector comprised of these words to the vector produced from Morsi's speech.

However, a similarity score in itself is meaningless. It is just a number and to test the hypothesis that Morsi's speech expresses characteristics of OCP we have also produced the following competing hypothesis. As many leaders are suspected to exhibit narcissistic features (e.g., Post, 1986), we tested the competing hypothesis that Morsi's speech is semantically similar to the vector of words characterizing Narcissistic Personality (NP) features.

The hypothesis testing procedure was as follows:

1. Defining the vectors of OCP and NP:

   The OCP and NP vectors were identified by choosing the adjectives (or turning into adjectives) keywords of the disorder DSM's definition and Millon's description.

   The OCP vector is comprised of the following words: "rigid", "stubborn", "over-conscientious", "inflexible", "organized", "scrupulous", "perfectionist", "hard worker", "productive", "miserly."

   The NP vector is comprised of the following words: "special", "unique", "selfish", "envious", "arrogant", "contemptuous", "brilliant", "attractive", "talented", "powerful", "beautiful", "admirable", "exploitative", "haughty."

2. Preprocessing the speech:

   We processed the speech by using a Part of Speech (POS) Tagger and identifying only nouns, verbs, adverbs and adjectives. Stop-words (e.g., that) have been removed from the analysis.

3. Computing the similarity between the speech and each of the personality vectors:

In this study we use a specific type of vectorial semantics analysis: Latent Semantic Analysis (Landauer, 2006; Landauer, Foltz, and Laham, 1998; Landauer et al., 2011) and measured the similarity between the vector of words produced from the speech and the vectors of words produced from the OCP and NP definition by using Boulder's LSA engine (http://lsa.colorado.edu/) with topic space "Psychology Myers 5th ed." (400 factors), and by using document-to-document comparison.

RESULTS

In line with our hypothesis, it was found that the vector of the speech was much closer to the OCP vector (0.09) than to the NP vector (0.02). This finding clearly supports our hypothesis. When analyzing the similarity with regard to the different part-of-speech categories, the highest similarity was between the OCP vector and the speech's verbs (0.11), nouns (0.09), and adjectives (0.07). The similarity of the NP vector with the verbs and nouns was 0.

In order to have a more specific "diagnosis," we analyzed the speech's similarity with the vectors of Millon's five sub-types of compulsive personality (Millon et al., 2012). The vectors of the five sub-types are as follows:

A. CONSCIENTIOUS: Rule-bound, duty-bound, earnest, hard worker, meticulous, indecisive, inflexible

B. BUREAUCRATIC: Officious, high-handed, unimaginative, intrusive, nosy, petty-minded, meddlesome, trifling, closed-minded

C. PURITANICAL: Austere, self-righteous, bigoted, dogmatic, zealous, uncompromising, indignant, judgmental

D. PARSIMONIOUS: Miserly, tight-fisted, ungiving, hoarding, unsharing

E. BEDEVILED: Ambivalent, tormented, muddled, indecisive, befuddled, confused, frustrated, obsessed

It was found that the text was mostly similar to the *Bureaucratic* and the *Puritan* subtypes (0.09 and 0.10 respectively). Zero or very low similarity was foundwith the other subtypes. This finding has not been validated against human judgment and its meaning is elaborated in the discussion.

DISCUSSION

Based on the above findings, we can evaluate Morsi's personality, at least as reflected in the specific speech, as consistent with OCP features, reflecting a *Bureaucratic-Puritan leader*. As suggested by Millon, one of the main pitfalls of the OCP is the failure to see the big picture. This suggestion seems to contradict Morsi's themes of vision, rights, and principles. However, in retrospect this pitfall clearly explains Morsi's failure in gaining the support of his people[6] and solving the deep problems of Egyptian society. Specifically, Morsi's ignorance of the socio-political situation in Egypt, and his focus on the Bureaucrattic-Puritanic issues of the new regime, led him astray from the real challenges faced by the Egyptian people, challenges which ultimately brought the people back to Tahrir Square. As suggested by McWilliams (2011, 2012), it is better to see personality in terms of *themes and tensions* rather than in terms of traits. Our thematic analysis and the translation of NP features in "holistic" vectors allow us to analyze the personality emerging from the text in terms of themes and tensions as the dominance of the OCP theme also indicates the tension over control. Our methodology has no pretension to substitute the intuition, expertise, and depth of the human profiler but to provide him or her with powerful tools to identify themes in the text, themes that may scaffold the process of hypothesis generation. This process in its turn may be scientifically and empirically conducted by translating the way human experts describe personality types/disorders into a solid and measurable dimension that can used for analyzing the text and testing the expert's hypothesis.

In sum, by applying (1) motif analysis combined with (2) a vectorial semantics approach to personality analysis and (3) a close psychological interpretation of the text, we may gain a better understanding of the speech and the leader. The lesson we learn from the specific analysis of Morsi's speech is that, on the surface, Morsi paid lip service to public opinion, both international and Arab. He justified his legitimacy as the elected leader, paid his debt to the Palestinian issue, and presented his new and promising vision for Egypt.

Nevertheless, in between the lines, we are observing a leader who was occupied with vision, principles, and rights. The speech, whether written by Morsi himself or—more plausibly—by Morsi and his close circle, represents strong features of Obsessive-Compulsive Personality Disorder, characterizing a Puritan who is obliged to *rigid moral norms* of his religious community the same as he is obliged to the *bureaucracy of his Muslim Brothers organization*. It would be very difficult to expect such a leader to employ transformative actions consistent with the needs of Egyptian society. For instance, the personality dynamics emerging from our analysis appears to be prohibitive in terms of propelling Morsi to include the large "secular" opposition, or to take care of the specific problems that bother the common Egyptian, beyond the grand vision of a Muslim nation.

In retrospect, this analysis explains the failure of Morsi and his tragic end, at least so far. Although this article focuses on a single case study, it presents a novel and powerful methodology that should be seriously considered for a

variety of aims. This methodology is currently in progress and will hopefully be developed in the very near future.

Notes

[1]http://en.wikipedia.org/wiki/Mohamed_Morsi, http://www.biography.com/people/mohamed-morsi-20862695.
[2]http://www.upi.com/Top_News/Special/2012/09/24/Morsi-to-address-United-Nations/UPI-34221348505944/ http://news.sky.com/story/988986/egypts-morsi-set-to-star-at-un-assembly. http://mondoweiss.net/2012/09/new-york-times-covers-morsis-un-speech-without-a-word-on-its-main-theme-palestine.html. http://www.newsmax.com/TawfikHamid/Analysis-Morsi-UN-Speech/2012/09/27/id/457842.
[3]http://www.telegraph.co.uk/news/worldnews/africaandindianocean/egypt/9697347/Mohamm ed-Morsi-grants-himself-sweeping-new-powers-in-wake-of-Gaza.html
[4] http://www.timesofisrael.com/anti-islam-movie-funded-by-100-jewish-donors-producer-tells-wall-street-journal/.
[5] http://theinf1.informatik.uni-jena.de/~wernicke/motifs/.
[6] See: http://morsimeter.com/media/docs/MorsiMeter-100DaysReport-en.pdf.

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From Crowds to Crystal Balls:
Hybrid Analytic Methods for Anticipatory Intelligence

by Melonie K. Richey

INTRODUCTION

Every professional working in the U.S. Intelligence Community (IC) today would likely agree that the discipline of intelligence analysis is not what it was two decades ago. The IC in which most intelligence professionals grew up operated within a fundamentally different external environment—a bipolar world order marked by a unitary, identifiable threat to U.S. national security and addressed by an explicit national grand strategy. Today, that bipolar world is increasingly multipolar with global influence distributed among and across many emerging powers. While the single, identifiable threat to U.S. national security since the events of 9/11 has largely been considered international terrorism, this statement would erroneously omit other emerging threats from the intelligence equation: cyber-attacks, espionage, pandemics, and WMD proliferation, to name just a few from Director of National Intelligence (DNI) James Clapper's 2014 Worldwide Threat Assessment.[1] Finally, critics argue that the United States has not benefited from a unified and expressly articulated grand strategy since containment during the Cold War era.[2] While this final statement is widely disputed, some insist that the U.S. over the past two decades has merely leveraged its position as the global exporter of democracy in substitution for a grand strategy.[3]

All these shifts in the external environment from world order to homeland threat to strategic response invariably alter the calculus for national defense and, thus, the work of the intelligence professional. Intelligence requirements in the old world order were designed to uncover secrets—e.g., *how many nuclear weapons is Russia likely to possess?* Intelligence requirements in today's world focus on uncovering mysteries—e.g., *what will happen to Syria in the event that Bashar al-Assad is removed from power?* An IC making the shift from stealing secrets to predicting outcomes—recently coined "anticipatory intelligence"—is an IC that is asking fundamentally different questions of its analysts. This, coupled with evolving technological capabilities ranging anywhere from big data analytics to quantum computing, necessitates novel analytic approaches that more closely resemble the work of Nate Silver than those of Nate Hale. Beyond novel analytic approaches is the demand for new capabilities to make sense of today's fast-paced and increasingly complex world, as well as to operate effectively in the newest and perhaps most vexing domain for today's national security professionals: cyberspace.

Arguably, the most pervasive word within the intelligence discipline today is "data."

Arguably, the most pervasive word within the intelligence discipline today is "data." Unfortunately for the analyst, a synonym for "data" is "noise." The problem that then confronts analysts in today's IC is how to turn data into anticipation and future-oriented left-of-boom analytics, thereby effectively extracting the signal from the noise.[4] The purpose of this article is to introduce a hybrid analytic technique of 21st century analytic practice and to demonstrate its application to evolving intelligence requirements.

Analytic techniques aside, there are thousands of analysts worldwide churning out reams of finished intelligence daily. Beyond countless RSS (Rich Site Summary) Feeds and subscriptions to *Foreign Affairs*, *The Economist,* and all the major dailies, it is impossible to ingest the massive amounts of polished analytic reporting the Internet has successfully made available to the average citizen. Therein lies the problem of consumption. The hybrid analytic method discussed in this article seeks to address the issue of consumption by aggregating the voices of experts and quantifying expert judgment. The most effective version of the IC will be the one that puts source and methods, like those discussed in this article, into the hands of everyday analysts. In a world where simple statistics can be done in Excel and open-source tools abound—from content analysis to network analysis to social media data mining—advanced analytic techniques are no longer just for econometricians and social scientists.

HYBRID METHODS

While there are numerous proposed answers to the evolving complexity of today's intelligence requirements, the development of new analytic methods and models invariably exists among them. For example, ensemble modeling spans the breadth of agent-based, game-theoretic, and system-dynamic models. Ensemble forecasting, or "stochastic" forecasting, is the most prevalent quantitative method under conditions of uncertainty, the tenets of which underlie hybrid, ensemble, and mixed methods of social science and analytic inquiry.[5] The purpose of the following discussion, however, is not to outline advanced models implemented by computational social scientists; rather, the following section aims to describe an instance in which everyday analysts borrowed analytic techniques from more advanced modeling practices and applied them in conjunction with open-source tools available to virtually everyone.

CROWDSOURCING FINISHED INTELLIGENCE

Crowdsourcing is relatively new to the intelligence discipline, yet programs such as the Intelligence Advanced Research Project Activity's (IARPA's) Aggregative Contingent Estimation (ACE) program have yielded levels of forecasting accuracy from everyday analysts that surpass even the forecasts of the most senior experts.[6] Derivations of this program, such as Phillip Tetlock's Good Judgment Project,[7] have led to seminal conclusions regarding what qualities and characteristics make an analyst a better or worse forecaster.[8] Now that the wisdom-of-crowds concept has paved the road for the introduction of prediction markets into the intelligence domain,[9] the next logical step is to refine the demographic of the crowd. This may seem contradictory as any practitioner well-versed in the theory of prediction markets knows that one of the most crucial prerequisites for the accuracy of market forecasts is the diversity of the market or crowd.[10] One caveat is that the crowd must be equally as diverse as it is generally well-informed; hence, that is why Phillip Tetlock pre-screens Good Judgment forecasters for fox-like characteristics before accepting their predictions. This is the same logic that underlies the Analysis of Competing Hypotheses (ACH) in mitigating the effects of confirmation bias. The more information and perspectives an analyst gathers, the less biased the finished intelligence.[11] This same concept also applies to brainstorming techniques; the more diverse the group, the less susceptible it is to groupthink.

All told, group diversity is inarguably integral to accurate forecasts and unbiased decisions; that said, there is a surplus of finished intelligence in the world produced from sources as disparate as they are qualified. Whether viewed from the perspective of volume, variety, or veracity, the analyst faces a problem of consumption. Think about what the U.S. IC alone produces weekly on any one issue, country, region, or target. With 17 intelligence agencies (counting ODNI) and nine unified Combatant Commands (COCOMs), there is certain to be overlap in intelligence production and forecasting when it comes to any one specific target such as Turkey, arguably one of the most pivotal nation-states in modern geopolitics. This does not include other analytic entities such as STRATFOR, Eurasia Group, or the Soufan Group; academic research institutions such as the Washington Institute for Near East Policy (WINEP) and universities; or analytic media producers and aggregators such as *IHS Jane's*, Thompson Reuters, *The Economist*'s Intelligence Unit, or LexisNexis. This list is still far from comprehensive, failing to consider a number of other foreign sources such as Oxford Analytica, The Hague's Center for Strategic Studies (CSS), Intelligence Online, the EU Intelligence Analysis Centre (EU INTCEN), etc.

The more information and perspectives an analyst gathers, the less biased the finished intelligence. This same concept also applies to brainstorming techniques; the more diverse the group, the less susceptible it is to groupthink.

The message here is not that crowdsourcing is inaccurate nor that an excess of intelligence production is harmful; rather, the question becomes how can analysts use crowdsourcing techniques to remedy the all-source and open-source analysis overdose? The resulting method provides a way to quantify expert opinion and aggregate prediction outcomes from analysis produced by those who should know best: experts in various disciplines and domains who have spent time on target producing finished analysis. While it is likely that the wisdom of crowds will provide strategic insight and depth into Turkey's geospatial future, it would also be beneficial to know what Soner Cagaptay (WINEP), Eliot Higgins (Brown Moses Blog), Robert Kaplan (STRATFOR), Aaron Stein (Turkey Wonk Blog), and Omer Taspinar (Brookings Institution) say on the matter. In other words, what happens if we redefine the *crowd* in *crowdsource* to include only experts who are producing analytic judgments on a target issue?

By collecting the finished intelligence of Turkish experts—not only their predictions on resolvable questions, but also their analytic products in general—and submitting this corpus to quick and dirty content analysis techniques, we

Figure 1. **Predictions from the finished intelligence products of Turkish experts worldwide. The weight of the link indicates number of times an expert made the prediction. The expert consensus is that Turkey is highly unlikely to intervene militarily in Syria and that Turkey is likely to remain unstable during the next 24 months for political reasons pertaining to Erdogan's presidency. October 2014.**

can gain insight into aggregate expert analysis on potential outcomes for Turkey's future, especially with regard to Syria (see Figure 1). The percentages in Figure 1 break down 80 total predictive statements made in 14 total documents regarding Turkey, sourced from selected experts in October 2014. Of the 80 statements containing predictive language, 51 percent of them were truly predictive in nature, 36.5 percent were statements of fact employing predictive language (such as "will" or "will not") or quotes, and the remaining 12.5 percent were unable to be categorized.[12]

Of the 51 percent that were true predictions (a total of 41 predictions), the topics varied (represented in green in Figure 1). Ten percent pertained to Turkey's regional geopolitics such as its relations with the EU or Iraqi Kurdistan. Seven percent pertained specifically to Erdogan's politics. The two largest topical areas, however, were Turkish military intervention in Syria (note this is different than other types of intervention) and Turkish state stability. Statements such as:

"*This means that Turkey is unlikely to intervene in Kobane or Syria, unless it can be guaranteed that the anti-ISIL operation is expanded to include regime targets.*"[13]

occupied 17 percent of the predictive language. Predictions regarding state stability were even more revealing in that analysts not only indicated Turkey was unlikely to maintain stability but they also indicated why (mostly political reasons including Erdogan's presidency and Kurdish regional instability). Statements such as:

"*The AKP is highly unlikely to gain Kurdish support in next year's elections, increasing the risk of political turbulence within Turkey.*"[14]

and

"*But Erdogan's self-aggrandizing vision will likely run into obstacles; the normal nature of Turkish politics is, at some point, bound to assert itself, to the detriment of Erdogan's ambition to be its exclusive executioner.*"[15]

were pervasive throughout.

With a relatively small sample size (14 articles is hardly considered sufficient), this is a very preliminary example of running content analysis techniques on crowdsourced finished intelligence, but the utility is clear. Could regular crowdsourcing techniques have produced the same results?

Possibly. However, this method requires no prediction market, no live participation by analysts, no advanced computational analytics, and only a few hours of time.

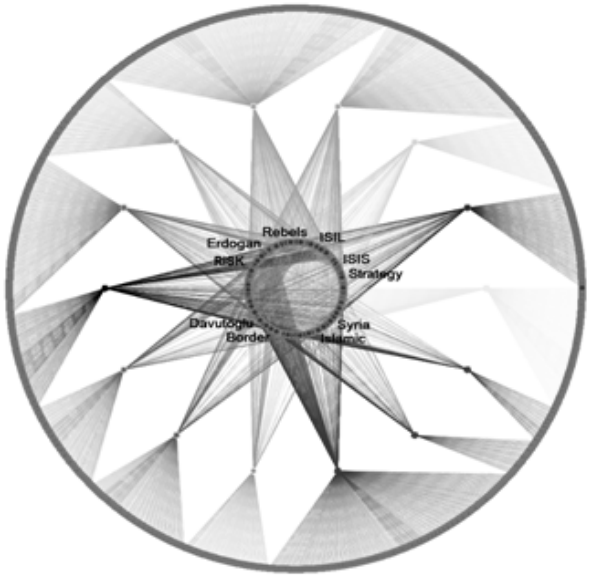

Figure 2. **Topics of conversation shared among multiple sources.**

The first step is to establish a source list of articles authored by experts. Compiled manually, this source list focused on Turkey as a target country, but could have just as easily focused on Ebola, Iran's nuclear program, the rising Brazilian economy, or Ukraine. Articles were mined in plain text format from the Internet using Carnegie Mellon's AutoMap software, an open-source content analysis tool.[16] After cleaning, parsing, and part-of-speech (POS) tagging of the text, a thesaurus, concept list, and semantic network[17] were extracted and primed for importation into *ORA, an open-source network analysis tool.[18] This provided a general sense of which concepts were most germane to the expert discussion (see Figure 2). Each color in Figure 2 represents a source and each node represents an article (for example, all three articles sourced from *IHS Jane's* are represented in red). The outer ring of blue nodes represents all the concepts that appear in only one article whereas the inner ring of blue nodes represents concepts that are shared by multiple articles; therefore, the inner ring of concept nodes are the topics that all the experts are discussing. It is clear, from this level of analysis, that Turkish experts are regularly discussing ISIS, regional borders, strategy, Turkish President Recep Tayyip Erdogan, and Prime Minister Ahmet Davutoglu, none of which is out of the ordinary for Turkish analysts. Zooming in on any one node gives an indication of what experts discuss within that particular concept area.

For example, zooming in on the concept *groups* reveals that experts talk about Kurdish, rebel, militant, extremist, terrorist, opposition, radical, and al-Qaeda-linked groups within the surveyed articles (see Figure 3).

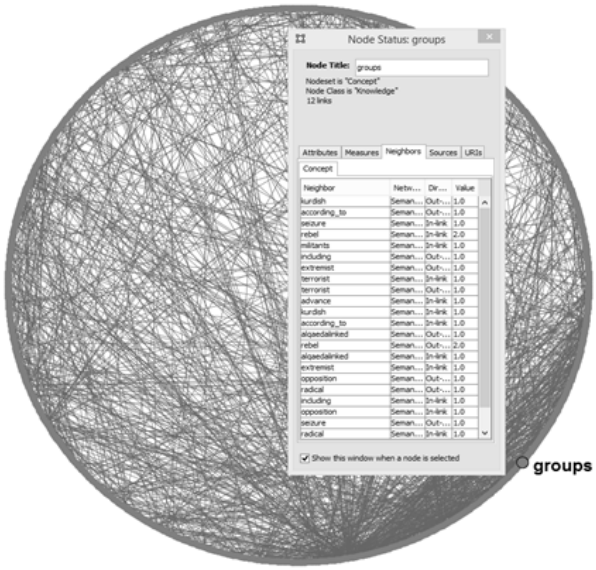

Figure 3. Zoomed analysis of concept node *groups* and resulting co-occurrence concepts within the 14 analytic documents analyzed.

Beyond individual concepts, it is also helpful to address concept groups. By highlighting all concept nodes that contribute to a concept group (such as *risk*, *risks*, and *risky* to analyze the topic of *risk* in general), it is possible to understand the structure of the expert conversation surrounding risk in the Turkish arena by analyzing the co-occurrence concepts (see Figure 4). Note that the five most prominent co-occurrence concepts to *risk* are *strategy*, *daily*, *country*, *terrorism*, and *will*. This suggests that Turkish experts dedicated a large portion of the conversation to risky strategies (closer analysis of the *risk* concept network might reveal whose: Turkey's, ISIL's, Bashar al-Assad's, or the Free Syrian Army's), daily risk and risks in general (terrorism likely posing a great risk for the country, both within Syria, foreign fighters returning home to Turkey, foreign fighters transiting the Turkish border or, worse, operating from within Turkish borders). The outlier, however, is the word *will*. Given that *will*, in some instances, constitutes predictive language, it is possible that experts are making predictions regarding risk to Turkey. While subsequent analysis demonstrated that experts were not making predictions specifically about risk, risk proved an integral concept within the explanations surrounding expert consensus on likely political instability in Turkey. The risky strategy turned out to be Erdogan's political treatment of the

Kurds whereas the greatest risks to the country were, indeed, foreign fighters involved in the Syrian civil war. The co-occurrence of *risks* and *will* tied directly into predictions of instability, with *risky strategy* and *terrorism risks* serving as conceptual referents.

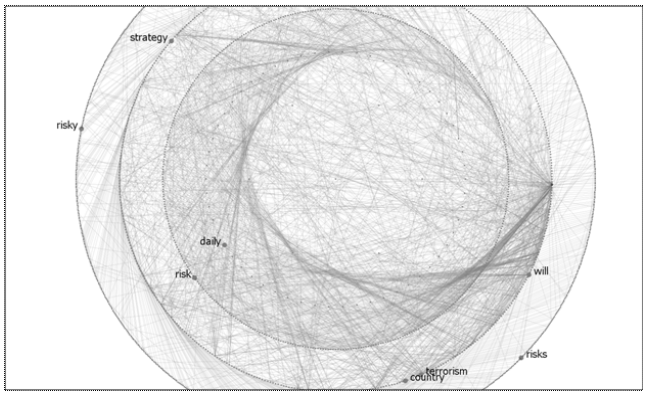

Figure 4. **Risk concept map within semantic network of 14 analytic documents analyzed.**

The content analysis up to this point, however, is largely contextual, providing the analyst with a comprehensive understanding of all associated components of the expert conversation. Subsequent to orientation within the semantic space of expert dialogue, analysis must then be concentrated on predictive and anticipatory statements. To achieve this, the texts were mined for probabilistic language such as *likely* (which would also pick up *unlikely*), *will*, *possib* (to locate instances of *possibly* and *possible*), *probab* (to locate instances of *probably* and *probable*), *suggest*, *indicate*, and *may*, among others. The mining tool extracted the entire sentence in which the probabilistic language was embedded to provide the analyst with sufficient context to interpret the phrase. Sentences were then manually sorted into one of three categories: *prediction*, *statement of fact or quote of external source*, and *uncategorizable or irrelevant*. Sentences were further sorted into topical categories such as *geopolitics*, *Erdogan's politics*, *military intervention in Syria*, or *state stability*. Upon categorizing all sentences tagged with predictive language, analysis provided the percentages discussed in the beginning of this section.

While this hybrid method is resource-light and all the analytic legwork is done in the manual categorization, the analysis derived from this method is not without its flaws. What analysts can derive from these expert predictions is limited to, of course, what the experts decide to predict. This method suffers from the same bias as big data: representativeness bias, otherwise known as the lack of signal emanating from certain areas.[19] In other words, when crowdsourcing expert opinions, there is no way to account for the significance of silence on a particular topic or by a particular author. Analysts cannot crowdsource expert predictions on Iran's nuclear program if experts are not making those predictions at the outset. With this method, however, we can use the inherent representativeness bias as gap analysis. Within this example, while experts predicted a lot about Turkey's political instability, there were no predictions addressing homegrown terrorism from Turkish fighters in Syria as the genesis for potential social instability. This could be a product of the expert analysis selected to review or it could signify an intelligence gap. The gaps may seem a bit specific in this context, but for open-source analysts attempting to manage global coverage and collection, identifying intelligence gaps in terms of regions, nation-states, or issues would likely cast the collection bias in a more helpful than harmful light.

CONCLUSION

The utility of these methods lies in the hybrid approach. By combining various Structured Analytic Techniques (SATs) into hybrid methods, analysts can derive new insight into an increasingly unfamiliar global arena. Using content and sentiment analysis to analyze documents is not unfamiliar to the intelligence discipline, nor is crowdsourcing. However, using content analysis on crowdsourced finished intelligence products addresses multiple challenges within the modern-day IC: quantifying expert opinion (and doing so with pre-existing analytic products) and aggregating the content of finished intelligence into a more consumable format. Not only is this process fairly automated requiring little analytic input, but it has the potential to reveal key insight circulating throughout the IC that may go unnoticed by some analysts.

Equally as important as what experts are saying is what they are not saying. Returning to the issue of bias inherent in the collection sample, lack of dialogue surrounding a specific topic or region has the potential to reveal gaps in analytic discourse and intelligence requirements. Routine collection targeting worldwide regions could reveal, for example, an analysis deficit in India, Indonesia, or Kazakhstan. It would also provide insight into where analysts and thought leaders are focusing their time, attention, and analytic resources.

Ultimately, the purpose of this article is not to imply that traditional analytic methods are obsolete, nor is it to advocate that newer methods are infallible. An increasingly complex operational space requires analysts to envision new ways of conceptualizing the intricate problems of the international environment. More important than replacing traditional methods is combining these methods to include techniques reflective of new technological capabilities to improve anticipatory analytics.

Notes

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[3] Ikenberry, G. John, "Why Export Democracy?" *The Wilson Quarterly* (1999): 56-65.

[4] Silver, Nate, "The signal and the noise," *The Wilson Quarterly* (2013).

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[9] Surowiecki, James, *The Wisdom of Crowds*, Random House LLC, 2005.

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[12] These statements were either irrelevant or unintelligible due to mistranslation as some of the documents were automatically machine-translated from the source language into English.

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[16] http://www.casos.cs.cmu.edu/projects/automap/.

[17] The ontology used for the content analysis was self-referential, derived from the sample itself through AutoMap's internal thesaurus-generation tools.

[18] http://www.casos.cs.cmu.edu/projects/ora/.

[19] Crawford, Kate, "The hidden biases in in big data," *HBR Blog Network* 1 (2013).

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The U.S. National Security Pivot to Asia:
A Socio-Cultural Approach to the Western Pacific

by LT (USN) Jason K. Gregoire

The crucial differences which distinguish human societies and human beings are not biological. They are cultural.

—Ruth Benedict

The U.S. announcement of a strategic "pivot" to Asia in October 2011, described as a focused rebalance of the U.S. National Security Strategy (NSS) to the rising influence of China, has enhanced U.S. efforts to prioritize building a stable and cooperative relationship with the People's Republic of China (PRC). This keystone NSS objective highlights the critical importance of the western Pacific Ocean commons as an economic and national security seam between the PRC and U.S. national interests. Within the western Pacific, each country's national security policy objectives are represented by their navies: the U.S. Pacific Fleet (PACFLT) and the People's Liberation Army (PLA) Navy (PLAN). While national diplomacy may be the preferred instrument of choice in carving the future U.S.-China relationship, interactions between the countries' respective navies will hold the greatest opportunity for both mutually-beneficial practiced security collaboration and avoiding catastrophic strategic miscalculation. It is due to this reality that the U.S., to achieve the NSS objective of re-establishing a strategic focus on the western Pacific and building a stable and cooperative relationship with the PRC, will need to develop a deep understanding of the PLAN.

More than just identifying the military order of battle, to achieve an effective and enduring relationship with China, the U.S. will need to enter the negotiations and national dialogues armed with a deep understanding of both the PLAN's and China's rich history, holistic culture, and complex society. To acquire this analytical depth regarding the PLAN, U.S. strategists will need to grasp the sociological and cultural underpinnings that will enable the insights necessary to bridge cultural gaps, mollify issues of contention, and negotiate a sustainable security partnership within the western Pacific. The U.S. socio-cultural analytical framework to meet the U.S. NSS's "pivot" to Asia and enhancement of the U.S.-China relationship should aim to broadly answer who and what is the PLAN, how does it form strategy, and what are its national security objectives. Understood through the concept of functionalism, culture (i.e., the beliefs, customs, practices, and social behavior of a particular nation or people) ascribes important functional purposes to groups. Social and cultural structures are often organized into systems of purposeful activities that define social norms, incentivize social and functional ideals, and reinforce authority structures. These structures shape and influence organizational systems of control, organize group resources, and even frame collective patterns of behavior and thought. Through an understanding of the socio-cultural indicators such as the religion, political and ethnic affiliations, and collective history and values and beliefs of a group, U.S. strategists will be better enabled to strengthen the nation's role and position in the Asia-Pacific region through establishing partnerships with the PLAN, and therefore with greater China. To begin, the socio-cultural analytical framework addresses the question: Who and what is the PLAN?

WHO AND WHAT IS THE PLAN?

The CCP

In a functionalistic social-cultural context, groups are defined through their history, collective identity, organizational structures, values and beliefs, and group characteristics (demographics). These systems and structures shape intra-group behavior and guide how in-groups interact with out-groups. To begin to understand who and what the PLAN is, metaphorically, the analysis should start with peeling back the onion to its core. For the PLAN, in peeling back its layers beyond its agency to the PLA, China's unified military organization, the core of the PLAN, like the PRC, is the Chinese Communist Party (CCP).

In characterizing the PLAN it is critically important to understand fundamentally the unique relationship between the Chinese military apparatus and the CCP. To put China in proper context, U.S. strategists should approach China not as a country comparable to the Western nations of the world, but instead as a political party, the CCP, with a country. The CCP is the overwhelming centrality in all institutions that comprise what the outside world labels as the PRC. A telling example to place into context the

influence of the CCP in China is to just factor its role in placing leadership within organizations in China. As a parallel, a similar department in the U.S. would oversee the appointment of the entire U.S. Cabinet; state governors and their deputies; the mayors of major cities; the heads of all federal regulatory agencies; the chief executives of GE, Exxon-Mobil, Wal-Mart, and about fifty of the remaining largest U.S. companies; the justices of the Supreme Court; the editors of *The New York Times*, *The Wall Street Journal*, and *The Washington Post*; the bosses of the TV networks and the cable stations; the presidents of Yale and Harvard and other big universities; and the heads of think-tanks such as the Brookings Institution and the Heritage Foundation.[1] In this context, the PLA is best described as a Party-Army, which maintains direct loyalty to the CCP, not to the PRC government. All forces within the PLA are controlled by, and pledge allegiance to, the CCP in analogous fashion to the U.S. military's control by civilian authority and its allegiance to the U.S. Constitution. This relationship between the PLAN and the CCP not only directly shapes the PLAN's mission, institutions, and practices that define it as an organization, but also defines the beliefs, symbols, heroes, and ethos of the PLAN.[2]

While a low percentage of PLAN conscripts are CCP members, a significant majority of officers are...

Swearing allegiance to the CCP is required for all PLA members, including non-party members.[3] For officers within the PLA, party standing is often as important or more so than an officer's long-term promotion position and rank than is merit. The domination of the CCP over the PLAN shapes roles, responsibilities, and relationships. Additionally, while the PLAN has traditional military ranks, it also has military grades. Whereas within the U.S. military system an individual's rank determines his/her relative authority and responsibility, within the PLA authority system it is often the individual's grade, not rank, of where that individual fits within the hierarchy of the CCP that determines his/her relative authority and responsibility in the PLA. Political officers and military officers hold authority within units, and party committees within PLAN units make planning decisions. While a low percentage of PLAN conscripts are CCP members, a significant majority of officers are, as are a growing number of PLAN non-commissioned officers (NCOs). While the above discussion is not an all-inclusive exploration of the influence the CCP exerts on the PLAN, it does highlight to U.S. strategists the fundamental need to study the CCP as a central key to unlock the nature of the PLAN in PACFLT-PLAN and U.S.-PRC security dialogue. Some of the additional influences on the nature and culture of the PLAN that this socio-cultural analytical framework considers are the same elements that shape the CCP: CCP organizational structures, values, and beliefs; China's ancient and modern history; Han ethnic centrality; and China's holistic worldview.[4]

History

A group's self-attributed origin/history has meaning and purpose. With such a long and rich history, the historic events and figures the PLAN chooses to champion and weave into its self-attributed history provides important functional purpose. It is important for U.S. strategists aiming to enable effective cooperation and the improvement of national ties through the PACFLT to understand deeply not only the history of the PLAN, but the meaning implied in its construction of its self-attributed history.

Although the naval history of China dates back two thousand years, with the earliest recorded naval events preceding the Qin Dynasty (221-206 BCE), the PLAN self-attributes its historic origin to the defecting units of the Republic of China Navy and PLA soldiers who participated in the 1950 landing operation on Hainan Island during the Chinese Civil War. Within this historic battle, employing only wooden junks (traditional, non-military ships) with makeshift mountain guns, the PLA defeated the comparatively modern ROC Navy, which possessed far technologically superior warships and naval aircraft.[5] Shortly afterward, these semi-amphibious PLA forces were consolidated, officially creating the PLAN as a branch service of the PLA. While the PLAN today operates world-class modern surface combatants and advanced attack submarines, its self-attributed origin as peasant force which overcame superior forces to achieve victory remains a fundamental tenet of the PLAN's self-identity and provides a source of pride and resilience.[6] In addition to its assigned Chinese Civil War origin, many of the same historic sources that shape the Chinese culture and the CCP also shape the PLAN's self-image, values, and ethos.[7]
The philosophy of the PLA, and therefore the PLAN, stems from a selective collection of the beliefs, teachings, and achievements of several historical figures and historic periods. For the U.S. to approach the CCP more effectively and establish parameters for enhanced security cooperation with the PLAN, whether within the western Pacific commons or through direct diplomatic exchanges, U.S. strategists must understand the CCP's and therefore the PLAN's connection to its ancient past. For the CCP and the PLAN, China's past serves not only as a source of its identity as a people, but also as a valued source of useful models and strategies to inform the present.

As a founding pillar of Chinese social culture and guiding philosophy, Confucius, and his collective teachings known as Confucianism, guides all PLA personnel customs of their

social relationships of behavior and interaction to one another and the world. It is important to recognize this difference in how the CCP and the former Communist Party of the Soviet Union evolved with regard to religion. While the former Communist Party of the Soviet Union banished all forms of religious thought and activity, even those that benefited the former Soviet society, in a reflection of its cultural pragmatism the CCP incorporated the non-conflicting aspects of Confucianism that improved social cohesion.

The Confucian principle of social and moral harmony shapes the relationship between all PLA superiors and their subordinates...

Confucianism emphasizes secularism based on the belief that human beings are improvable through personal and communal self-development with the principles of moral righteousness and obligation to the community, rather than a worship of/devotion to a deity. The Confucian principle of social and moral harmony shapes the relationship between all PLA superiors and their subordinates, which mandates that while the superior in the relationship has just power over subordinates, he bears responsibility for his subordinates' welfare as well. Confucian philosophy reinforces the idea of harmony through its teachings that true power and authority arise from moral behavior. The Confucian value of social harmony is the centerpiece that bonds units and creates unit cohesion through the "parent-child" relationship that exists between PLA officers and enlisted personnel. While Confucian thought guides PLA social behavior, values, and beliefs, for the U.S. strategists to better understand the PLA's military values and doctrinal philosophy this socio-cultural framework examines additional sources.

As a guide for strategic and operational warfare, several manuscripts written between the 7th and 4th centuries B.C., accredited to the ancient Chinese military general, strategist, and philosopher Sun Tzu of the Zhou Dynasty, which are collectively known as *The Art of War,* are championed by the PLA in much the same way the U.S. military subscribes to the writings of Carl Von Clausewitz. Sun Tzu represents to the PLA a solid example of China's long tradition of sophisticated martial achievement, and these writings are not only celebrated as ancient masterpieces but also are studied to guide principles that military strategists to this day strive to leverage and apply to modern challenges. The high regard with which Western militaries also hold these same Chinese military literary works engenders pride within the Chinese military and further strengthens its sense of stature. These efforts to apply Sun Tzu's lessons contribute to modern PLA strategy instruction and military doctrine. These edicts include: conflicts are won by morale and artful planning and strategy, the value of seeking and exploiting asymmetries in warfare, the value of intelligence (especially biographical intelligence of enemy leaders) in waging war, and a general's objective is "subduing the enemy without fighting." While later discussions within this essay further explore the concept of CCP/PLAN strategy, it is important for U.S. strategists to factor not just the salient differences in Western culture and Eastern culture military doctrine, but also the distinguishing differences between the socio-cultural aspects of the military philosophies that provide the doctrine's foundation, and how these philosophies shape U.S./PRC diplomatic or PLAN/PACFLT interactions.

An additional source of significant influence within the CCP and the PLAN is the 14th century A.D. war novel *Romance of the Three Kingdoms,* which contains stories and describes battles that represent Chinese dynastic warfare. While fictional, the stories are widely known and the stories lend themselves to proverbs for which the PLA regularly ascribes relevance to modern military thought and tactics. The stories celebrate the strong virtue of loyalty among soldiers and the righteousness of fighting for a just cause. *Romance of the Three Kingdoms* also claims that fighting for the benefit of the common people is both glorious and morally righteous, a value that remains a pillar within the PLA today.

...Mao's essays and often cited basic principles serve as the primary basis for the operational doctrine of the PLA.

Many of the more modern traditions, values, and beliefs of the branches of the PLA stem from the revolutionary history represented within the writings of Mao Zedong, most notably *On Protracted War.* While the majority of Mao's military teachings revolved around people's war and insurgency campaigns, Mao's essays and often cited basic principles serve as the primary basis for the operational doctrine of the PLA. Mao's basic principles included the idea of active defense, the merit of intense study of military science, the need for military strategy and preparation, the power of moral superiority in warfare, and the near insurmountable power of an army's enduring fighting spirit. Mao's principles shape much of the guiding strategies of modern Chinese military thought. These strategies involve using speed, surprise, and deception in luring enemies away from their strengths, using asymmetric advantages to attack an enemy's weakest position, and the strategic strength of defense. In a later section examining strategy, Mao's philosophy in how strategies are formed provides further insights to U.S. strategists.

In addition to the specific individuals and teachings discussed which provide insights into the mindsets and behaviors of the PLAN and CCP already mentioned above, China's sentiment regarding the historic period from approximately 1840 to the end of the Chinese Civil War, notoriously labeled the "Century of Humiliations," also guides the PLA. Within this period, China suffered near continuous foreign intrusion, which allegedly divided China's social harmony and ultimately led to the collapse of China's final imperial dynasty in 1911. This collapse is blamed on foreign imperialism and portrays China as a victim of outside aggression. The Chinese account of the Civil War tells of the CCP's and the Army's heroics as guardians of the proud and honorable Chinese people in righting the wrongs of China and pushing out the Japanese Imperial Army that committed brutal atrocities against the Chinese people. This "Century of Humiliations" is thought to be the basis for what many describe as a CCP and PLA suspicion of foreigners and perception that foreign nations' clandestine aim in interacting with China is to interfere with Chinese affairs, policies, or economic development.[8] China's history, key figures, and collective memory shape and guide the character of the CCP and branches of the PLA. To further enhance U.S. strategists' socio-cultural insights, it is important to examine some of the CCP's and PLA's values and beliefs.

Values and Beliefs

Values and beliefs guide behavior, norms, rule formation, and group organization. An accurate understanding of a group's values and beliefs may provide U.S. strategists an effective approach to successfully negotiate and reach effective agreements between in-groups and out-groups, namely the PACFLT and the PLAN. An especially powerful analytical approach to producing insights into a group's fundamental values and beliefs is to analyze the heroes of the group. For the PLA/PLAN, an examination of an organization's heroes and how an individual gains recognition as a hero is particularly telling of its values and beliefs. As the PLA celebrated its 80th anniversary in 2007, "honorable models" or organizational heroes were showcased. One such hero was Lei Peng (1910-1962). Lei Peng was born into a peasant family, orphaned at a young age, joined various Communist youth organizations, and later joined the PLA, working as a driver in a transportation unit. He was killed by the fall of a telephone pole knocked over by a truck he was directing while conducting his PLA duties. He is celebrated as a hero because of his selfless devotion to the party and the PLA, his diligence and achievement in ordinary positions, and his modesty and prudence.[9]

Heroism within the CCP and PLA is most commonly associated not with individual bravery or specific valiant deeds but instead with unwavering, absolute devotion to the cause and mastery of one's duties, work, family, community, and party. Here the attributes of a hero combine elements of Confucian thought and CCP Marxist-Leninist ideals. Like the CCP, honor is for the group, not the individual. Individual heroism is often seen negatively as "showing off." The real heroes are the common, faceless, low-ranking soldiers who serve as the model for all conscripts, NCOs, and officers.

Given the PLA foundation as peasant army of the common, uneducated, and impoverished people, its creation of heroes from the ranks is aligned with its composition, history, and ethos. In regard to collective values, the underlying principles highlighted from Confucius, Sun Tzu, and Mao elevate social values and moral authority as a PLA force multiplier in enhancing the PLA's strengths and empowering it to defeat technologically superior foes, as during the Chinese Civil War. This philosophy employs the common social teachings that China's society possesses superior human qualities in the moral, political, and spiritual realms. Some of these values include loyalty, patriotism, obedience, discipline, and a fighting spirit.

...Mao's fighting spirit bridges the belief that the PLA possesses the world's greatest fighting spirit because it possesses the highest moral superiority and fights for just causes (Confucianism).

Loyalty bonds the PLAN not just with the CCP but also to the PRC as a nation and to the Chinese people. By putting the interests of the people, nation, and party above personal concerns, a PLA service member demonstrates patriotism. As highlighted in the previous section discussing the role of Confucian social harmony in guiding PLA relationships, obedience is a fundamental principle and all PLA personnel are expected to follow the orders of their superiors, just as they trust their superiors will keep their best interests at heart. The self-discipline of following the rules, bearing austerity without complaint, and maintaining integrity is thought to bring balance and harmony within the ranks. This discipline in turn is essential to Mao's celebrated value of fighting spirit, which remains a cornerstone of the PLA ethos. A key element in its ability to effectively conduct warfare, Mao's fighting spirit bridges the belief that the PLA possesses the world's greatest fighting spirit because it possesses the highest moral superiority and fights for just causes (Confucianism).

Organizational Structures

As discussed above, the CCP is the critical factor in understanding the distribution of power and organizational relationships within the PLA. The CCP exercises its direct authority over the PLA through the Central Military Commission (CMC). Charged with PLA administrative matters and policy, the CMC is headed by the CCP General Secretary/PRC President and consists of the heads of the major PLA departments and the top commanders of each of the armed services. As within nearly all relevant organizations holding power within the PRC and the PLA, a primary criterion for selection to a leadership committee for one of these organizations is CCP standing. This is important for U.S. strategists to understand because, although the offices of the CMC are housed in the PRC Ministry of Defense, the principal state bureaucracy for dealing with foreign militaries, the ministry is considered subordinate to the CCP CMC.

From the CMC down, the PLA's authority structures exist as a hierarchy, with functional structures organized into horizontal systems within each level, with each level being subordinate to the level immediately above it within the PLA hierarchy. This CCP-like system exists down to tactical units. Typical PLA functional departments within each level include a staff and political, logistical, and armaments departments.

U.S. strategists should be sensitive to ethnic stereotypes within Chinese society.

While the authority/power system is designed with party committees and dependent hierarchical subordinate bureaucracies to reflect CCP ideals of equal representation and consensus, individuals can vary in power and influence within units, organizations, the PLA, the PLAN, or the CCP. In the PLA culture, there are three primary sources of secondary influence: the PLA position held, the position within the CCP, and informal relationship networks. The influence of personal networks is strongly present in the PLA as well as within greater Chinese society. In Chinese society there exists a notion of strong personal obligation between those who share a relationship. This cultural sense of community was reinforced during China's past decades under Communist rule and collective social organization. These PLA personal relationships are built under a number of different circumstances, such as PLA commanders and their former subordinates, shared experiences, and shared geographic origin. These differing sources of influence and power often are invisible to outsiders, and can significantly lead to individuals possessing far greater power and influence than their overt position or PLA rank may imply.

Demographics

The PLAN's 250,000 personnel represent approximately 12.5% of the total PLA and 0.02% of the 15- to 59-year-old PRC labor force population.[10] The PLAN, like the greater PRC society, is ethnically dominated by the Han people. The Han, the core of ethnic Chinese, have historically dominated China. Han are thought to hold lower esteem in China's minor ethnic groups. U.S. strategists should be sensitive to ethnic stereotypes within Chinese society. The branches of the PLA have a two-year conscription for 18-year-old men; women may register for duty in the medical, veterinary, and other technical services at 14 years old.[11] Conscripts comprise approximately one-third of the PLAN's personnel, which is similar to other branches within the PLA.
The demographic trends and challenges within the PLAN have been shaped by the demographic trends of greater Chinese society. Historically, the majority of PLAN conscripts were volunteers from predominantly rural and undeveloped regions within China. These volunteers were poorly educated and perceived PLA service as a vehicle for social mobility. The social effects from shifts in PRC economic and social policies have reshaped Chinese society and its demographics. Strong economic expansion since the late 1970s has enhanced the opportunities across China for economic and social mobility, as well as prompted a significant population movement from the underdeveloped PRC countryside to major urban centers. The PRC's improved economy has also led to increased access for its citizens to modern medical care and development of a more productive agricultural sector, which has led to increases in the average PRC citizen's health and life expectancy. This change in lifespan and internal population migration has dramatically increased the challenges currently borne by younger Chinese generations in caring for the aged. This increased social and financial burden, in combination with improving private sector economic opportunities across China, has reduced PLA volunteerism.

As a result of the PRC's 1979 family planning policy, the so-called One-Child Policy, a growing percentage of PLA members are from single-child households. In 2006, children from one-child households were reported to make up approximately 52% of the PLA.[12] This demographic trend of a rising proportion of China's society being comprised of single-child families, coupled with China's economic modernization and the resulting increase in life expectancy, has created significant pressure on recent Chinese generations to provide for their aging families. Many of these single-child households are part of an emerging family structure referred to as the "4-2-1 family structure." The 4-2-1 structure has four grandparents, two parents, and one child.

Given the growing mathematical reliance on the one offspring to provide for six aging family members, many poor families endure significant hardship while their child is serving in the PLA for relatively low wages, which creates stress on the PLAN to maintain quality sailors in its ranks and for the sailors to remain focused and dedicated to PLAN tasks.

As characterized above as a Party-Army, the PLA's unique relationship with the CCP, China's history, and organizational structures all shape the PLA's mission, institutions, and practices which define it as an organization and also provide its foundation for the PLA's beliefs, symbols, heroes, and ethos. In addressing the socio-cultural framework question of who and what the PLAN is to better enable achievement of the U.S. NSS objectives in the western Pacific, U.S. strategists need to understand deeply the history, collective identity, organizational structures, values and beliefs, and characteristics (demographics) of the PLAN. Now that U.S. strategists have acquired through the socio-cultural framework a fundamental understating of who the PLA is, they should next turn their attention to addressing how it develops strategy, and what its national security objectives are.

HOW DO THEY FORM STRATEGY?

In building a relationship and an enduring security partnership, it will be critical for U.S. strategists to possess not only a keen understanding of the CCP's and PLAN's strategic objectives but also the philosophy of how China builds a strategy. To accomplish this, China's NSS objectives should be explored and understanding should be grounded within the socio-cultural analytical framework. Additionally, some of Mao Zedong's philosophical writings and the Chinese cultural elements of *Shi* and identity should be examined to extract insights regarding how strategy is formed in China.

Mao's strategizing philosophy, built around the idea that politics are the essence of strategy and Clausewitz's maxim that "war is the extension of politics," remains largely intact in contemporary Chinese thought. Mao, heavily influenced by the strategic thought of Clausewitz, believed that to formulate good strategy encompassing all considerations (military, economic, foreign relations, etc.), it must be developed around the political aims of the state. Mao further stated that an accurate and complete assessment of the "traits" (all circumstances of the conflict and environment such as time, location, nature, and available means) is absolutely essential in formulating strategy best suited to the factors and conditions within which the war/politics would occur. These concepts of the political aim of war and "traits" illustrate the critical implications of the CCP's assessment of the major dominant trend of the times. As has been the guiding assessment in formulating all CCP strategy, customarily the CCP holistically assesses the global security environment and provides a one- to two-sentence assessment of the major dominant trend of the times, such as the current trend of peace and development. This single assessment acts as the central tenet in all Chinese strategy. The major dominant trend of the times is the central trait around which Mao suggested all strategy should be built. A more aggressive and defensive assessed dominant trend, based on Mao's philosophy, would directly translate to more aggressive and active military policies and international interactions.[13]

Mao's strategizing philosophy, built around the idea that politics are the essence of strategy and Clausewitz's maxim that "war is the extension of politics," remains largely intact in contemporary Chinese thought.

Another concept central to understanding the holistic importance of the CCP's assessment of the major dominant trend in developing strategy is the Chinese cultural elements of *Shi* and identity. *Shi* is a Chinese term describing the configuration of power and the central direction of the process of change in the environment within which an actor acts and interacts. In Chinese culture, *Shi* is thought to be one of the most critical elements in formulating strategy. China views an altered understanding of *Shi* as the starting point for change in its worldview. As described above, when China's holistic worldview changes, so too does its strategy. The characteristic of identity refers to who an actor is, and constitutes China's motivational and behavioral disposition in the international arena. Chinese thought suggests power and identity can be defined by an actor's network of relations, rather than as an attribute of the actor himself. In formulating strategy, China cannot know its objectives until it knows its identity; therefore, China's role and its assessment of its position within the international power configuration act as a major factor in defining its national interests and dictates its strategy formulation. China's role, focus, and responsibility in world affairs are directly shaped by *Shi* and China's assessed identity within the international system.[14]

To achieve the aforementioned objectives within the U.S. NSS, U.S. strategists must understand the Chinese socio-cultural concepts of *Shi* and identity and how these concepts, along with Mao Zedong's philosophy of strategy, relate to how China views the configuration of power in the world and how this existing configuration and nature of the major dominant trend affect China's interests. To identify how the U.S. and the CCP might find commonality in

achieving their respective NSS objectives within the western Pacific, U.S. strategists should, through a functionalist socio-cultural analytical framework, understand the foundation of the CCP's NSS objectives.

A NSS can be defined as the "development, application, and coordination of all the elements of national power … to achieve a nation's objectives … in peace as well as war."[15] For the past 80 years, with the exception of some deviation by Mao Zedong, the NSS of the PRC has promoted the three key national security objectives of sovereignty, modernity, and stability.[16] The Chinese collective cultural mindset is far more preoccupied with regular concerns over the idea of national sovereignty than Western nations. This is due to China's turbulent history and self-aggravated collective social consciousness of historic egregious acts that breached Chinese self-claimed sovereignty. This social consciousness of breaches of sovereignty by foreign nations is most strongly associated with the previously discussed "Century of Humiliations." China's national character defines its prioritization of the right of its sovereignty based on this span of mourned and still bitter collective social memory which it feels. It continues to teach younger generations that the interference of foreign powers prevented it from becoming the great world power it rightfully deserves to be, and caused the people of China great social humiliation.

Culturally, China's geography and national self-identity can be understood as a country comprised of a Han-ethnic mainland surrounded by territories of other ethnic minorities. These outer territories have historically functioned as a peripheral security buffer zone to protect the Han-centric mainland.

This same line of thinking applies to the CCP's one-China or unification policy. During this period of social humiliations, historic territories of China (Macau, Hong Kong, and Taiwan) were lost to foreign (or domestic in the case of Taiwan) powers. The Confucian principle of harmony and balance influences the PRC's policy of reunification. To bring Confucian cultural balance and harmony back to China, these lost territories, identified as critical elements of China's cultural and national identity in the Chinese mindset, must be returned to sovereign Chinese rule.

Culturally, China's geography and national self-identity can be understood as a country comprised of a Han-ethnic mainland surrounded by territories of other ethnic minorities. These outer territories have historically functioned as a peripheral security buffer zone to protect the Han-centric mainland. China's history is colored with periods of development and power followed by long tracks of relative weakness. The Great Wall of China is not a symbol of strength, but reflects a relatively weak civilization attempting to defend itself against intrusion and predation. China's historic strategic need for buffer security states protecting the Han-based interior has and continues to shape its social consciousness, and is directly reflected in its strong concerns regarding the enduring separatist movement in Xinjiang Province, independence initiatives in Tibet, and U.S. efforts for regime change in North Korea. Given the Chinese people's nearly 5,000-year history in the region, its territorial integrity and sense of rightful ownership are interwoven with its history and is regularly at odds with contemporary politics and the far more limited social collective memories of Western nations. U.S. strategists must factor in the cultural long-term memory and conservatism that shapes CCP and PLA thought regarding the concept of sovereignty.

The second CCP NSS objective is modernity. From its self-ascribed identity as the Middle Kingdom, the society or people between divinity and the rest of humanity, the Chinese hold a collective social belief that its people and culture are the most moral in the world and that, through this superior morality and the Confucian principle of authority derived from morality, China rightfully should hold leadership over and above the other nations of the world. Based on this Confucian concept of morality being the chief source of power and authority, China feels it should rightfully be the most powerful, wealthy, and modern nation in the world. Striving to achieve greater modernity is, in the context of Chinese culture, simply striving to achieve its social right and inevitable reign of global power and wealth. In the same context of Chinese collective thought, for a foreign nation to oppose Chinese modernity in any way is a sign of that nation's immorality and a direct threat to China's destiny.

Modernity can also be understood as a means to achieve the third and final CCP NSS objective—stability. More than any other objective, stability reigns as paramount for the CCP. China's long history of foreign interference, bringing internal instability and the collapse of multiple Chinese dynasties due to widespread instability, reflects the enduring reality that the most significant threat to the CCP and the PRC as a nation-state is not a foreign power, but instead China's more than one billion inhabitants. Here too, Confucian values of stability and cohesion play a significant role in shaping the collective social psyche. Extending the Confucian centrality of family harmony to larger organizational units of the village, province, and

state, stability is the ultimate factor for a balanced and harmonious PRC. Stability is also the most critical factor enabling the CCP and its governance system to maintain its dominance over the PRC state. The prioritization of the NSS objective of stability reflects the enduring practice, from dynastic emperors to CCP secretaries, of prioritizing the resources of China inwardly versus outwardly. This cultural philosophy of an inward vice outward focus aligns with China's social nature as a collective versus individualistic society, as well as its anthropologic classification as a high-context culture.[17] China's collectivist nature almost surely enhances its prioritization of national stability as well as social harmony. The CCP leadership likely holds the belief, based on its NSS objectives, that what happens inside China will have a greater influence on China's future than external factors.

To achieve the U.S. pivot to Asia and strengthen the U.S.-China relationship in the western Pacific, U.S. strategists should leverage the socio-cultural analytical framework provided within this essay to fundamentally understand the values, behaviors, and strategic principles of the CCP and the PLAN. Culture, understood through functionalism, can provide U.S. strategists insights into the motivations and norms of the CCP and the PLAN in a way that will maximize U.S. efforts in effectively building an enhanced relationship with China to achieve its NSS objectives. The proclamation that began this discussion on culture is the same that concludes it: "The crucial differences which distinguish human societies and human beings are not biological. They are cultural."

Notes

[1] Richard McGregor, *The Party: The Secret World of China's Communist Rulers* (New York: Harper Perennial, 2010), p. 72.
[2] Office of Naval Intelligence, "China's Navy: 2007," http://www.militarytimes.com/static/projects/pages/20070313dnplanavy.pdf (accessed March 24, 2013).
[3] Michael Goldfarb, "A Tale of Two Oaths," *The Weekly Examiner*, blog entry posted March 14, 2007, http://www.weeklystandard.com/weblogs/TWSFP/2007/03/a_tale_of_two_oaths.asp (accessed March 24, 2013).
[4] Office of Naval Intelligence, "China's Navy: 2007," http://www.militarytimes.com/static/projects/pages/20070313dnplanavy.pdf (accessed March 24, 2013), 93-94.
[5] Nan Li, "The PLA's Evolving War fighting Doctrine, Strategy and Tactics, 1985-1995: A Chinese Perspective," *The China Quarterly* 146, no. 1 (1996): 448.
[6] Office of Naval Intelligence, "The People's Liberation Army Navy: A Modern Navy with Chinese Characteristics," http://www.fas.org/irp/agency/oni/pla-navy.pdf (accessed 12 March 2013).
[7] Office of Naval Intelligence, "China's Navy: 2007," http://www.militarytimes.com/static/projects/pages/20070313dnplanavy.pdf (accessed March 24, 2013), 93-94.
[8] U.S. Marine Corps, Marine Corps Intelligence Activity, *The Culture of the Chinese People's Liberation Army* (Quantico, VA, 2009), 37.
[9] James C. Mulvenon, "Hu Jintao and the 'Core Values of Military Personnel'," *China Leadership Monitor* 28, 2009, 1-8.
[10] Matthew C. Trifle, *The Growth of the Chinese People's Liberation Army Navy: Impacts and Implications of Regional Naval Expansion.* (Monterey, CA: Naval Postgraduate School, 2007), 37.
[11] Within the PLAN, while women have served within all branches of the PLA since its founding, women primarily provide PLA support functions with limited numbers serving in combat roles.
[12] Julie DaVanzo, Harun Dogo, and Clifford A. Grammich, *Demographic Trends, Policy Influences, and Economic Effects in China and India Through 2025*, no. WR-849 (Santa Monica, CA: RAND Corporation, 2011), 40.
[13] Gao Rui, "The Development and Principles of the Strategic Theories," in *Science of Strategy (Zhanlue Xue)* (Beijing: PLA AMS, 2001), 17-18.
[14] Zhu Liqun, "China's Foreign Policy Debates," *in Chaillot Papers*, Institute for Security Studies 121 (September 2010): 17-19.
[15] David M. Finkelstein, "China's National Military Strategy: An Overview," *Asia Policy* 4, no. 1 (2007): 68.
[16] David M. Finkelstein, "China's National Military Strategy: An Overview," *Asia Policy* 4, no. 1 (2007): 70.
[17] High-context cultures are relational, collectivist, intuitive, and contemplative. They generally emphasize interpersonal relationships, prioritize trust in relationships, and prefer group harmony and consensus to individual achievement. People in these cultures tend to be less governed by reason than by feelings. Within communication, context (speaker's tone of voice, facial expression, gestures, social status, or physical posture) is often more important in shaping meaning than chosen words.

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Unmanned Aircraft, Privacy, and the 4th Amendment

by SrA (USAF) Herschel C.M. Campbell and Dr. James Hess

What is the difference, practically speaking, between the FBI using an unmanned drone or a helicopter to survey a crime scene, a car chase, or a hostage situation? Is it just that a drone is unmanned, quieter, or more stealthy?[1]

SUMMARY

The era of unmanned aerial technology in the United States is upon us. The question among scholars, government officials, and activist groups is how we ensure public privacy rights granted by the 4th Amendment, in light of recent events like the controversy over the legality of the USA PATRIOT Act and the NSA scandal in which millions of conversations may have been monitored without a warrant. To that end, this article looks primarily at the legal landscape and cultural climate of the United States in regard to use of Unmanned Aerial Vehicles (UAVs). A combination of public polling data, government accountability sources, newspapers, and academic articles have been analyzed in order to present a well-rounded view of public and legal definitions of the 4th Amendment. Although it is difficult to quantify 4th Amendment compliance due to the infinite personal interpretations of the Bill of Rights, the information presented in this article should adequately frame whether compliance is feasible and what needs to be done in order to ensure such compliance. A combination of public education and legislation based on already existing precedent can be used to integrate these assets into the U.S. airspace.

UAVs – JOBS AND PROTECTION BUT AT WHAT COST?

On September 11, 2001, the world watched in horror as the United States endured its worst attack since Pearl Harbor. The post-9/11 world has seen two wars and the rapid growth of Intelligence, Surveillance, and Reconnaissance, better known as ISR. Always part of the battlespace, ISR has become increasingly important because the "war on terror" is asymmetrical, crossing borders, cultures, and other easily identifiable features. In this environment it is difficult to know who the "bad guys" are. The desire to find individuals who potentially pose a threat has reached a fever pitch. Phone, optical, and Internet surveillance are all realities of the 21st century. Recently, in response to the Boston Marathon bombing of April 2013, Representative Peter King (R-NY) raved about the need for more surveillance, stating that "…to stay ahead of the terrorists…I do favor more cameras. They're a great law enforcement method and device…it keeps us ahead of the terrorists, who are constantly trying to kill us."[2] King is not alone. Police departments, the Border Patrol, the Department of Homeland Security (DHS), the Coast Guard, and the military have also expressed interest in using ISR, particularly in the form of UAVs within the U.S.[3]

On the other hand, there is a growing concern that the United States might be losing the individual privacy that is so cherished in this country. Dr. James McAdams questioned the U.S. monitoring of the Internet by asking, "Is the United States becoming Great Britain?"[4] Dr. McAdams' positions are but one aspect of the larger puzzle of ISR use in America. As a whole, the subject of such use is too complicated for one article. Law enforcement needs to be able to survey criminals, but should they be able to use the methods brought to light in the Snowden case? Is Internet surveillance acceptable? What if the person is a criminal? What about UAVs? There are so many questions that tackling them all at once would be folly. Rather, this article will focus on answering just one of these questions. Namely, given the rise in UAV technology, what are the potential benefits of UAV technology in the United States and how can UAVs be incorporated into the U.S. airspace without violating the 4th Amendment? This article will hypothesize that a combination of public education and legislation based on already existing precedent can be used to integrate these assets into the U.S. airspace.

KEY TERMS

Before that can happen, however, there are five terms which must be explained so as not to cause confusion to the reader. These are general definitions, based on the research done by this author and used to denote the subtle differences among UAVs, Unmanned Aircraft Systems (UASs), and drones, which at times are erroneously used interchangeably.

- *4th Amendment* – "The right of the people to be secure in their persons, houses, articles, and effects, against unreasonable searches and seizures, shall not be violated."[5]
- *Drone* – "a pilotless *radio-controlled* aircraft used for reconnaissance or bombing."[6] This term is often improperly used interchangeably with UAV/UAS/RPA because, unlike UAV/UAS/RPA systems, a drone does not have a pilot.
- *Unmanned Aircraft System or UAS* – refers to *aircraft systems*, to include the ground control station or GCS, satellites, communications devices, computers, or other equipment to include the actual UAV that are used as a system to control UAVs during operations.
- *Unmanned Aerial Vehicle or UAV* – refers to *platforms* that can perform either autonomous or more often semi-autonomous operations. These may either be pre-programmed flights or flights controlled by someone who is not physically in the aircraft. The terms RPV, or remotely piloted vehicle, and RPA, or remotely piloted aircraft, could be used synonymously with UAV or UAS as both have a human pilot who is commanding the aircraft's actions. For continuity purposes the term "UAV" will be used when talking about UAVs, RPAs, or RPVs.
- *Reasonable Expectation of Privacy* – For legal purposes we will use the definition provided by James Barr, a member of Faulkner Information Services and "a leading business continuity analyst and business writer with more than 30 years' IT experience."[7] According to him, reasonable expectation of privacy applies to:

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  - Bathrooms
  - Locker rooms
  - Department store dressing rooms
  - Other areas where personal privacy is paramount[8]

UNDERSTANDING THE SCOPE OF THE UAV vs. PRIVACY

Unmanned aerial systems and unmanned aircraft have become the subject of great controversy over the past twelve years. UAVs, which have grown in their public perception via the wars in Afghanistan and Iraq, are fast becoming big business. By 2020 unmanned aerial systems and unmanned aircraft are projected to be multi-billion dollar businesses, $60 billion between the U.S. and European Union markets.[9] The era of unmanned aerial technology in the United States is upon us. At this very moment, a person can walk into a Verizon Wireless store and buy the Parrot 2.0 drone (UAV) for approximately $200-300. The question among scholars, government officials, and activist groups is how we ensure public privacy rights granted by the 4th Amendment, in light of recent events like the controversy over the legality of the USA PATRIOT Act and the NSA scandal in which millions of conversations may have been monitored without a warrant. To that end, this article looks primarily at the legal landscape and cultural climate of the United States in regard to use of UAVs. Public polling data, government accountability sources, newspapers and academic articles have been analyzed in order to present a well-rounded view of public and legal definitions of the 4th Amendment. Although it is difficult to quantify 4th Amendment compliance due to the infinite personal interpretations of the Bill of Rights, the information presented in this article should adequately frame whether compliance is feasible and what needs to be done in order to ensure such compliance.

In order to frame the issue, sources from accepted legal experts or government review authorities such as the *National Conference of State Legislatures*, *Comparative Politics, The Champion Harvard Journal of Law and Public Policy*, *Congressional Research Service*, and *U.S. Department of Justice Office* were utilized. It was imperative that the research feature respectable sources in order to examine the validity of UAV integration from a legal perspective. Then, public opinion sources to include newspaper, polling data, and peer-reviewed pieces on UAVs were incorporated to examine the public opinion climate surrounding UAVs. The dependent and independent variables that emerged were as follows:

Independent Variable: privacy

Dependent Variables: location of UAV use, purpose of UAV use, legal arrangements, and type of UAV being utilized

With this topic there are more or less two main camps. First, there are those who feel the threat to privacy is either too great to support UAV use or of such danger that UAV use should not be implemented until near full disclosure on who, what, where, when, and why they will be used can be provided. Some of these groups include the American Civil Liberties Union (ACLU), various scholars such as Richard Thompson II and John Villasenor, several U.S. Congressmen, and other civil liberties groups. Second, there are those who look past these arguments at the benefits UAVs can provide. These groups include public service organizations like law enforcement and firefighting, farmers, private business interests, and government agencies such as the FBI, DHS, and the Coast Guard (formally part of DHS).

Both the advocates and critics of UAV technology have valid points. UAVs can operate for much longer periods of time than their manned counterparts. Some can operate for upwards of "30 hours without refueling, compared with a helicopter's average flight time of just over two hours."[10] The average manned airplane will get let less than 10 hours of flight time without refueling. Flight time is just one of the benefits UAVs offer. As one study worded it, "Since their earliest military applications, the UAS has been seen as an ideal platform for missions that are deemed too dull, dirty, or dangerous for manned aircraft."[11] It is this ability that has the critics of UAVs raving. If an asset can stay up for many hours or even days at a time, what, how, and on whom could it be used to collect information? Their argument can be summed up by Senator Dianne Feinstein (D-CA) who said, "The greatest threat to the privacy of Americans is the drone . . . and the very few regulations that are on it today."[12]

USES vs. PRIVACY CONSIDERATIONS

In order to justify the debate, a framework needs to be established. UAVs and UASs are at the forefront of the public focus because they can bring exciting new possibilities in a variety of fields but also present real threats to privacy. Petroleum companies, mining operations, the U.S. Forest Service, Coast Guard, Border Patrol, FBI, DHS, small town and city police departments, and even university research projects are all clamoring for the opportunity to utilize these assets to make inspections, improve security, fight fires, conduct search and rescue, detect illegal activity, and conduct scientific research.

Kylie Bull writes for *Jane's Magazine*. *Jane's* is an unclassified publication that deals specifically with military-related equipment. In her article "Briefing: Eyes in the Sky," she points out many of the benefits of UAV technology citing the ability to go many hours, even days, without refueling, the safety provided from otherwise dangerous manned jobs like rescue operations, and counterterrorism.[13] This is a good resource for research on the topic as she also surmises some of the concerns over UAV use. "UAV operators face civil liberty concerns…in February this year more than 100 privacy groups petitioned the Federal Aviation Administration to address the impact… [Including] concerns about the accident rates…"[14]

Bull is able to provide a fairly detailed account of capabilities and a brief discussion of the concerns about UAVs. However, the article does not offer answers to the question of how best to quell or meet the need to resolve these issues. This is an understandable limitation, as the focus of research with *Jane's* is military technology- and economics-based, with much of the information in the last half of the article explaining the growing economic landscape provided by these assets but leaving the social aspect largely unaddressed.[15]

Meanwhile, Richard Thompson writes thoroughly on the concerns of anti-drone lobbyists in *Drones in Domestic Surveillance Operations: Fourth Amendment Implications and Legislative Responses*. His research paper was written for the Congressional Research Service. His greatest contributions to the debate are examples of legislation being presented to regulate unmanned systems to preserve the 4th Amendment rights of U.S. citizens including: Preserving Freedom from Unwarranted Surveillance Act of 2013 (H.R. 972), Preserving American Privacy Act of 2013 (H.R. 637), and Drone Aircraft Privacy and Transparency Act of 2013 (H.R. 1262).[16] After explaining the base arguments of privacy vs. increased security, he attempts to offer a legislative approach. However, his work falls short of offering a solution: "As the integration of drones for domestic surveillance operations quickly accelerates, these questions and others will be posed to the American people and their political leaders."[17] In doing so, he provides no recommended course of legal action and leaves untouched an aspect that will be addressed in this article, namely the need to educate people on unmanned systems.

PUBLIC OPINION

Two polling studies were examined in the course of this research. The first was a study released August 15, 2013, by Monmouth University. The study, titled *National: U.S. Supports Unarmed Domestic Drones*, focuses on the use of UAVs or drones; the terms were used interchangeably. Among the highlights of this poll were the findings that most Americans favor UAV uses provided that safeguards are put in place to protect privacy. "3-in-4 Americans (76%) say that law enforcement agencies should be required to obtain a warrant from a judge before using drones."[18] 69% of Americans were at least somewhat concerned about how the use of drone aircraft by law enforcement would affect personal privacy; 49% of these cited they were "very concerned."[19] However, the explanation for these results is most likely due to a lack of general knowledge about these aircraft. The poll found that 52% of respondents knew little to nothing about the use of UAVs within the United States.[20] This is in line with the hypothesis of this author's research which is that, along with strict regulation, a public education program will be necessary in order to introduce unmanned systems into U.S. airspace. Often polling data can be skewed based on wording and this could be the case in this instance:

> How concerned would you be about your own privacy if U.S. law enforcement starts using unmanned drones with high tech cameras and recording equipment? Would you be very concerned, somewhat concerned, only a little concerned, or not at all concerned?[21]

Note the vivid wording here: "High tech cameras and recording equipment." It could be that this creates images of an Orwellian state. Perhaps if the poll had simply used surveillance equipment the results would have been different. It is also important to note that, in the examination of the material, the poll often referred to UAVs as drones. This is something that has been repeatedly found in the research and suggests that the word "drone" has an effect on the perception of UAV technology.

The second study, by the Institute for Homeland Security Solutions, was titled *Unmanned Aircraft and the Human Element: Public Perceptions and First Responder Concerns*. Relative to this research, its findings can be summed up as follows:

> The general public reported a fairly low level of awareness, with a little less than half (44%) reporting that they knew *just a little* or *nothing at all* about UAS applications in U.S. airspace well over half of the general public indicated support for any application (57%) [sic]… Although the support was fairly high, most respondents reported high levels of concerns with the transition to the domestic airspace, noting that they were *somewhat concerned* or *very concerned* with the potential monitoring outside our homes and in public spaces (67%), safety issues (65%), and the ability of the government to regulate use (75%). (Eyerman, Letterman, Pitts, Holloway, Hinkle, Schanzer, Ladd, Mitchell, & Kaydos-Daniels 2013, 2-3).[22]

These data are nearly the same as Murray's, although indicating a slightly higher level of support. Again, note a lack of knowledge of the systems and its correlation with a fear of the effects of UAV use on privacy. Also note the overall support for use of these systems.

Overall, these studies provide a human context for the debate over the use of unmanned systems in the United States. They demonstrate a willingness of the American people to utilize UAVs/UASs, while at the same time demonstrate a fear of the unknown. They make the case for education and regulation as a means of calming fears over UAV use.

LAW AND REGULATION

Legislation plays a key role in determining the course of UAV operations in the United States. Inevitably, protests over the use of UAVs will result in court cases and litigation that will either end in the termination of UAV use in the country or more likely find a niche into which UAVs will find acceptance within the letter of the law. Two sources will be examined here for their contribution to this aspect of the debate.

If helicopters and airplanes can conduct surveillance and it is socially accepted, then it opens the door for UAVs.

First, Richard Thompson II seeks to examine the implication of UAV use to 4th Amendment rights by examining the nature of what makes a search "reasonable."[23] He does this by looking at case studies and then examines the response in the 113th Congress.[24] A fairly narrow focus, his work provides a great comparative model for future research on manned platforms like helicopters and planes:

> Similarly, in *Florida v. Riley*, local police received a tip that an individual was growing marijuana in a greenhouse located 10 to 20 feet away from his mobile home. The officers could not see the contents of the greenhouse from the ground, so they flew a helicopter over the defendant's backyard at an altitude of 400 feet…Because the helicopter, like the plane in *Ciraolo*, was in navigable airspace…the Court did not consider this a search for which a warrant was required.[25]

This opens up a great topic for examination. If helicopters and airplanes can conduct surveillance and it is socially accepted, then it opens the door for UAVs. Thompson's work also provides legislation that the 113th Congress examined which can be used for further research.

John Villasenor cites Thompson's research and builds upon it by looking more in-depth at Supreme Court rulings and their impact on surveillance.[26] One of the strengths of his contributions is that he updates the status of Supreme Court decisions by bringing in information from *United States v. Jones*, in which the Supreme Court ruled against using GPS or tracking without a search warrant.[27] He also looks at no fewer than four separate Supreme Court cases. He contributes evidence that FAA safety regulations might be a way to protect privacy: "It is illegal to operate an aircraft "in

a careless or reckless manner so as to endanger the life or property of another."[28] This provides another aspect of research into UAV regulation. In general, Villasenor is slightly more thorough in his research than Thompson.

The body of literature surrounding unmanned aerial systems and unmanned aircraft can be summarized as a debate between those who want to utilize sophisticated, relatively inexpensive technology and those who are concerned that to do so opens a Pandora's Box of problems, most notably the ability to establish a Big Brother state. Virtually no one in academia, politics, the private sector, or the defense industry denies the ability of these systems to offer faster, cheaper, more efficient means to do a variety of tasks that are "dull, dirty, or dangerous."[29] Airplanes and helicopters crash; yet, we still use them. Although a debate can be made as to the safety of these aircraft, the real debate is over privacy.

Public perceptions are well laid out by the Monmouth University and Homeland Security Institute polls. Bull points out their capabilities and the financial benefits succinctly. Thompson provides some case studies for examination of proposed legislation on the topic. Meanwhile Barr and Villasenor provide an overview of reasonable expectation of privacy and the precedence established by Supreme Court cases. However, none of these sources is able to articulate a hypothesized solution to the question of how the government can incorporate UAVs into the airspace while maintaining 4th Amendment rights. This is the principal difference between the present literature and this article. The article will be able to demonstrate a framework by which legislation can be created to integrate these assets, and shows a willingness of the public to support UAVs. However, it falls short of providing a detailed path to integration, something that would need further study into specific case studies of ongoing UAV use within the United States as well as research into safety of flight and cyber security elements of UAV operations.

PROPERLY STUDYING UAVs

This article is constructed using a mixed methods approach, in a similar mold to that used by Richard Thompson II or John Villasenor. A multitude of resources is needed to frame the issue. These include court cases that establish precedent, political and social articles, government reports, and commentaries that can be combined to point out accurately the fears and reservations of civil rights groups, critics, and advocates of UAV use. Polling data were also necessary to assess which areas represent the most concern to the public. In addition, political pages, Government Accountability Office reports, FAA reports, and news articles listing and describing the actions by the government to monitor and incorporate these assets were needed to assess whether the critics and civil rights groups' fears were being addressed. In order to achieve these demands, inferential statistical quantitative data, content analysis of documents, and collection with analysis of archival, administrative, and performance data were all utilized.

VARIABLES

The independent variable in this article is privacy, since it is privacy that is continually addressed by both proponents and critics of UAS technology and which is at the heart of the issue of the 4th Amendment. Privacy is a difficult variable to judge since it is subject to individual opinion. However, in terms of this research, the focus is on the 4th Amendment definition of privacy, more specifically that dealing with search and seizure rights and curtilage. To accomplish this, precedent is established by looking at legal documents on what constitutes the personal domain.
There are several dependent variables that affect the level to which UAVs impact privacy. These include but are not necessarily limited to location of UAV use, purpose of UAV use, legal arrangements, and type of UAV being utilized. Here there will be a brief description of how this article investigates each of these. Research regarding location includes documents detailing where these assets have been used. The purpose of these uses includes scientific studies, military publications, and other peer-reviewed documents detailing how these assets are used and when. These would often be sources that also detailed location. Legal arrangements include a wide array of sources from legal evaluations made by academics to articles describing implications of UAV use on 4th Amendment rights. Finally, research on types of UAVs mostly included military and Department of Justice documents, since the majority of data on types of UAVs can be found here. However, other sources include newspaper articles and scientific research pieces.

UAVs ARE NOT INHERENTLY "BAD"

UAVs are providing enhanced capabilities along a large spectrum of industrial and defense fields, spawned mainly by their ability to do jobs that are "dirty, dull, or dangerous," for a lower cost and risk to human life.[30] As of 2013, the uses of UAVs have involved mining operations, aerial mapping, agriculture surveillance, border patrol, law enforcement, and Coast Guard operations including "maritime domain awareness" and "threat identification" (Bull 2012, 1-5; Business Will Have Drones 2013).[31] [32] This will only continue to grow, as these assets are cheaper and more efficient than manned aircraft in most situations:

> Customers can buy an entire system, consisting of the aerial vehicle, software and a control station, for less than $100,000, with smaller systems going for $15,000 to $50,000, said Jeff Lovin, a senior vice president at Woolpert, a mapping and design firm in Dayton, Ohio. Woolpert owns six traditional, piloted twin-engine aircraft to collect data for aerial mapping; these typically cost $2 million to $3 million to buy, and several thousand dollars an hour to operate.[33]

Lovin's claim is supported by studies that date back to the 1990s, long before UAVs were mainstream. "The purchase price for helicopters used in policing ranges from $500,000 to $2 million depending on the size and accessories."[34] Those numbers do not take into account inflation and still they show a sizable difference in price between helicopters and UAVs. "One local law enforcement agency has estimated the cost of using a UAS at just $25 per hour compared to $650 per hour for a manned aircraft."[35] This translates to $52,000 versus $1.3 million to provide 40 hours of coverage a week over the course of a year. In some instances that could be the difference between having an active air surveillance program or not. It is also considerable savings that any business or agency could put toward training and equipment.

Clearly there is a cost advantage, but this is coupled with other operational advantages such as loiter times, reduced risk to a human pilot, operational abilities that manned assets cannot perform, and financial opportunities. "For instance, defense firm Lockheed Martin's Stalker—a small, electrically powered drone—can be recharged from the ground using a laser, [and] now has a flight time of more than 48 hours."[36] There is no pilot in the device, thus no risk to a human operator. The device can stay in the air much longer than a helicopter, the closest comparable manned asset at a fraction of the cost. The Coast Guard, Border Patrol, DHS, and police departments have all expressed interest in using these assets to monitor cities, borders, and important infrastructure and help out with emergencies.[37] In fact, "last year a police department in North Dakota conducted the first reported drone-assisted arrest."[38] A recent college experiment demonstrated feasibility of UAVs in scientific endeavors, specifically the measurement of certain atmospheric phenomena that require longer loiter times than can be achieved using conventional manned aircraft. The Collaborative Colorado-Nebraska Unmanned Aircraft System Experiment noted that "the execution of CoCoNUE demonstrated that the operation of UAS in this manner is not only possible but also has the potential to reveal important characteristics of mesoscale phenomena that are difficult or impossible to sample in any other way."[39] This raises the possibility of utilizing unmanned systems in weather and atmospheric studies. UAVs are also being looked at to provide infrastructure support. As Bull points out:

> Private companies…have been quick to adopt UAVs for the surveillance of infrastructure, particularly in the oil and gas sectors where it can be impractical to monitor pipelines or offshore installations with static cameras. Spending on oil and gas security is set to reach USD29.2 billion in 2012 and, as the costs of unmanned aircraft fall, their deployment by private companies is set to increase.[40]

Even critics of UAVs, like Norman Reimer, author of "Inside NACDL: The Droning of America," and writer for the legal journal *The Champion*, concedes the issue is not about capabilities: "…There may be many valuable and appropriate uses for this emerging technology, such as search-and-rescue missions, hot pursuit in a dangerous criminal situation and detecting radiation leaks…"[41]

UAVs also might be able to help spur the economy by providing a new and exploding market both here and abroad.

> The widespread use of drones in Europe is likely within the next few years if EU and U.S. plans to create a new aerospace market come to pass. Authorities are hoping to profit from the creation of a larger commercial drone market which, by UK aerospace group Astrea's estimate, could be worth over $60 billion per annum by 2020.[42]

Exact numbers on the economic impact vary from the above mentioned $60 billion to $5 billion according to Reimer.[43] "The Teal Group, an aerospace and defense consultancy based in Virginia, predicts that global annual UAS spending will rise from an estimated $6.6 billion in 2012 to over $11 billion over the next decade, corresponding to a total ten-year expenditure of nearly $90 billion."[44] No group over the course of this research reported numbers lower than $5 billion. The bottom line is that UAVs are set to provide a huge boost to the economy. Infrastructure to include manufacturing of UAVs, the ground stations, oversight positions, air traffic monitoring, contractors, law enforcement agencies, scientific research projects, and many other fields will all see direct impact from the growth of UAV systems. Time will tell how lucrative this market becomes, but all available research thus far indicates that UAVs will be big business for the foreseeable future, an assumption further supported by the recent Congressional mandate for the FAA to incorporate a viable plan for their implementation into the U.S. airspace by the end of 2015.[45] [46]

CONCERNS ABOUT ABUSES

Despite the promise of lucrative economic growth and technological advancements in a bevy of fields, concerns remain regarding the uses of UAVs in U.S. airspace. Chief among these concerns is the potential for violations of 4th Amendment rights and related issues of privacy. The 4th Amendment reads: "The right of the people to be secure in their persons, houses, articles, and effects, against unreasonable searches and seizures, shall not be violated."[47] The boundary of what constitutes houses, articles, and effects continues to be a trouble spot with regard to the integration of unmanned systems. Very few people argue against utilizing UAVs for search and rescue or firefighting. Polling shows nearly 85% support these uses.[48] [49] However, other areas of UAV use are not as clearly supported. The problem can be summarized as fear of "Big Brother." As Mr. Stanley of the ACLU states: "We need to put in place good privacy protection, so that people can innovate around this technology without the cloud of Big Brother hanging over them."[50]

Nor is privacy a concern shared only by civil rights groups. Several politicians including Democrat Dianne Feinstein and Republican Ron Paul, the Government Accountability Office, and multiple state and local governments have made their concerns known either through public speech or legislation. Dianne Feinstein was the Democratic chair of the Senate Select Committee on Intelligence and stated that "the greatest threat to the privacy of Americans is the drone and the use of the drone, and the very few regulations that are on it today."[51] While somewhat dramatic, it is alarming that the chair of the Intelligence Committee views unmanned aircraft as a greater threat than the recent NSA scandal involving the collection of information from private citizens. Additionally, no fewer than nine states have enacted legislation ahead of the 2015 integration deadline for the FAA restricting the use of UAVs.[52] Virginia, for example, has placed a 2-year moratorium on any UAV use that is not for emergency/disaster relief or exceptional circumstances.[53] Furthermore:

> In September 2012, the Government Accountability Office (GAO) found that federal agencies as a whole have not addressed important UAS privacy concerns, specifically how data captured by UAS will be used and protected by federal law enforcement agencies. The report stated that by not working proactively to address these issues, federal agencies, including DOJ, risk further delaying the integration of UAS into the national airspace system.[54]

Even the GAO admits there are faults that must be addressed in order to integrate UAVs into the airspace. These are legitimate issues that must be addressed before incorporation of UAVs can take place.

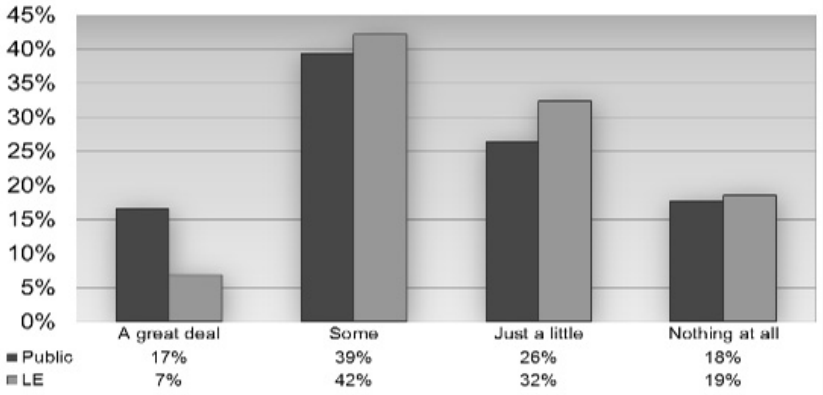
Despite this, however, there are a number of promising signs that would suggest these hurdles can be overcome. For instance, the GAO report by the DOJ goes on to state that all eight recommendations given to better exercise oversight of UAS and funding for such systems were met by the DOJ and closed out.[55] Also, the fact that states are proactively working toward resolving potential problems ahead of time could be interpreted as a sign that the legal system is built to handle integration after all. In fact, individual state legislation or perhaps even community-level legislation on how, why, and under what circumstances UAVs will be utilized, such as in the case of Queen Anne County, MD; Mesa County, CO; and Orange County, FL, could serve as one of the best methods for resolving fears of privacy matters since it would allow more direct participation by the public in the legislative process.[56]

PUBLIC OPINION

Public opinion and perception are paramount when discussing this topic because the truth is that most Americans do not know very much about UAVs. This has implications when it comes to voting and making decisions regarding the introduction of UAVs into the U.S. airspace. Two independent surveys conducted by Monmouth University and the Institute for Homeland Security Solutions were studied over the course of this research project. The Homeland Security Solutions poll used two pilots, one by email with 119 of 748 surveys completed and the second a web panel with 2,119 of 3,623 participating.[57] The Monmouth University poll sampled 1,012 via telephone.[58] The findings were quite similar. On the following page are reflected first the Homeland Security Solutions poll and then the Monmouth University poll.

If the two polls are averaged together the numbers come out to less than 23% of respondents being able to say they had "a great deal of knowledge." Over 40% of the population admits to knowing little to nothing about UAVs. Furthermore, 75% of respondents in the Homeland Security Solutions poll and 49% in the Monmouth poll question the government's ability to properly regulate or handle UAVs, with a further 69% expressing concern over privacy in the Monmouth Poll.[61] [62] Finally, 76% of respondents in the Monmouth Poll felt that a warrant should be required in order to use UAVs for law enforcement purposes.[63] Although the Homeland Security Solutions poll does not poll participants on the need for law enforcement to get a warrant, it does note search and seizure as a chief area of concern for law enforcement at 68%.[64]

HOMELAND SECURITY SOLUTIONS POLL:
Asking constituents what level of knowledge they had concerning drones.



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MONMOUTH UNIVERSITY POLL:

1. How much have you read or heard about the use of unmanned surveillance aircraft, sometimes called drones, by the U.S. military overseas – a great deal, some, just a little, or nothing at all?

	TOTAL	RACE		U.S. REGIONS				
		White	Black/ Hispanic	North-east	Mid-west	South-east	South-west	Mountain/ West
A great deal	**29%**	30%	28%	28%	27%	31%	33%	29%
Some	**31%**	35%	23%	32%	30%	31%	27%	34%
Just a little	**25%**	24%	22%	27%	29%	24%	17%	22%
Nothing at all	**15%**	11%	27%	13%	14%	15%	23%	14%

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Two conclusions are readily drawn from the sum of these statistics. First, in order to foster trust, the government needs to explain how these assets are used, i.e., a public education campaign of sorts. Education could also be used to clarify any misconceptions as to the capabilities and intentions behind UAV use. Approximately 60% of respondents in both polls supported law enforcement uses of UAVs.[65] [66] The government must take steps to bridge the gap between public support for UAV use in law enforcement and the distrust and concern over the ability of national, state, and local entities to properly regulate these assets. Second, the legal solution most desired by both law enforcement and citizens is to obtain a warrant before use in law enforcement matters.

LEGAL PRECEDENT AND THE 4TH AMENDMENT

As stated earlier, the primary argument against implementation is the potential for breeches of 4th Amendment rights. This primarily targets UAV use for law enforcement purposes. When disputes over constitutionality arise, it has always fallen to the Supreme Court to be the final judge of what is constitutionally acceptable. To this end, a look at Supreme Court rulings on a similar asset such as helicopters should suffice to determine if there is legal precedent for UAV use as well as guidance for the use of UAV assets.

Thompson succinctly and correctly addresses this in *Drones in Domestic Surveillance Operations: Fourth Amendment Implications and Legislative Responses*. In it he writes:

> In a series of cases that provide the closest analogy to UAVs, the Supreme Court addressed the use of manned aircraft to conduct domestic surveillance over residential and industrial areas. In each, the Court held that the fly-over at issue was not a search prohibited by the Fourth Amendment, as the areas surveilled were open to public view. In California v. Ciraolo, police received a tip that an individual was growing marijuana in his backyard next to his suburban home. Because two fences blocked their view of the yard, officers flew a fixed-wing aircraft at an altitude of 1,000 feet over the property to conduct a visual inspection… The Court held that…"what a person knowingly exposes to the public ... is not a subject of Fourth Amendment protection." "Any member of the public flying in this airspace who glanced down could have seen everything these officers observed."... Much weight was placed on the fact that the plane was at all times in navigable airspace as defined by federal statute.[67]

Simply put, anything that can be seen by a manned asset—something already widely used in law enforcement already—

is fair game in the Court's eyes. In this sense, precedent already exists. In fact, there does not have to be a warrant in order to meet this legal precedent. However, this only solves the issue of surveillance and does nothing to protect the use of material obtained. What happens to photographs is also the subject of scrutiny, especially since the volume of material taken could be magnitudes higher than that from conventional aircraft. Additionally, oversight of how this material would be stored, used, and handled needs to be addressed. Remembering that UAVs can stay airborne for days in some cases makes it easy to see how the sheer amount of data collected on an individual could be intimidating and possibly in violation of the law. Some might argue that because this information is digitally collected it could be stored and used against someone years later, perhaps if they ran for political office. Just for prospective, in 2002, 440,606 terabytes of information were collected by law enforcement and intelligence assets in the U.S. in email monitoring alone.[68] If a UAV were to operate for 20 hours and refuel and relaunch every four hours, it would be aloft 7,280 of 8,736 hours a year. That is 83% of the year. One can only imagine the amount of data that could be collected. It is understandable that such a large amount of potential video data would be of concern to critics and therefore it warrants strict oversight.

Another aspect to consider is the sophistication of this technology. The Supreme Court has detailed a distinction between technology that is "not general public use" and other UAS technology:

> Technology *not* in general public use, which at least for the moment describes the state of UAS in the United States… *Kyllo* did not prevent government use of uncommon technology generally, but instead was focused on the use of such technology to "explore details of the home that would previously have been unknowable without physical limitation."' Thus, although warrantless use of a UAS equipped with a sophisticated thermal imaging camera to "see" through the walls of a home would certainly run afoul of *Kyllo,* acquisition of visible-light images of a home's exterior or curtilage using a UAS-mounted consumer-grade, low-resolution imaging system in public navigable airspace would likely not.[69]

Therefore, to an extent the Supreme Court has made a determination that the sophistication and access of high-level technology associated with UAVs could be considered grounds to put them into a class that would require higher oversight such as a warrant. While Peter Foster's summarization that "…the difference, practically speaking, between the FBI using an unmanned drone or a helicopter to survey a crime scene, a car chase or a hostage situation? Is it just that a drone is unmanned, quieter, or more stealthy?" might be accurate, the Court has at least for now determined that capabilities dictate the extent to which UAVs should be used freely.[70] It would seem that high-technology devices like thermal imaging might require a warrant due to their lack of general use in the public.

UAVs ARE COMING TO THE U.S. – SO WHAT DO WE DO ABOUT THEM?

Little doubt remains as to the lucrative and promising future of UAV technology. The challenge in integration has primarily been along civil liberty lines, i.e., the fight against Big Brother. This article has used a mixed methods approach of qualitative and quantitative research to explore the potential benefits UAVs offer the U.S. as well as the challenges of integration of UAVs as they relate to the 4th Amendment.

The data demonstrate that public support remains concerned by recent government missteps such as the NSA scandal. Both polls clearly show that Americans support UAVs but have difficulty with trusting the government to use them appropriately. The question is not one of the assets but of the unknown. Therefore, a combination of public education and legislation based on already existing precedent can be used to integrate these assets into the U.S. airspace. The challenges to implementation can be overcome in the following ways:

- Allow states to continue to make their own legislation regarding UAV use in order to let the public own the integration process. As previously stated, there are nine states that have already passed legislation. Since powers not delegated to the federal government specifically are left to the states, then states should be allowed to begin the legislative process.
- Launch a public campaign to include forums on UAV use in order to grow the number of individuals that have a solid and reliable understanding of these assets. Most people are unaware of the difference between a true drone and an RPA/UAV. For instance, one common myth that UAVs are not human- operated would be dispelled if the public were to be educated on how a UAV operates, as all remotely piloted aircraft in fact have either a human pilot or someone who can take over in the event of a malfunction.
- Legislate overarching requirements governing how, when, where, and why UAVs will be used. In particular, the need for a warrant for surveillance of individual property should be legislated. The polling data from both the Monmouth Poll and

the Institute for Homeland Security Solutions indicate that both the public and law enforcement feel most comfortable with warrant-based UAV use in law enforcement; hence, giving the people what they want seems reasonable.[71] [72]

These recommendations can alleviate the worries and apprehensions of a public that largely understands these assets only in terms of news reports on the wars in Afghanistan and Iraq or from movies such as "The Bourne Legacy." In the UAV debate, ignorance is a disease and knowledge is the cure. Clearly there is money to be made from these assets and they have demonstrated an ability to save time, lives, and money in a wide range of industries. Furthermore, it would seem that in terms of basic search and seizure the Supreme Court does not distinguish manned from unmanned assets, but rather cautions that for advanced technology searches of any kind a warrant is prudent. From a 4th Amendment perspective it would therefore seem that the integration of UAVs into U.S. airspace is viable if steps such as those outlined in this article are taken to form proper legislation.

The use of UAVs is a growing topic and there are several aspects not covered in the scope of this article that deserve further research. First, there are concerns over the safety of UAVs. "As of July 2010, the Air Force had identified 79 drone accidents costing at least $1 million each. The primary reasons for the crashes: bad weather, loss or disruption of communications links, and 'human error factors,' according to the Air Force."[73] It is these communications links that are the focus of an effort to construct a "tunneling network" that would be "a ground-based system of radars or other sensors peering up at the UAV and the airspace surrounding it [which] could help escort a pilotless aircraft to its destination."[74] Such technical problems must be part of the future of research on UAV integration. Remotely piloted aircraft by their nature are going to have small delays in flight controls due to simple computing. In a busy airspace like that over the United States the inability to fly safely could result in disastrous consequences. Research into this aspect of UAVs could help to uncover potential solutions to signal loss or weather avoidance.

Additionally, UAVs operate by remote control. There is little academic study involving the threat of cyber security and hacking of UAVs. This is a potentially dangerous aspect of remote aircraft that appears to be so far under-researched. Research into encryption and counter-hacking technology should be explored further as part of the integration process for UAVs in the U.S. airspace.

Notes

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What's in a Name? Waging War to Win Hearts and Minds

by Dr. Robert J. Kodosky

JEDI MIND TRICKS?

Informing students that one's scholarly interest resides in the study of American psychological operations (PSYOP) elicits the same response each time. It provokes questions about "Men Who Stare at Goats," a 2009 film starring actor George Clooney that Hollywood adapted from Welsh journalist Jon Ronson's book about U.S. Army Lieutenant Colonel Jim Channon's proposed First Earth Battalion, a unit inspired by 1970s New Age philosophy.[1] This is hardly ideal. Still, getting any reaction from undergraduates, no matter how misguided, constitutes a reason to celebrate for history professors everywhere.

One might predict that Hollywood shapes undergraduate perceptions of PSYOP. Expectations would differ, however, about the awareness of PSYOP among American soldiers. They are, after all, actively engaged on the front lines of the U.S. effort to win the hearts and minds of would-be terrorists. This distinction, however, means little. Deployed to Afghanistan with the 345th PSYOP, U.S. Army Sergeant M.E. Roberts learned that "even within the military, PSYOP is largely misunderstood."[2] Soldiers either ascribe to it nefarious purposes, as if PSYOP constituted some "mystical Jedi mind trick," or they see it "simply as an extension of the good deeds done by Civil Affairs."[3]

To remedy this problem, in the midst of America's Global War on Terrorism, military officials defined PSYOP as "planned operations to convey selected truthful information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately, the behavior of their governments, organizations, groups, and individuals." They identified it as a tool "to induce or reinforce foreign attitudes and behavior favorable to the originator's objectives," and cast it as "a vital part of the broad range of US activities to influence foreign audiences."[4]

Officials situated PSYOP, along with electronic warfare (EW), computer network operations (CNO), military deception (MILDEC), and operations security (OPSEC), as a core element of United States Information Operations (IO). They envisioned all elements working in concert to produce IO that facilitated the capability of American forces "to influence, disrupt, corrupt, or usurp adversarial human and automated decision making while protecting our own."[5]

The integration of PSYOP with IO transpired as a result of recommendations made in 2003 as part of the *Information Operations Roadmap* produced by the Department of Defense. As it turned out, though, little understanding about PSYOP existed within IO. A "major problem," documented in Operation ENDURING FREEDOM (OEF), Operation IRAQI FREEDOM (OIF), and Operation IRAQI FREEDOM 2 (OIF 2) lessons learned, is that "IO planners did not adequately understand PSYOP." Consequently, IO officials "failed to appreciate [PSYOP] capabilities sufficiently or employ them appropriately and effectively." Following the integration, IO officers remained "not well trained or well informed."[6]

...Secretary of Defense Robert M. Gates, with the support of the commander of U.S. Special Operations Command (USSOCOM), called for replacing the term "PSYOP" altogether with a new label, Military Information Support Operations (MISO).

By June 2010 Secretary of Defense Robert M. Gates, with the support of the commander of U.S. Special Operations Command (USSOCOM), Admiral Eric Olson, called for replacing the term "PSYOP" altogether with a new label, Military Information Support Operations (MISO). The 4th PSYOP Group, located at Fort Bragg, NC, subsequently became the 4th Military Information Support Group (MISG), and a new unit, the 8th MISG, became active in August 2011. The 8th Group, composed of 1,070 soldiers, assumed responsibility for the 1st, 5th, and 9th MIS battalions while the 4th Group retained the 6th, 7th, and 8th battalions with a total of about 800 soldiers.

USSOCOM spokesperson Ken McGraw cited the tendency of the term "psychological operations" to elicit a widespread "misunderstanding of the mission" as "one of the catalysts for the transition." Not all stood convinced, though, that the name change might produce the desired results. Alfred Paddock, Jr., a retired colonel who served as the Director of Psychological Operations in the Office of the Secretary of Defense from 1986 to 1988, commented that the alteration "makes it even more difficult for psychological operations personnel to explain what they do."[7] Colonel Paddock might be right. MISO sounds more like a soup than a military operation.

This situation constitutes a problem. As communications scholars suggest, "Communication is a vital tool of terrorist groups." It enables them to "spread their ideology, legitimize their actions, recruit new supporters and intimidate enemies." Similar to the war of words that characterized the conflict between the United States and its communist adversaries during the Cold War, scholars acknowledge that persuasive communication remains of "special strategic importance in the Global War on Terrorism."[8] America's experience with PSYOP during the war it waged in Vietnam is instructive. This history suggests that it is the mission, and not the name, that prevents effectively incorporating psychological means into the way Americans prefer to wage war.[9]

"SURRENDER OR WE'LL SHOOT!"

During the Vietnam War, U.S. officials rechristened "psychological warfare" as "psychological operations." This reflected their concern about "the continued use of a term that includes 'warfare' to describe an activity that is directed to friends and neutrals as much or more than to hostile or potentially hostile people."[10] Officials conceptualized the new term to encompass "the planned use of propaganda and other measures to influence the opinions, emotions, attitudes, and behavior of hostile, neutral, or friendly groups in such a way as to support the achievement of national objectives."[11] They hoped it would energize the war for hearts and minds in Vietnam, underway since the 1950s.

In 1964 Barry Zorthian, a retired U.S. Marine with combat experience in World War II, became America's "communications czar" in Saigon. Initially this entailed dealing with the growing number of reporters in Vietnam. Within a year, President Lyndon B. Johnson expanded Zorthian's duties. He created the Joint United States Public Affairs Office (JUSPAO) and made Zorthian its director. The new agency's mandate covered all American PSYOP in Vietnam which Johnson hoped "could match and even outmatch the military's efforts."[12]

An amalgamation of civilian and military personnel, JUSPAO went to work in 1965. It outlined its mission to plan and execute American PSYOP as "nothing more—and nothing less—than the whole process of communications in wartime."[13] Under JUSPAO guidance, the United States Army's 4th PSYOP Group (formerly 6th PSYOP Battalion) became the "workhorse of American PSYOP in Vietnam" following its activation in 1967. Its work reflected President Johnson's repeated acknowledgment that, in Vietnam, "…the ultimate victory will depend upon the hearts and the minds of the people who live out there."[14]

Generating leaflets offered few prospects for advancing one's career. The task appeared incompatible with the technology-driven war that Americans waged in Vietnam.

This insight appeared clear from the vantage point afforded by Washington. It proved more difficult to see in Vietnam. There, conventionally trained American forces struggled to fix and destroy an elusive and deadly enemy. PSYOP aimed at winning hearts and minds appeared to many soldiers to constitute little more than a lethal sideshow. JUSPAO generated an impressive output—521,400 posters, 2,224,000 leaflets, 30,000 slogan sheets, and 600,000 calendars—all in its first year in support of pacification. Yet it found little place in America's war of attrition. The military strategy of search and destroy which U.S. forces employed in Vietnam primarily relegated PSYOP to tactical support of combat operations by inducing enemy defections through a campaign called *Chieu Hoi* (Open Arms). Ninety-five percent of JUSPAO's leaflet output consisted of surrender appeals.[15]

Generating leaflets offered few prospects for advancing one's career. The task appeared incompatible with the technology-driven war that Americans waged in Vietnam. As identified by one PSYOP officer with the 5th Special Forces Group (Airborne), 1st Special Forces, Nha Trang, "Face to face operations on the ground are the most effective form of psychological operations," while "aerial distribution of leaflets is the least effective and aerial loudspeaker operations the next least effective."[16] The military's dependence on helicopters, however, rendered such insights as inconsequential. The U.S. Army Commanding General, XXIV Corps (18 June 1970-9 June 1971) Lieutenant General James W. Sutherland, Jr., recalls that "while the helicopter" proved to be "invaluable," there existed a "growing tendency to place too much reliance on it." For example,

> There is a great inclination to move forces from one point to another, not searching any one area thoroughly and overflying both the enemy and the civilian populace, both of whom would be affected by our physical presence on the ground.[17]

A MATTER OF INTELLIGENCE?

The disconnect between conventional military priorities and PSYOP plagued military intelligence in Vietnam. A study completed in 1967 by the 15th PSYOP Detachment, 7th PSYOP Group, concluded that PSYOP intelligence had attained only a "low level of effectiveness in Vietnam." With "over 1,500 written pages being issued every day," the problem did not derive from a lack of material collected. In fact, available intelligence, according to the report, constituted "much information which is useful input to psychological operations intelligence analysis."[18]

Nevertheless, PSYOP intelligence in Vietnam possessed minimal collection activities of its own which made it dependent on the "fallout" generated from other efforts. This situation proved problematic as intelligence collectors possessed a limited capacity to respond to PSYOP needs. The Combined Military Interrogation Center (CMIC) at Tan Son Nhut, operated jointly by U.S. and Republic of Vietnam (RVN) military personnel, and the RVN's National Interrogation Center in Saigon (NIC), interrogated prisoners of war and some *Chieu Hoi*. Neither stood prepared to generate effective PSYOP based on the considerable quantity of intelligence that came in.

At the CMIC, interrogators "had no formal schooling in psychological operations." They had received their training at the U.S. Army Intelligence School at Fort Holabird, MD, which used *The Interrogator's Guide* as its basic text. Of the twelve military activities that the guide lists on page one for interrogators to coordinate, it identifies Order of Battle personnel as first and PSYWAR personnel as last. Interrogators in training received ideas for PSYOP questions from the book, but they had to search for these examples which are scattered throughout the text. Moreover, the questions offered concern only vague areas such as morale. They neglect entirely to address specific techniques such as leaflet and loudspeaker campaigns.[19]

This situation improved somewhat with the efforts made by the 4th PSYOP Group in Saigon. It initially had "no official access to military information facilities," due to MACV J2 (Assistant Chief of Staff for Intelligence) procedures that discouraged "personal contact between psychological operations intelligence analysts and military intelligence collection agencies," preferring that all interaction occur by "papers sent through official channels." Utilizing "personal friendships and informal relationships," PSYOP interrogators gained access to the CMIC and the NIC, but inevitably the arrangement proved "a difficult way in which to operate."[20]

The dissemination of intelligence to PSYOP analysts constituted another problem. Military Intelligence neglected to include both the 7th PSYOP Group and the 4th PSYOP Group on its direct distribution list and, despite the efforts made to correct this oversight, neither unit had made it onto the list by 1967. To complicate matters further, the Psychological Operations Directorate (MACPD) insisted that all intelligence information directed to the 4th PSYOP Group be routed through it first before further distribution. This left 4th PSYOP to operate without the benefit of timely intelligence.

Such obstructionism made it difficult to craft relevant PSYOP as did the perennial lack of funding afforded to the oft-stated U.S. goal of winning hearts and minds. PSYOP analysts could make only limited use of documents churned out by the Combined Document Exploitation Center (CDEC) located at Tan Son Nhut. The CDEC received copies of documents from all over Vietnam which it translated, producing up to 120,000 pages per day. This immense CDEC output went into its Document Retrieval System which stored the material on film, indexed in detail according to the Intelligence Subject Code. The freely available system came to include all intelligence reports pertaining to Vietnam up to and including the classification CONFIDENTIAL.

No factor hindered PSYOP intelligence more than personnel issues. Researchers and analysts were too few and far between, and those who did the work possessed few qualifications.

It all remained beyond the reach of PSYOP analysts, who, with the exception of those at JUSPAO that benefited from a J2 Liaison Officer who made daily visits to CDEC, lacked the 3M Reader Printers necessary to read the film. This situation in field offices not only prevented the circulation of material; it rendered an unwieldy storage and retrieval system that made officials dependent on file cabinets. Even when they did secure access to CDEC documents, usually by visiting the Center in person, the usefulness of these materials remained limited. Contents classified as SECRET or higher remained off limits to PSYOP intelligence except when personnel could arrange to view them through the "personal effort of a friend." Even this proved problematic as such products risked receiving a CLASSIFIED stamp that further limited their circulation.[21]

No factor hindered PSYOP intelligence more than personnel issues. Researchers and analysts were too few and far between, and those who did the work possessed few qualifications. While a study conducted by the 7th PSYOP Group in 1967 recommended that the PSYOP effort in Vietnam required almost 400 individuals engaged in intelligence work at all levels, the entire endeavor actually employed only 25. At the time of the report, six worked in the JUSPAO Planning Office; six sat the Psychological Desk in the Combined Intelligence Center, Vietnam; two operated as Psychological Officers for MACV J2; two more resided in MACPD; and the 4th PSYOP Group utilized six in its Research and Analysis Team. This left "those who are involved to exist from crisis to crisis, like firemen putting out fires." Analysts lacked "adequate time" that would allow them to "do the more thorough and detailed studies that are needed." JUSPAO alone lacked the human resources to scrutinize up to 95 percent of the intelligence it received.[22]

"WE ARE ALL PROFESSIONALS HERE"

This predicament resulted in a PSYOP product skewed toward the national level. All U.S. PSYOP analysts worked from Saigon. None operated at the corps, division, or sector level. This produced generalized products of marginal utility for Sector Advisors, Province Representatives, or PSYOP teams charged with providing timely tactical support. JUSPAO pre-tested and evaluated products using the Vietnamese language, for example, but its interviewing and surveying remained confined to Saigon and the safe areas that surrounded it. The results it obtained from questioning *Hoi Chanh* at *Chieu Hoi* centers, while often useful locally for "confirming or identifying trends," often did not incorporate representative samples from the countryside.

PSYOP officials in the field cited the problems that this presented. They argued that "locally produced leaflets" were "superior to those produced at the Saigon level" because they derived from "first hand information and tactical intelligence" that kept "specific targets in mind." For example, one national campaign resulted in four million leaflets dropped over Darlac Province. As the PSYOP advisor there pointed out, though, the effort "did not really have much pertinence" locally. It focused on the celebration of the Tet holiday celebrated by ethnic Vietnamese, few of whom resided in Darlac Province. Targeting the non-ethnic Vietnamese who did live there with Tet-themed PSYOP proved "valueless." The advisor observed, "They do not celebrate TET."[23]

PSYOP intelligence suffered due to its reliance on under-qualified personnel. "In many cases," according to the 7th PSYOP Group, individuals held Intelligence Research and Analysis positions "who have had no experience in psychological operations, intelligence, or related fields in the social sciences." None had received "Southeast Asia studies training." This made it difficult for PSYOP to connect effectively to the larger intelligence community. An inability to communicate created a cycle of frustration. "Products given to PSYOPS" did not fulfill its needs. Moreover, PSYOP staffs rarely petitioned the intelligence community "for specific help to meet specific requirements."[24]

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Due to the widespread perception that PSYOP constituted a sideshow to the real war in Vietnam, there existed a decided lack of professional expertise among those tasked with winning hearts and minds. JUSPAO employed no one who possessed an advanced degree in psychology, and had no individuals working on field teams or PSYOP battalions who held an advanced degree in any related social science. No PSYOP officer in the military's field forces had any graduate training in psychology. The same held true for the 4th PSYOP Group Headquarters. Based on its analysis of "everyday operations of psyop units plus the results of a survey of the qualifications, background, training and experience of personnel involved in psyop at all levels" in Vietnam, from "individual action" to "the highest level of policy formulation," one study asserted "that there is little or no input of competent professional knowledge of dynamic applied psychology to most aspects of PSYOPS." It suggested that labeling the U.S. effort as psychological operations proved "misleading even if interpreted very loosely."[25]

TO FORGIVE AND FORGET

The contradiction inherent in winning hearts and minds while prosecuting a strategy of search and destroy are evident in the attempt by U.S. officials to rejuvenate PSYOP-induced defections. Dubbed "National Reconciliation" by U.S. officials, RVN Prime Minister Nguyen Cao Ky instituted *Dai Doan Ket* by proclamation on 19 April 1967. While the existing *Chieu Hoi* had targeted Communist foot soldiers with promises of amnesty and guarantees of civil rights, the new initiative promised government aid in finding careers for top-level defectors "commensurate with their experience, ability and loyalty." Further, it offered "full participation in political activities" to all who agreed to "renounce force, abandon Communist

ideology and atrocities, lay down their weapons, and abide by the Constitution of Vietnam."[26]

Proponents of *Dai Doan Ket* envisioned national reconciliation as a means to end the war by nation-building. It constituted a program of "reconciliation and rehabilitation" that "could become the instrumentality by which members of the VC [Viet Cong] openly transfer their allegiance to the GVN." It aimed not only to bring insurgents back into society, but to allow them back into "the decision-making arena."[27] *Dai Doan Ket* failed to realize its promise. The number of high-level defectors remained minimal. For example, the Army of the Republic of Vietnam (ARVN) offered ex-VC officers the chance to take examinations that would enable them to join the military at their old ranks. By 1971 the tests remained un-administered. Nobody had ever volunteered to take them. Even more problematic, that same year VC agents posing as defectors infiltrated the program in record numbers. They overran 31 outposts.[28]

Familiar problems plagued *Dai Doan Ket* from its start. It took six months, from October 1966 until April 1967, for U.S. officials to convince their Vietnamese counterparts to adopt *Dai Doan Ket*. At the Mission Council meeting in Saigon on 10 April 1967, JUSPAO director Barry Zorthian observed that "National Reconciliation is back on track" since being "bogged down on the exact Vietnamese terminology for certain elements of National Reconciliation." Vietnamese officials, "concerned that there be no implication of coalition in the program," had spent months "casting around for the correct phraseology."[29]

RVN Premier Nguyen Cao Ky expressed his lack of faith in* Chieu Hoi *during one of his earliest meetings with U.S. Ambassador Henry Cabot Lodge.

Once the Vietnamese settled on *Dai Doan Ket*, JUSPAO provided the effort with enormous support, primarily by replicating the activities it utilized to promote *Chieu Hoi*. It produced and disseminated a copious quantity of leaflets. During the week of 24 March 1968, for example, the agency reported dropping 183 million leaflets throughout the RVN.[30] In the end, however, it all amounted to more of the same. *Dai Doan Ket* represented new rhetoric that did little to alter the old reality. Problems that had plagued *Chieu Hoi* from the beginning remained largely unaddressed.

RVN Premier Nguyen Cao Ky expressed his lack of faith in *Chieu Hoi* during one of his earliest meetings with U.S. Ambassador Henry Cabot Lodge. It left him "disgusted," he said, indicating that much American money "had been wasted."[31] This constituted a recurring theme. In December 1966, during a meeting in Bangkok with U.S. Secretary of State Dean Rusk, RVN President Thieu "expressed concern" that, of 40,000 defectors brought in through *Chieu Hoi*, 32,000 "were totally out of GVN [RVN] control." At present, Thieu argued, the program lacked the ability to ensure that defectors "did not revert to VC." Regardless, Rusk stressed the "great importance" of reconciliation, "alongside Chieu Hoi increase."[32]

Thieu continued his resistance. In a meeting with Lodge on 8 February 1967, Thieu pointed out that "nothing big could be expected in the way of national reconciliation." The "ground," he said, "needs a great deal of cultivation." There remained in Vietnam a "widespread suspicion of defectors." That is why, Thieu explained, the *Chieu Hoi* rate remained "intermittent." He told Lodge that when Premier Ky recently spoke of Communist defectors becoming ministers "he was at once subjected to a tremendous barrage of criticism." Thieu instructed Lodge that, regarding reconciliation, there should be no "illusions."[33]

That U.S. officials harbored them at all is remarkable, given the numerous problems with *Chieu Hoi*. The JUSPAO advisor responsible for Tuyen Duc/Lam Dong Provinces reported that, despite a "large scale appeal, few ralliers [defectors] came in." Even worse, the advisor noted that the *Chieu Hoi* Center in Lam Dong Province had been "razed by a GVN battalion." Recently arrived in the area, the unit "tore part of the walls from the building and stole tables and beds to be used for firewood." Another advisor from Quang Ngai/Quang Tin indicated that "neither province has an effective Chieu Hoi Psy-Ops team in operation." In An Giang, the advisor cited a "marked lack of initiative on the part of the Chieu Hoi Chief." He added that, after a thorough investigation, "only one pregnant woman who professes to be a member of the Chieu Hoi cadre has been found actually working in the field." The advisor from Tay Ninh/Binh Long observed that the "Chieu Hoi program has not been very effective."[34]

Through its entire time of operation, including the period after 1967 when the RVN implemented *Dai Doan Ket*, the PSYOP defection program yielded almost 200,000 *hoi chanh* (defectors).[35] As the JUSPAO report from Ba Xuyen Province makes clear, however, this metric proved misleading. "On the surface," the program appeared to "move along." Defectors did "come in," but "any look below the surface reveals grave problems." Specifically, "Chieu Hoi activity is not coordinated with other elements." Further indication of these issues percolating "below the surface" is evident in the report filed from Hau Nghia. While it cites a growing number of defectors, "double that in April," it also observes that the "Chieu-Hoi office has yet to

work out a re-indoctrination program of the most elementary sort." Defectors just "sit at the center," as a "course of study to facilitate reintegration into society is shamefully lacking."[36]

The military efforts of Americans and their Vietnamese counterparts relied "more heavily on the need to kill VC than on the GVN's [RVN] goals of peace and prosperity." Lecturers in reintegration centers read from prepared texts with "little regard as to whether they were even understood much less accepted." Course content blended anticommunism and nationalism while emphasizing "rules of behavior" designed to further the "just cause" of the RVN. *Hoi Chanh* found *Chieu Hoi* personnel to be "undemocratic" and "lacking enthusiasm for what they were teaching." They considered the instructors as "condescending, and generally aloof from the problems of the men they were instructing."[37] This attitude toward *Hoi Chanh* negated the program's aim of gathering intelligence about the adversary. As the U.S. advisor in Hau Nghia reported, the "Chieu-Hoi chief has yet to inform JUSPAO or VIS [Vietnamese Information Service] about a new rallier [defector], so that rapid exploitation of his defection can be made."[38]

A report prepared by the Chieu Hoi Division of the Office of Civil Operations (OCO), "Some Lessons Learned About Chieu Hoi in 1966," reveals the defector program's problems as widespread. Despite a clear link between military operations and defection rates, for example, the report emphasizes that "there was little if any coordination of the Chieu Hoi psyops effort with military operations." Meanwhile, reception centers had not been "built up, either quantitatively or qualitatively, to the desired standards." The report emphasizes that, while "we promise members of the VC that they will be welcomed," few provinces maintain an "organized and continuous program to make the incoming Hoi Chanh feel welcome." It chronicles "many instances" where *Hoi Chanh* failed to receive their promised payments. Even more problematic, it cites "a number of cases of mistreatment" and labels the political reorientation for returnees as "sadly deficient."[39]

THE PROBLEMS REMAINED THE SAME

In July 1967 the U.S. Department of State proudly announced the institution of "National Reconciliation in Vietnam" on the front page of its publication, *Viet-Nam Notes*. Besides outlining the speech made by Premier Ky to announce *Dai Doan Ket* on 17 April, the newsletter notes the distinction between the new initiative and *Chieu Hoi*. *Dai Doan Ket* "offers more to the middle and upper ranks," provides employment "in accordance with their ability," and extends the full rights of citizenship, "including the right to vote and to run for office."[40] The evidence suggests that this remained a distinction without a difference. The program never gained Vietnamese acceptance, nor did it reenergize the *Chieu Hoi* effort. Mostly it constituted a new slogan, reaffirmed through a joint communiqué issued by Presidents Johnson and Thieu on 20 July 1968.

A couple of months after the announcement of *Dai Doan Ket*, President Johnson's Special Counsel, Harry McPherson, visited Vietnam. He reported back to the White House little indication of a revamped amnesty program. At the *Chieu Hoi* center which McPherson toured, he found accommodations "pretty crowded" while "facilities were few." While there, he heard "stories of hoi chans [defectors] being beaten," and "frequent accounts of their being denied ID cards and work permits." Whatever "the truth of these tales," McPherson told the President, they offered a clear indication of the "divided emotions with which hoi chans are regarded by government forces." Despite its retooling, the program's problems continued unabated. So too did the pamphlets produced to support it.[41]

McPherson wondered "how effective our psy war operation is." He observed that "MACV's [Military Assistance Command, Vietnam] people are infatuated with how many million leaflets they've dropped." Not impressed, McPherson questioned if it might not "be more effective if they dropped them in their canisters." He added that there remained "much room for improvement in this part of our effort."[42]

Securing a pledge of national reconciliation from Vietnam's leaders resulted in *Dai Doan Ket* garnering only lip service. In promulgating its 1968 plan, the *Chieu Hoi* Division cited "Vietnamese motivation and administrative capability" as the program's continued "problems of ultimate concern." It identified the existing RVN *Chieu Hoi* staff of 1,615 as "inadequate both in numbers and quality." Since the RVN maintained little interest in the endeavor, it offered salaries "too low to attract competent people." In turn, this situation perpetuated rampant corruption. While the program promised defectors various allowances, such as 200 piastres per month while residing at the *Chieu Hoi* center and 1,000 piastres on separation, along with additional food money and clothing, "in fact, the underpaid GVN [RVN] officials often tend to make ends meet by cheating on returnee allowances."[43]

Dai Doan Ket hardly reformed *Chieu Hoi*. Old problems persisted. New promises went unfulfilled. *Dai Doan Ket* pledged to defectors the opportunity to reintegrate into the RVN with full political rights, social acceptance, and economic security, offering jobs commensurate with one's talent and experience. Yet American *Chieu Hoi* officials observed a continued "attitude of suspicion" among people living in the RVN that "inhibits resettlement and

reintegration of returnees." The more *Dai Doan Ket* promised the worse the situation became. Suspicion turned to "resentment" whenever the program offered "any extra advantages" to "ex-Viet Cong as an inducement for their return or to facilitate a new life." U.S. advisors warned of the danger that the program risked becoming "extremely counter-productive" to the entire war effort if returnees are not "successfully reintegrated into Vietnamese economic life," especially as finding jobs for *hoi chanh* remained a "major specific problem."[44]

By the end of 1968, American PSYOP planners could only report that job placement remained a "most important point." It constituted the "one aspect" of *Dai Doan Ket* that has "not received the attention it deserves." Once again, the call went out for the "renewed interest due in this area in order to maintain the credibility of the policy."[45] It went unheeded. Richard M. Nixon, successor to Lyndon B. Johnson as U.S. President, wondered in November 1969, "Are we doing everything we can" to "disrupt morale in North Vietnam and among the VC?" National Security Advisor Henry Kissinger responded by suggesting the "utilization of Viet Cong and North Vietnam Army ralliers within the South Vietnam psychological warfare organizations."[46] The RVN had already authorized the establishment of high-level provincial committees to find jobs for *hoi chanh*. By the end of 1971, only five provinces had such a committee. At the national level, the *Chieu Hoi* Ministry provided jobs to several prominent returnees, but other civil ministries demonstrated no "initiative or desire to make national reconciliation a reality."[47]

Neither did Americans in Vietnam. U.S. embassy officials applied "rigorous rules" to prevent U.S. agencies from hiring *hoi chanh*, thwarting the efforts to do so on several occasions by both JUSPAO and the U.S. Agency for International Development (USAID).[48] The American Chieu Hoi Division reported that U.S. security regulations "definitely inhibit the employment of returnees as laborers, drivers and in other non-sensitive positions." It cited the difficulty of getting Embassy security clearances for former "nationalist Viet Minh" while observing that the "problem is obviously greater for ex-Viet Cong." The Chieu Hoi Division identified the issue this presented in projecting a reformed RVN, especially as "a former employee of the colonial regime will have no difficulty" receiving clearance.[49]

NOW AND THEN

Vietnam proved an ill fit for the American way of war. Political and military restraints prevented the United States from pursuing the unconditional surrender of its adversary through the full-scale application of military might in its familiar style of waging war. Vietnam ushered in a new era of warfare which demanded "not overweening weight of resources," but "light agile, maneuverable, politically sensitive and sophisticated armed forces for peacemaking and peacekeeping roles."[50] This would have necessitated the seamless integration of PSYOP into a U.S. military and political strategy that emphasized RVN reforms. Such a strategy remained chimerical.

The Vietnamese "ruling establishment," dominated by the "more educated elite and the bourgeoisie left behind by the French" expressed "inadequate concern for the welfare of the rural peasant and worker." Widespread RVN corruption and apathy ensured that defection held "little appeal" to "Viet Cong on an ideological or political level." RVN unwillingness to commit to genuine reforms explains "why the more motivated Viet Cong only rarely return under the Chieu Hoi Program." It also offers insight into the reason why American PSYOP generated to support the defector program "largely" emphasized "fears, hardships, etc."[51] The RVN had few positives to offer.

Neither did the Communists, however. The U.S. President's Special Counsel Harry McPherson identified these issues when he visited Vietnam during the summer of 1967. He warned President Johnson that "the VC take every advantage of the hatred caused by RVN corruption, and by the absence of government services." McPherson admitted that while "it sounds romantic to say," if he "were a young peasant" and saw "that the ridiculous Vietnamese educational system" if offered a "position of leadership in the VC," he would "join up." The Communists had "little to offer in a positive way," McPherson added. Their basic appeal targeted "those who want to get rid of today's system."[52]

Americans countered Communism in Vietnam in conventional military fashion. Despite renaming their psychological initiatives, few Americans or their Vietnamese allies took seriously the notion of winning hearts and minds. They relied instead on the persuasive powers of attrition. The wartime strategies employed by the United States as part of its Global War on Terror in Afghanistan and in Iraq differed considerably from the style of warfare Americans utilized in Vietnam. The problem of winning hearts and minds, however, remains.

In his review of PSYOP conducted in Afghanistan and Iraq, Christopher Lamb observes that "in combat, many commanders will place greater confidence in kinetic weapons." For many, he writes, "substituting kinetic options with PSYOP products amounts to targeting on faith, since their actual effects are so difficult to observe and quantify." While the impact of PSYOP "will always be more obscure than that of kinetic weapons," Lamb concludes, "much more could be done to systematically assess PSYOP effects through dedicated intelligence support and

interrogation of target audiences."[53] This entails more than a name change. It requires a re-conceptualizing of the American way of war as dictated by the demands of a new era of warfare christened by the conflict in Vietnam.[54] It begs for recognition that hearts and minds constitute more than a slogan or a sideshow; they occupy the central terrain of battle. Dominating this space is essential, whatever the means employed to do so are called.

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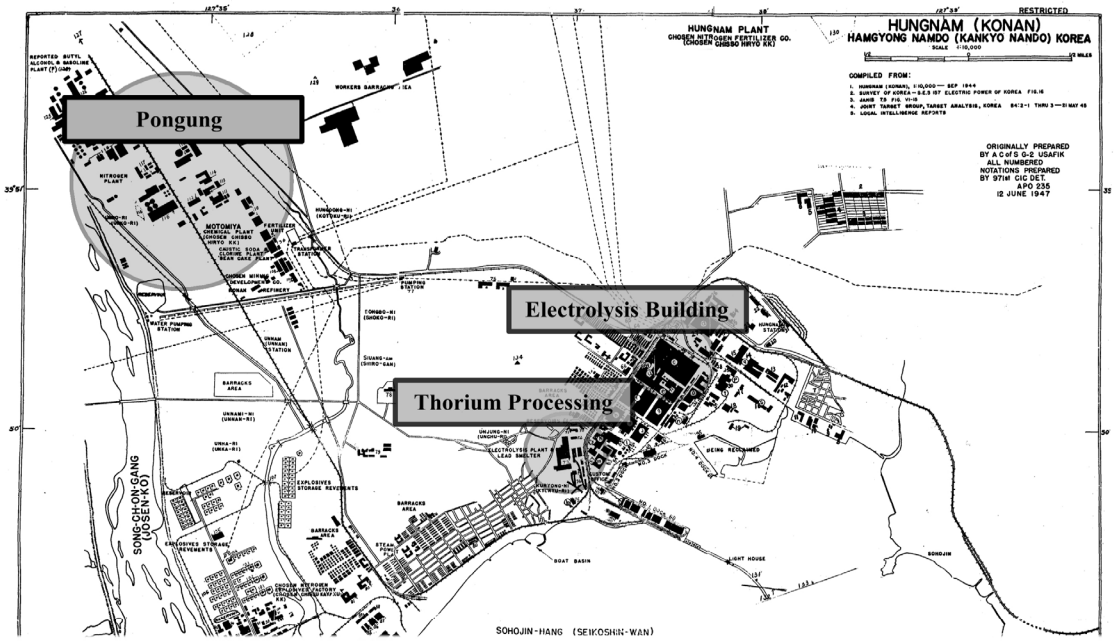
Two CIA Reports:
Hungnam, North Korea

by Bill Streifer

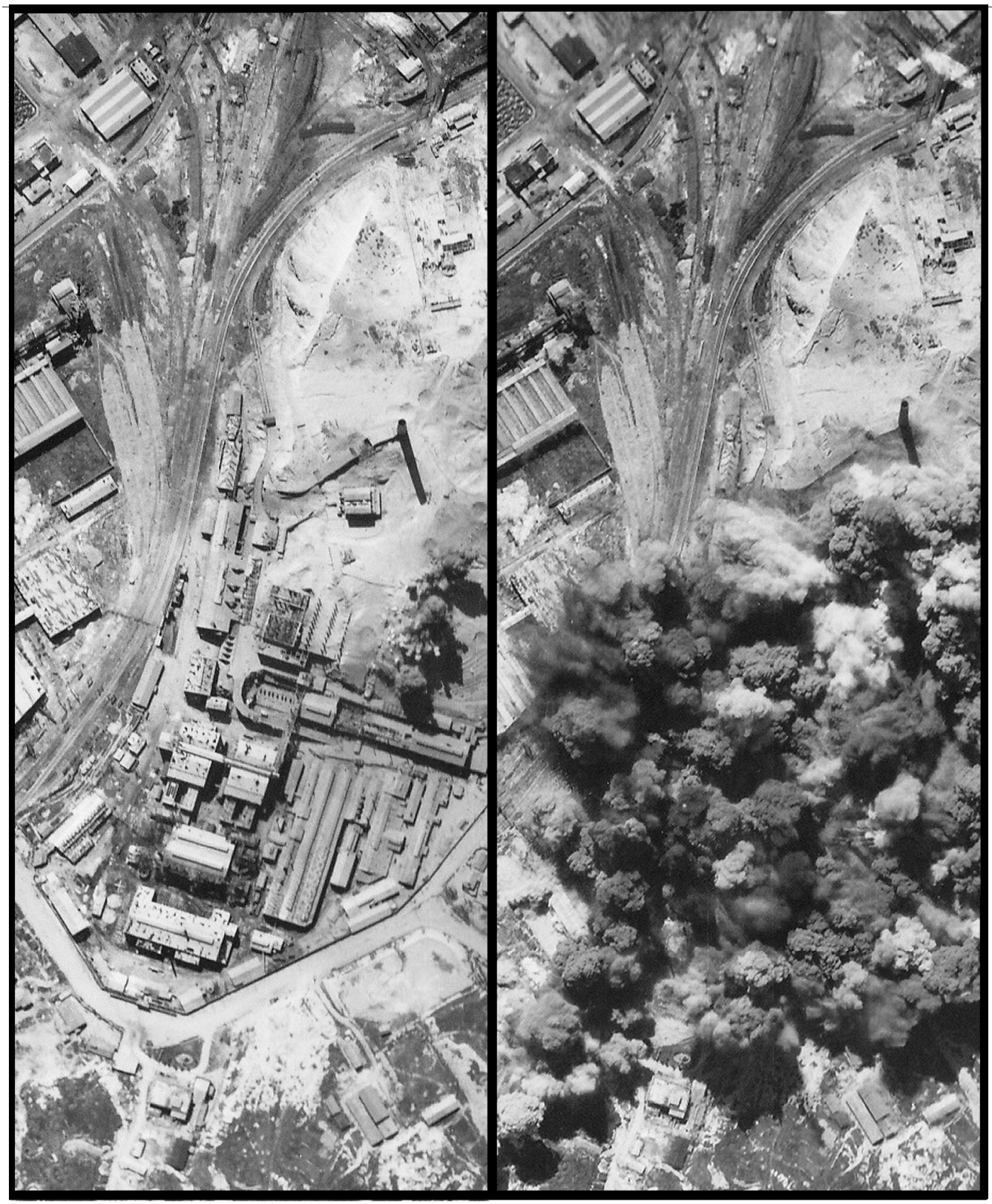


United States Air Force in Korea (USAFIK) Map of Hungnam, North Korea (1947).

BACKGROUND

Developed in the 1930s by the Japanese industrialist Jun Noguchi, the Chosen Nitrogen Fertilizer Complex in the port city of Hungnam, North Korea (known as "Konan" by the Japanese), was the largest nitrogen fertilizer and chemical complex in the Far East. Other facilities in the area included an explosives plant about 1.5 miles to the southwest and the Motomiya Chemical Plant about 2.5 miles to the northwest (now Pongung).[1] The Hungnam Chemical Complex, which remained undamaged throughout World War II, was demolished by B-29 bombers with the Far East Air Force (FEAF) during the early months of the Korean War. The Hungnam Nonferrous Metals plant, for instance, was attacked on August 24, 1950. The following day, in a message to General George E. Stratemeyer, the Commanding General of FEAF, General Emmett "Rosie" O'Donnell, the Commanding General of the FEAF Bomber Command, wrote the following:

> For your information, study of strike photos taken during mission on Konan [Hungnam] yesterday reveals that the one building thorium plant indicated to us by the Joint Chiefs of Staff as critical target has been thirty-five percent destroyed and has suffered an estimated additional forty percent heavy damage. Plant area immediately adjacent to this building is heavily and accurately hit. Post strike photos are still not available because weather forced reconnaissance aircraft to land at Misawa. It is thought that buildings in this area were used to process monazite sand which is a primary source of thorium and other elements in the atomic energy program. I believe this was an excellent mission conducted by one group, the nine two group [92nd BG], and results will likely have far reaching implications.[2]



August 24, 1950

Thorium processing plant (Hungnam, North Korea) demolished by B-29s during the Korean War (1950).

Following the August 24, 1950, attack, *The New York Times* described a mission in which B-29s staged heavy strikes against North Korean targets, dropping "more than 600 tons of bombs by radar on four major objectives."[3] The "heaviest blows," however, were struck on "an outlying section of the chemical plant" at Hungnam.[4] Later, an article in *Chemical Week* remarked that "the erasure of the plants by U.S. B-29's evidently put quite a dent in the Reds' war potential," adding, "It's hard to make chemicals in a flattened plant."[5]

Thorium, which can be extracted from thorium oxide, which in turn can be extracted from monazite, can be converted into fissionable U-233 by means of a nuclear reactor—in much the same way as uranium can be converted into plutonium. This was of great interest to the early Soviet nuclear weapons program, which culminated on August 29, 1949, when the Russians conducted their first atomic test.[6] By 1951 about 49,000 tons of monazite, which may contain as much as 7,500 tons of thorium oxide,[7] had been excavated.[8] According to documents discovered in 1993 at the Soviet archives, North Korean leader Kim Il-sung had promised to ship far more monazite to the Soviet Union[9] in exchange for military equipment shortly before the North Korean offensive against South Korea began. Although the program to secure fissionable material from North Korean mines was interrupted during the Korean War, it resumed afterward.[10] Soviet officials investigated the exploitation of monazite deposits in North Korea "from the beginning of the occupation period in 1945," when samples of the deposits were brought to the Soviet Union.[11]

In June 1966 North Korea concluded an economic cooperation agreement with the Soviet Union...

Rumors of nuclear activities at Hungnam began in October 1946 when David Snell—a reporter for *The Atlanta Constitution*, who had recently returned from military service in Seoul, Korea—reported in a front-page headline story how Japanese chemists at the Konan fertilizer and chemical complex had worked feverishly to develop the atomic bomb (including an alleged atomic test at sea) before Soviet forces arrived in the area and how, upon their arrival, the Russians allegedly tortured Japanese scientists for their "atomic know-how." Snell's source was the Japanese head of security and counterintelligence at the plant during the war.[12]

When Snell requested permission to file the story with his "old paper" in Atlanta, the head of U.S. Army Intelligence in Seoul, LTC Cecil W. Nist, denied Snell's request, adding, "We know all about Konan, of course."[13] Snell's story in *The Atlanta Constitution* sparked harsh condemnation in Japan and the Soviet Union, as well as in the United States. Yoshio Nishina, the father of modern physics in Japan, called the story "a complete lie," the Soviet press called Snell a provocateur, and Robert Patterson, the U.S. Secretary of War, categorically denied the story without amplification. Officially, the story as reported by Snell was a "complete fabrication."[14]

TWO CIA REPORTS

Following a February 1965 visit to North Korea by Soviet Premier Alexei Kosygin, economic relations improved considerably. Then in June 1966 North Korea concluded an economic cooperation agreement with the Soviet Union which the CIA believes probably included "aid provisions for many of the unfinished projects" from an earlier agreement.[15] By 1970 a number of "Soviet-assisted projects" were completed, including the chemical plant at Hungnam,[16] which, as we have already discussed, was demolished two decades earlier. According to the CIA, Soviet trade statistics provided "the only consistent set of information on the value of drawings under the 1966 [Soviet-North Korean] agreement." In 1969, the year when the CIA produced a number of reports on Hungnam (including the two discussed in this article), exports to the Soviet Union totaled $126.6 million and imports $201.6 million.[17]

The information that follows is based on a pair of now-declassified "Top Secret" CIA "Basic Imagery Interpretation Reports."[18] The first, dated June 1969, is a description of the Hungnam Chemical Plant at Pongung, and the second, dated November 1969, is a detailed description of the Hungnam Nonferrous Metals Plant, also known as the Hungnam Copper Refinery (according to the CIA/USAF's Basic Encyclopedia). Both CIA reports have since been declassified, and yet large sections of each remain redacted. The "latest imagery used" and the targets' Basic Encyclopedia numbers are also redacted. The Basic Encyclopedia (BE) number (BEN) is a 10-character number containing two parts: the World Aeronautical Chart (WAC) number—four characters—and the installation number—either six numeric characters, one alpha and five numeric characters or two alpha and four numeric characters.[19] The World Aeronautical Chart provides complete world coverage with uniform presentation of data at a constant scale, and is used in the production of other charts.[20]

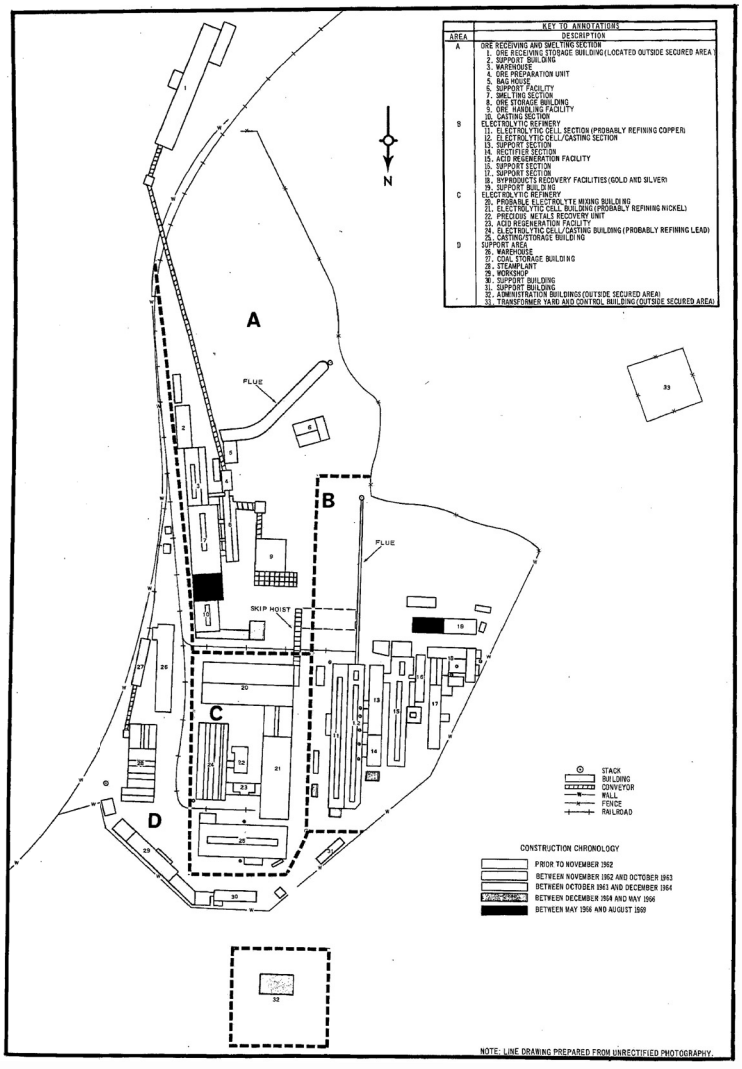
THE HUNGNAM CHEMICAL PLANT AT PONGUNG

The CIA's June 1969 "Basic Imagery Interpretation Report" on the Hungnam Chemical Plant at Pongung covered the period between late 1963 and February 1969. Based on photography, the plant was completed in

October 1963, "operated continually throughout the period," and "no significant changes have occurred since." In addition to a photograph and a detailed line drawing of the plant, the report also includes a discussion of plant status and reference material, some of which remains heavily redacted. This report was based partially on an April 10, 1968, "Top Secret" CIA report and partially on an April 1969, "Secret" U.S. Army report.

The Hungnam Chemical Plant at Pongung, located in the northwest section of Hungnam, "is part of an industrial complex which also contains the Hungnam Nitrogen Fertilizer Plant [redacted], the Hungnam Copper Refinery [redacted], and the Hungnam Explosives Plant 17 [redacted]." As will be seen later, the "Hungnam Copper Refinery" was [more accurately] renamed the "Hungnam Nonferrous Metals Plant." The plant at Pongung produced industrial chemicals and synthetic fibers. In addition, production facilities for caustic soda, calcium carbide, calcium cyanamide, ammonium chloride, and "probably" vinyl acetate were identified on photography. There were also facilities for the possible production of polyvinyl chloride and dyestuffs which "collateral information indicates [were] products of this plant." Electric power was received from the regional grid through the Hungnam Transformer Station. A waterworks facility adjacent to the west side of the facility supplied it with water from the Songchon River. Well north, along the border between China and North Korea, the Songchon River flows into the Yalu River.

The Hungnam Chemical Plant at Pongung measures approximately 10,000 by 4,000 feet, and occupies 920 acres. It is secured on three sides by a wall and bordered on the fourth (on the west side) by a canal. The plant can be divided functionally into eight production areas: Probable Vinyl Acetate Production (Area A), Gas By-Product Production (Area B), Ammonium Chloride Production (Area C), Possible Dyestuff Production (Area D), Calcium Carbide and Cyanamide Production (Area F), Possible Polyvinyl Chloride Production (Area G), and Caustic Soda Production (Areas H and I). In the Caustic Soda Production areas, salt



Thorium processing plant (Hungnam, North Korea) in a 1969 CIA report.

brine is electrolyzed to form caustic soda and chlorine in the electrolysis buildings. The map of the Hungnam Chemical Plant at Pongung on page 7 of the report is redacted.[21]

HUNGNAM NONFERROUS METALS PLANT

The CIA's November 1969 "Basic Imagery Interpretation Report" on the Hungnam Nonferrous Metal Plant covers the period between November 1962 and August 1969. In addition to a low-resolution photograph of the facility, the report also contains a detailed line drawing of the plant, a chronological summary of construction, and its operational status.

A detailed analysis of the plant based on high-resolution photography showed that the primary products of the plant were refined nonferrous metals, "probably copper, lead, and nickel." Secondary products including refined precious metals, gold and silver, which were recovered as by-products from the electrolytic solution used in the refining process. Nonferrous ores were transported to the plant by rail from nearby mines at Munchon (120km) and Nampo (350km). In addition, small quantities of ore were brought by rail into a receiving and storage area. After smelting, these ores were further refined, again by the electrolytic process.

The CIA believed that the sulfuric acid used in the electrolytic cells was "probably provided by the sulfuric acid production facilities at an adjacent fertilizer plant." Precious metals were then recovered as by-products from the residues within the electrolytic cells. Electric power for the plant was obtained from the regional grid through a small transformer yard west of the plant. The Hungnam Nonferrous Metals Plant occupied an irregularly shaped area approximately 1,500 by 500 feet, which contained about 18 acres. The entire plant is secured with two controlled-access entrances. A rail spur from the main rail line between Wonsan and Tanchon entered the plant from the south. A road entered the plant from the north. Berthing facilities for both ocean-going and coastal vessels were located just south of the plant on the Sea of Japan.

In 1962 the Hungnam Nonferrous Metals Plant contained two electrolytic cell buildings and a precious metals recovery unit that were "probably operational." In addition, an ore smelting facility was present, but the first evidence of its operation was in January 1966 when smoke was seen emanating from the plant. By October 1963, a third electrolytic cell building was observed, also "probably operational." Between October 1963 and December 1964, a second precious metals recovery unit was constructed and coal-handling facilities for the steam plant were added. In addition, between May 1966 and November 1968 the smelter was expanded. Additional support facilities were also constructed during the "reporting period," that is, between November 1962 and August 1969. Although the installation was previously named the "Hungnam Copper Refinery" (see "The Hungnam Chemical Plant at Pongung," above), the plant was later more appropriately renamed the "Hungnam Nonferrous Metals Plant." The major plant facilities were an ore smelting facility, three electrolytic cell buildings, and precious metals recovery units.

According to the CIA, the Hungnam Nonferrous Metals Plant had been "covered by overhead photography" since late 1962. At that time, the plant contained two electrolytic cell buildings, a smelter, a precious metals recovery section, and support buildings. Most of the refining facilities at the plant, however, "predate the Korean conflict." The facilities that were heavily damaged during the war were put back into operation about 1957 with assistance from the Soviet Union. Between 1962 and 1969, an additional electrolytic cell building was constructed and the steam plant, smelting section, and numerous support facilities were expanded. Meanwhile, some minor support facilities were dismantled. According to CIA analysts, "the existing refining facilities were probably in partial operation" by November 1962 "as evidenced by the presence of rail cars, trucks, and construction activity." The third electrolytic cell building was "probably operational in October 1963, when it was first observed complete." On the basis of "smoke emissions from associated stacks," the smelting section was first observed in operation in 1966, and the casting section of the electrolytic cell building in March 1968. Smoke was observed emanating from these same stacks during all subsequent photography. By August 1969 the entire nonferrous metals plant appeared to be fully operational.

AIR TARGET CHARTS 548TH RTG, 200 SERIES, 4TH EDITION, APRIL 1968

Both CIA reports—"Hungnam Chemical Plant at Pongung" and "Hungnam Nonferrous Metals plant"—relied on the same map reference: 548th Reconnaissance Technical Group (RTG), April 1968, 200 Series, 4th edition.[22] As SMSgt (Ret) Bill Forsyth (former 548th Reconnaissance Technical Group) explained, the 200 Series charts were radar charts developed mainly for the Strategic Air Command (SAC). Features like cities were portrayed as they would probably have been seen on a radar scope: high-return areas would be a darker shade of magenta; small settlements/villages portrayed with circles. "We called them pop circles," Forsyth said, with an emphasis placed on vertical obstructions, such as antennas. For an April 1968 chart, the basic information would have been compiled from overhead satellite imagery—KH-4, now

declassified. The first KH-4 ("Keyhole") mission, launched in 1962, brought a major breakthrough in technology with the employment of the "Mural" camera, providing stereoscopic imagery. This meant that two cameras photographed each target from different angles, allowing imagery analysts to examine KH-4 stereoscopic photos as three-dimensional. Since the first SR-71 Blackbird mission over North Korea was flown on January 26, 1968, three days after the USS Pueblo was seized, imagery from this mission over Hungnam would not have been used to compile the base information for a chart published in April 1968. Rather, Forsyth said, it "likely did a quick update of the information on the 3rd edition chart using SR-71 imagery, and rushed it to printing." Forsyth arrived at the 548th in July 1972, after assignments in Vietnam, exploiting drone imagery, Japan, SR-71 and U-2, and an assignment at March AFB in California. After Vietnam fell in 1975, he worked mainly on North Korea at the 548th. "Loved the work," Forsyth said.[23]

Credits

1. "Hungnam Plant," Chosen Nitrogen Fertilizer Company, Hungnam (Konan), Assistant Chief of Staff G-2, USAFIK (United States Air Force in Korea), 971st CIC Detachment, June 12, 1947.
2. "Bombing of Thorium Processing Plant," Far East Air Force (FEAF), August 24, 1950 (snippet), Air Force Historical Research Agency (AFHRA). The "U"-shaped building seen at the center of #2 is a material cart loading ramp, used for moving up raw material (ore) before it is dumped into the processing mill.
3. "Basic Imagery Interpretation Report: Hungnam Nonferrous Metals Plant," CIA ("Top Secret"), Industrial Facilities (Non-Military), November 1969, p. 5.

Notes

[1] 356 POWs, prisoners of the Japanese during WWII—mostly British, some Australian and a Canadian physician—were forced to work long hours under back-breaking conditions at a calcium carbide plant at the Motomiya Chemical Plant. Their experiences will be discussed in an upcoming book, *The Flight of the Hog Wild*, by Bill Streifer and Irek Sabitov (a Russian journalist).
[2] ComGen FEAF Bomber Command (Yokota, Japan) to ComGen FEAF (Tokyo, Japan), August 25, 1950; "The Three Wars of Lt. Gen. George E. Stratemeyer," Air Force History and Museums Program (1999), p. 135.
[3] "Official Reports Describing the Day's Fighting on Korean Fronts," *The New York Times*, August 26, 1950, p. 2.
[4] *Ibid.*
[5] "RED KOREA: It's hard to make chemicals in a flattened plant," *Chemical Week*, Vol. 69, 1951, McGraw Hill, p. 10.
[6] For a discussion of the CIA's failure to predict when the Russians would conduct their first atomic test, see "The Shock of 'First Lightning': An Intelligence Failure?" *American Intelligence Journal*, Vol. 31, No. 1, 2013, by Bill Streifer and Irek Sabitov (a Russian journalist).
[7] Californian monazite contains between 0.5% and 20% thorium; *The Tuscaloosa News*, October 21, 1946, p. 3.
[8] Zaloga, Steve, *Target America*, Presidio, 1993, p. 40.
[9] Weathersby, Kathryn, "Soviet Aims in Korea and the Origins of the Korean War, 1945-1950: New Evidence from Russian Archives," Working Paper No. 8 (November 1993), p. 26.
[10] Zaloga, Steve. *Target America*, Presidio, 1993, p. 40.
[11] Weathersby, Kathryn, "Soviet Aims in Korea and the Origins of the Korean War, 1945-1950: New Evidence from Russian Archives," Working Paper No. 8 (November 1993), p. 26.
[12] Snell, David, "Japan Developed Atom Bomb; Russians Grabbed Scientists," *The Atlanta Constitution*, October 1, 1946, p. 1.
[13] Sources available upon request.
[14] Snell, David, "Japan Developed Atom Bomb; Russians Grabbed Scientists," October 3, 1946, p. 1.
[15] "Recent Soviet and Communist Chinese Aid to North Korea," CIA, November 19, 1970.
[16] *Ibid.*
[17] *Ibid.*
[18] "Basic Imagery Interpretation Report: Hungnam Chemical Plant Pongung," CIA ("Top Secret"), Industrial Facilities (Non-Military), June 1969, 7 pages; "Basic Imagery Interpretation Report: Hungnam Nonferrous Metals Plant," CIA ("Top Secret"), Industrial Facilities (Non-Military), November 1969, 6 pages.
[19] *USAF Intelligence Targeting Guide*, Air Force Pamphlet #14-210, Intelligence, February 1, 1998, Chapter 1: "Targeting and the Target."
[20] Ndikum, Philip Forsang, *Encyclopaedia of International Aviation Law*, Vol. 2, 2013, p. 444.
[21] 548th RTG (Reconnaissance Technical Group), USATC (U.S. Air Target Chart), 200 Series, Sheet MO380-4HL, 4th edition, April 1968, Scale 1:200,000 ("Secret").
[22] 548th RTG, USATC, 200 Series, Sheet MO380-4HL, 4th edition, April 1968, Scale 1:200,000 ("Secret").
[23] This information is based upon an online interview with Bill Forsyth in April 2014.

Bill Streifer is a historical researcher on topics such as Allied POW camps, B-29 reconnaissance missions, and the Office of Strategic Services (OSS) during World War II. His articles and blogs have appeared in the American Intelligence Journal*, the* OSS Society Journal*, the National Library of Scotland, and the British "Goldfish Club" and 500th Bomb Squadron (B-29) newsletters. He and Irek Sabitov are co-authoring a massive, well-documented book about the Konan POW camp in northern Korea near where Japanese atomic research during World War II was rumored to have occurred, that is until Soviet forces occupied the area and tortured Japanese scientists for their atomic "know-how." Details can be found on "The Flight of the Hog Wild" website, http://www.my-jia.com/The_Flight_of_the_Hog_Wild, which has been recognized by the Library of Congress as part of its historical collection of Internet materials.*

The "Great Gouzenko":

Political, Intelligence, and Psychological Factors in the Defection that Triggered the Cold War

by Erik D. Jens

[Author's Note: All statements of fact, opinion, or analysis expressed in this article are those of the author and do not reflect U.S. Department of Defense or other U.S. government positions on any fact or argument herein included.]

INTRODUCTION: IGOR GOUZENKO, THE LITTLE DEFECTOR WHO STARTED THE BIG (COLD) WAR

The defection to Canada of Soviet GRU officer Igor Gouzenko is often cited as marking the start of the Cold War.[1] The fact that he defected in the (as of 1945) relative backwater of Ottawa, rather than in New York or London, highlights several aspects of the Allied intelligence communities' wartime dispensation. It established a long-lasting pattern of the Canadian intelligence community's subordination to, and sometime manipulation by, its initially more experienced and better-resourced American and British cousins. More significantly, however, Gouzenko's defection established beyond doubt, even for the many Communists and their various sympathizers throughout the West, the Soviet Union's commitment to obtaining atomic bomb secrets, and the lengths to which it was willing to go to get them. Perhaps more than any other single event in the immediate aftermath of the Allied victory, Gouzenko's deed fractured the fragile wartime friendship between the American and Western European nations on one side, and the Soviet Union on the other.

That Gouzenko himself was a fairly extraordinary person makes the story of his defection and its aftermath even more compelling a narrative. Igor Gouzenko was what Shakespeare might have called a "man of parts": a talented artist, a veteran of the wartime Red Army, a skilled cryptographer in the pre-computer era, personally brave enough to go through with defecting, and—as he proved later in life—a best-selling novelist and memoirist. Yet he could also be vainglorious, self-centered, quick to take offense and to litigate on a whim, paranoid, generous with friends but hopeless with money, even as he and his wife raised eight children in their adopted nation of Canada.

Prior to World War Two, Canada had essentially no intelligence community in the modern sense.

As an intelligence case study, Gouzenko's defection is worth examining on at least three levels. First, his actual defection serves as a case study of how to handle (and how not to handle) a valuable defector in a rapidly evolving situation. Second, examining Gouzenko's character and motivations in light of psychologist Robert Cialdini's "weapons of influence" provides insights for any Western case officer seeking to draw out and develop a young, intelligent embassy worker from an authoritarian state. Third, young Lieutenant Gouzenko's behavior on the job, as noted by a visiting Soviet counterintelligence officer a year before his defection, raised several red flags for those who could discern them. This paper will examine both the circumstances and consequences of Gouzenko's defection, and his personal character and motivations that might provide insights into other such potential or actual defections.

THE SETTING: CANADIAN INTELLIGENCE DURING WORLD WAR II

Prior to World War Two, Canada had essentially no intelligence community in the modern sense. In the realm of signals intelligence (SIGINT), the nation had entered the war "in a state of cryptographic blindness," though by war's end it had built substantial, permanent partnerships with the United States and Great Britain.[2] As for human intelligence (HUMINT), as of 1944 Canada's sole practitioners were a unit of twenty personnel in the Royal Canadian Mounted Police (RCMP), headed up by two officers at the Mounties' Ottawa headquarters. (The Canadian military also maintained a small HUMINT corps, primarily for censoring military and POW mail and debriefing arriving immigrants and others at Canadian ports.[3]

They had little training or experience in human intelligence operations, and almost no technical collection capability. Well aware of its limitations, the Canadian government routinely relied on its more experienced and better-resourced cousins, both to the south and across the water, for expertise and assistance.[4] Neither the Canadian government nor its citizenry felt much sense of danger from within; neither the Soviets nor anyone else appeared to care much about domestic Canadian affairs.[5]

Prior to the Gouzenko affair, the RCMP's one high-profile espionage operation to date had proved a mortifying failure. In November of that year, a German submarine, in an operation contemporaneous with the well-known "Nazi saboteur" infiltrations on the U.S. east coast, had landed an agent, one Werner Janowski, on the Canadian coast. He had been discovered and arrested almost immediately, when only hours after landing he checked into a hotel, smelling of weeks in a German U-boat, lighting his cigarettes with Belgian matches, and paying his bill with obsolete Canadian currency.[6]

When Janowski offered to serve his captors as a double agent against Germany, the RCMP interrogator assigned to run him under "Operation Watchdog" failed to perceive that his "asset" remained firmly under German control and was feeding him false information. Once the first batch of intelligence reports on Janowski's clearly deceptive information reached British intelligence, officials promptly arranged for Janowski to be sent to Great Britain for exploitation—and for his Canadian handler to accompany him in order to receive basic intelligence and tradecraft training.[7] The episode highlighted Canada's wartime reliance on British expertise for intelligence operations, characterized by one intelligence historian as "a major theme of Canadian intelligence history."[8]

Not only Great Britain, but also the United States, routinely mentored or otherwise assisted the Canadian intelligence services, both through its military intelligence services and the FBI. American help came with a measure of coercion. For example, when in 1941 Canadian intelligence officials invited legendary U.S. codebreaker Herbert Yardley to set up a Canadian SIGINT agency, the U.S. and British governments made clear that they would cease sharing intelligence and related resources with the Canadians, so long as Yardley remained on the payroll.[9] Yardley, despite his very promising start in building a Canadian cryptologic capability, was summarily fired and replaced with a seasoned British codebreaker, who maintained extensive coordination with the U.S. and British cryptographic communities.[10] Canadian SIGINT, including both radio intercept and decryption, thus became closely intertwined with that of its "big brothers."

This unequal partnership would soon play a large part in the Allies' interest and participation in Gouzenko's revelations about Soviet ciphers.

CANADA ASCENDANT: THE SOVIET UNION TAKES NOTICE

For the Soviet Union, prewar Canada had been largely a political and military nonentity, not even worth the expense of an embassy. Apart from a longtime NKVD (the Soviet security service, predecessor of the KGB) presence in Canada, focused on tracking and manipulating the Canadian Communist Party, Stalin saw little reason to pay much attention to his geographic northern neighbor. With Canada's wartime arms buildup and increasing collaboration with the United States and Great Britain, the Soviet Union began to take a more direct interest in Canadian affairs.[11] In 1941, the Soviet Union established an embassy in Ottawa. One of the first Soviet arrivals was a military intelligence officer of the GRU, one Major Sokolov—a thorough and careful spymaster who immediately took charge of the Canadian Communist Party as a HUMINT network already in place.[12]

In June 1943, the Soviet defense attaché, Lieutenant Colonel Nikolai Zabotin, arrived in Ottawa. Among his staff was his cipher clerk, 24-year-old Lieutenant Igor Gouzenko, who would soon be followed by his wife Svetlana and their infant son.[13] Colonel Zabotin took over and greatly expanded Major Sokolov's network, targeting high-level Canadian government and military officials. By 1945, Zabotin had seventeen embassy personnel "running" about twenty Canadians, with plans to double the size of GRU operations by establishing a second station out of the Soviet Union's Montreal consulate.[14]

Around this time the NKVD, which had been operating in Canada since the 1920s, set up an office in the embassy alongside Colonel Zabotin's GRU operation, the better to expand its own intelligence network in parallel with Zabotin's military intelligence operation. The two agencies' personnel in the embassy had an often tense and competitive working relationship, given the zero-sum nature of their mission. They tended to trespass on each other's hunting grounds in hunt for Canadian Communists and others who were (a) willing to assist the Soviet Union (a fairly large pool) *and* who (b) possessed placement and access to information of special interest to Moscow (a far smaller pool).[15] Assessing this already small pool of potential assets to weed out those who could not be reliably controlled by a Soviet spy handler (due to the candidate's personality, carelessness, drinking habits, etc.) would have reduced the candidate pool even further. Zabotin suspected,

correctly, that Moscow was using the two intelligence services' competition to compare their reporting and keep them both honest. An additional means of oversight from Moscow was the political intelligence and tasking operation run out of the Ottawa embassy by its Second Secretary, one Goussarov. This official's duties encompassed political directives from Moscow to Canadian Communist Party leaders, with the goal of increasing the Soviet Union Communist Party's control and influence in Canadian society and politics.[16]

The Manhattan Project included British and Canadian as well as American scientists, and all were potential direct or indirect targets of Soviet intelligence.

Despite often-bitter rivalries within the embassy, punctuated by office gossip (soaked up by young Gouzenko, and reported in detail during his post-defection debriefs by the RCMP) about who had recruited which sources recently, both Soviet intelligence efforts shared a top collection objective: Allied atomic bomb information.[17] The Manhattan Project included British and Canadian as well as American scientists, and all were potential direct or indirect targets of Soviet intelligence.

GOUZENKO'S CROSSING AND WHAT CAME AFTER

Igor Gouzenko's short-lived intelligence career began early in the Second World War, when conscription into the Red Army interrupted his architectural studies. The highly intelligent young soldier was assigned first to engineering studies, then to the GRU's intensive, year-long cipher course. Lieutenant Gouzenko's first assignment was to the new embassy in Ottawa, where he arrived—soon followed by his pregnant wife, Svetlana—in June 1943.[18]

By his own account and those of his later biographers, Gouzenko—despite having passed the NKVD's rigorous screening for political reliability before ever starting his cryptography studies—began to lose his Soviet idealism almost immediately upon his arrival in Canada.[19] Gouzenko was disillusioned by the comparison between everyday Canadian comforts and the deprivations of life in Moscow.

Canadians tended to feel a certain camaraderie with Russians, both as a wartime ally and because of their similar geographic situations, and Gouzenko quickly warmed to his host country.[20] His commanders' casual talk of inevitable war with the West, and their contempt for the trusting Canadians, further undermined his Soviet patriotism. Finally, his observations of the often messy, but free and freely discussed, Canadian election of 1944 cemented his and Svetlana's desire to raise their family in the West.[21]

Gouzenko did his work adequately and, for the most part, got on well with his superior, Colonel Zabotin. However, in mid-1944, Gouzenko and his wife were abruptly ordered to return to Moscow. As far as Gouzenko could guess, it was for a minor security breach, when he had failed to completely burn a batch of classified documents.[22] However, Gouzenko had no way to tell whether he was to be reassigned, imprisoned, or shot upon arrival back in Moscow. He and Svetlana agreed that they had to defect, for their sake and their young son's. Gouzenko began to lay his plans.

To ensure that the Canadians would consider him worth accepting as a defector, Gouzenko—as he later reported in his initial Canadian debriefs—spent two weeks selecting a collection of telegrams and agent reports to bring to the Canadian authorities. Gouzenko marked all the documents he wanted by bending their corners, so that on the day he defected he would be able to quickly find and seize all of them within a few minutes.[23]

On the evening of September 5, 1945, Gouzenko, carrying his purloined documents, visited the *Ottawa Journal*, and was told to come back in the morning.[24] Canadian government offices had also closed for the day, and Gouzenko was forced to return to his apartment, still carrying the documents. Having initially attempted and failed to defect, he was immediately, fatally compromised unless he succeeded on his next try. The next morning Igor Gouzenko, with his wife and young son, visited the *Journal* again, along with the Ministry of Justice and the Ottawa Magistrate's Court, still with no success.[25] Returning to their apartment in a mounting state of terror and (wholly justified) paranoia, they saw two men in a car watching their apartment from across the street.

In fact the men were plainclothes RCMP officers. Following the Gouzenkos' second visit to the Ministry of Justice, one of its top officials, Norman Robertson, had brought the word of a Soviet defector directly to the Canadian Prime Minster, Mackenzie King. King, politically sensitive to a fault, feared to disrupt ongoing postwar talks among the Allies. He initially refused to take definite action, expressing aloud the hope that this Gouzenko might kill himself and spare everyone an embarrassing predicament.[26]

Robertson then contacted MI6 chief Stewart Menzies, who, in one of the great lucky breaks for Western intelligence during the Cold War, happened to be in Ottawa on other business.[27] Menzies immediately recognized the import of Gouzenko's proffered information, and urged quick action to locate and protect the young GRU officer. With British

intelligence now on notice and involved in the case, King acquiesced in the decision to take Gouzenko and his family under Canadian protection.[28]

Meantime, unaware that their defection had been accepted, the Gouzenkos told their neighbor, a Canadian air force sergeant, that they were in fear for their lives, and sought refuge in his apartment. By this time, Colonel Zabotin had realized that his cipher clerk and a large number of classified papers had gone missing. When a team of armed NKVD officers kicked in the door of Gouzenko's apartment and began ransacking it for the missing documents, Gouzenko's neighbor called local police, who immediately arrived and, following a standoff with the Soviet enforcers, forced them to depart. By dawn, the Mounties had whisked the Gouzenko family to a safe location for initial debriefing and preliminary exploitation of Igor's document trove.[29]

The sensational "Gouzenko affair" had several far-reaching consequences in Canadian government and society.

The next day, the Soviet embassy formally notified the Canadian government that one of its junior officers had stolen money from the embassy and was being sought for deportation. The Canadians responded with a polite request for a detailed description of the suspect (whom they were debriefing at that moment). Over the next two weeks, the Soviets and Canadians played a diplomatic game, with the Mounties ostentatiously "searching" for Gouzenko to delay officially confirming the Soviets' worst fears.[30]

By the night of September 6, Robertson was able to report to Prime Minister King the extent to which, as detailed in Gouzenko's documents, the Canadian government had been penetrated at high levels by various Soviet intelligence services. The documents also revealed that atomic bomb research was the Soviets' primary collection target. This convinced the Prime Minister to have the RCMP protect Gouzenko, who was soon installed with his family at Camp X, a Canadian training and communications center in Ontario.[31] The Mounties quickly realized that they were no better equipped to deal with such a complex intelligence operation on its own than they had been during the war, when handling—and being duped by—the German agent Janowski. Prime Minister King thereupon requested assistance from British intelligence agencies and the FBI.[32]

King feared that speedy or sloppy handling of the Gouzenko case could impact not only Canada's relations with its allies, but those allies' relations with the Soviet Union. For that reason he resisted British calls to immediately arrest a Canadian nuclear scientist, Alan Nunn May, named in Gouzenko's documents as a Soviet asset who had provided plutonium and uranium samples to Colonel Zabotin. Canadian, U.S., and UK officials agreed on a "surgical" approach to Gouzenko's revelations. They would investigate and charge implicated Soviet spies, but would not attempt to use the case for political leverage or otherwise tie the scandal to the U.S. and UK's ongoing talks with the Soviet Union.[33]

The surgical approach was apparently successful, as the Soviet Union had very little to publicly say about Gouzenko or his documents after its initial attempts to recover the defector. Stalin even forbade the usual summary killing of Gouzenko wherever he could be found, on the grounds that it would only confirm the importance of his stolen documents and harm the Soviet Union's currently good relations with the West.[34] (Several attempts on Gouzenko's life would nevertheless be made in the years after Stalin's death in 1953.[35])

In the months following his defection, Gouzenko and his information were kept under wraps for several months while he was debriefed and his documents deciphered. Meanwhile, the Americans and British grew increasingly anxious that the Soviets were rolling up their HUMINT networks while the Canadians conducted their endlessly slow and secret (but not from the Soviets) investigation.[36]

Finally, in early February 1946, the American columnist Drew Pearson—tipped off, according to various sources, by impatient U.S. or British officials—reported on his radio program that the Canadian Prime Minister had informed President Roosevelt of a Soviet spy ring.[37] Prime Minister King thereupon briefed the Canadian government on the case, and established a royal commission to review Gouzenko's evidence with an eye to investigating and prosecuting Canadian citizens spying for the Soviet Union. The Canadian Kellock-Taschereau Commission ultimately named and arrested twelve Canadians on charges of espionage.

Their security services began taking seriously the insider threat, including improved national security legislation as well as internal security procedures and vetting.

The sensational "Gouzenko affair" had several far-reaching consequences in Canadian government and society. It permanently dispelled Canadian trust in the Soviet Union's professed benign intentions. It also spurred widespread

outrage in Canadian society at the Kellock-Teschereau Commission's treatment (legal at the time) of citizens suspected of espionage: held incommunicado, denied lawyers, and often convicted on no evidence other than Gouzenko's documents and whatever confessions could be frightened out of them.[38] Gouzenko's revelations permanently enlightened Canada and its allies as to the Soviets' true intentions. Their security services began taking seriously the insider threat, including improved national security legislation as well as internal security procedures and vetting.

WHAT GOUZENKO KNEW

Gouzenko's stolen documents identified approximately twenty Canadians and Americans as Soviet assets with varying levels of placement and access in government, the military, and academia. The Soviets' American assets included Alger Hiss and other highly placed officials. Also betrayed by Gouzenko's documents were the British nuclear scientists Alan Nunn May and Klaus Fuchs, and Canadian Member of Parliament Fred Rose. One of Fuchs' contacts, Harry Gold, also confessed, and named as a fellow Soviet asset David Greenglass, Ethel Rosenberg's brother, who in turn implicated the Americans Julius and Ethel Rosenberg in Soviet atomic espionage.[39]

Most of those whom Gouzenko's documents named as Soviet agents appear to have been true believers, motivated by idealism far more than by lucre. Most of them were old enough to have joined the Canadian Communist Party by the early 1930s, and tenacious enough to have stuck with the party through decades of government whipsawing between criminalizing and tolerating Canadians' active Party membership.[40]

Yet the details of Gouzenko's records made clear the businesslike approach of Colonel Zabotin and his colleagues toward their Canadian assets. All were assigned code names (one of many factors complicating prosecution of those with the wits to keep silent under extended secret interrogation). The Soviet handlers appear to have practiced sound basic tradecraft: using code names for persons, locations, and activities; teaching their Canadian assets secret signs and passwords to signal meetings and establish bona fides; and insisting on remunerating even the most idealistic assets for their intelligence production.[41] Soviet intelligence officers' insistence on such procedures made it difficult for their assets, who had been carefully schooled in tradecraft and were fully aware of the danger and illegality of their actions, to later persuade Canadian security officials and prosecutors that they had merely engaged in unknowing, informal, or impulsive provision of "harmless" information to their Soviet handlers.

The larger picture of Soviet espionage revealed by Gouzenko's documents put Western intelligence and security services on permanent notice of the danger posed by Soviet espionage.

Gouzenko himself, as an experienced cipher clerk, provided invaluable insight and assistance to Western agencies in breaking Soviet codes (some of his reports remain classified as of 2014). Perhaps most importantly, the larger picture of Soviet espionage revealed by Gouzenko's documents put Western intelligence and security services on permanent notice of the danger posed by Soviet espionage.

GOUZENKO'S DOCUMENTS: A MOLE IN MI5?

Gouzenko's documents identified a spy, code-named "Elli," who was apparently a highly-placed GRU asset, a division chief within MI5.[42] Intelligence historians have speculated for decades whether Elli was indeed Sir Roger Hollis, who spent 30 years in MI5 as a Soviet counterintelligence specialist and retired in 1968 as chief of MI5. British author Chapman Pincher has made the most thoroughly researched argument for Hollis' treachery.[43]

Soon after Gouzenko's defection, Roger Hollis, then the chief of MI5's Soviet desk, was detailed to fly to Ottawa and assess Gouzenko's intelligence value. In November 1945, Hollis met with the defector on the Canadian base where he and his family were staying.[44] Gouzenko recalled later, in an interview with Pincher, how Hollis

> approached me in a crouching way as though anxious that his face not be seen. I was surprised that this man, who seemed almost afraid to talk to me, asked me very little when I told him that the GRU had a spy inside MI5 in England, known by the code name Elli. We talked in English, but for such a short time that we did not even sit down [about three minutes]. He took few notes, if any, and behaved as though he wanted to get away from me as quickly as possible.[45]

Pincher asks why Hollis, as an ambitious young British counterintelligence officer (and a Soviet specialist at that) would fly from London to Ottawa only to conduct such a brief, furtive interview, and then assess perhaps the most significant Soviet defector of the Cold War as a fabricator not worth further attention.[46] Was it that Hollis feared that Gouzenko might recognize and identify him as Elli? Pincher makes a compelling case that Hollis, if not actually in Soviet employ, was astonishingly, chronically incompetent over

several decades in the business of identifying Soviet assets under his nose. In any event, Hollis reported back to MI5 that Gouzenko—carrying a sheaf of Soviet asset files and trained in Soviet cryptography, perhaps the single most significant walk-in defector of the Cold War—was of only minor interest and not worth following up.[47] Intelligence historians have been drawing their own conclusions ever since.

GOUZENKO FROM THE SOVIET PERSPECTIVE: COUNTERINTELLIGENCE INDICATORS

In 1944, one Colonel Mikhail Milshtein was ordered by GRU headquarters to visit and assess a number of embassies and consulates across North America.[48] Milshtein, already a seasoned intelligence officer, had served as a case officer in prewar New York City and later run operations against the Nazis on the Eastern Front; he would become known as a near-legendary Soviet intelligence and counterintelligence officer, a role model in the intelligence corps.[49] In the course of his visit, Colonel Milshtein noticed that young Lieutenant Gouzenko, an exceptionally intelligent and artistic young officer, was, alone among the staff, permitted to live in an apartment on his own. (The embassy grounds were cramped, and the Gouzenkos' crying baby apparently annoyed Colonel Zabotin's wife.) Milshtein also noted that Gouzenko had access to a classified document safe containing sensitive HUMINT source operations files—access wholly unrelated to his duties as a cipher clerk.[50] This violated a prime tenet, then as now, of operational security and counterintelligence: restricting access to sensitive information to those with a need to know. Colonel Milshtein also learned that Gouzenko had been reprimanded by Colonel Zabotin for repeated lateness, and for incompletely burning a classified document—another security violation. Gouzenko himself approached Colonel Milshtein and asked to be trained in intelligence operations.[51]

Finally, Milshtein observed that Colonel Zabotin was known as a local *bon vivant* and womanizer (as was most of the Soviet diplomatic staff), indicating less-than-scrupulous attention to details of embassy security procedures.

Having failed to persuade Colonel Zabotin to send Gouzenko back home, Milshtein returned to Moscow and reported his impression of Lieutenant Gouzenko as a potential defector, recommending his recall to Moscow. The GRU was slow to react, and then accepted Colonel Zabotin's request to postpone Gouzenko's recall (Gouzenko was the GRU's only trained cipher clerk at the embassy, and losing him until such time as a replacement could be sent would have had a major impact on the intelligence section's ability to send and receive secure message traffic).[52] In fact, having served well to date and displayed no actual disloyalty, Gouzenko was likely ordered back to Moscow as a mere precaution, not for punishment, though of course he would have had no way of knowing it.

Following Gouzenko's defection, Milshtein's 1944 report, preserved in GRU files, saved him from punishment; almost no one else involved in Gouzenko's assignment was so fortunate. The Moscow GRU officer who had failed to act quickly to recall Gouzenko was purged and never heard of again. Zabotin was recalled to Moscow and killed.[53] All of Igor and Svetlana Gouzenko's parents and siblings were executed or served long labor camp sentences.[54]

In the aftermath of this major Soviet counterintelligence lapse, NKVD headquarters sent a blistering message to Soviet residencies around the world, detailing the operational lapses of the Ottawa station. Its critiques will be recognizable to any present-day counterintelligence officer. For example, access to classified information was not confined to those with a need to know. Intelligence assets known to be actually or potentially compromised, such as Member of Parliament Fred Rose, were nonetheless actively met and tasked by Ottawa-based GRU and NKVD spy handlers.[55]

A generally lax attitude toward document security made possible Gouzenko's access to and theft of critical documents revealing sources and methods of Soviet intelligence.

Moreover, a generally lax attitude toward document security made possible Gouzenko's access to and theft of critical documents revealing sources and methods of Soviet intelligence.

One might wonder whether the Stalinist purges of the 1930s, extending as they did to the intelligence services, claimed the most aggressive and competent officers, leaving a large proportion of mediocre types to fill out the ranks of spy handlers and other intelligence officers. (Colonel Zabotin, if he was—as he seemed—an essentially competent intelligence officer, might have been spared the purges partly due to his prewar assignment, out of sight and mind of the Kremlin: running GRU operations in Mongolia.[56]) Certainly, as of the late 1930s, NKVD tradecraft at the London station was far below standard, with officers openly meeting assets next to the embassy.[57] Meanwhile, the NKVD's New York station during the war commonly sent intelligence reports back to Moscow identifying assets' code names with their true identities—a fundamental failure

of basic operational security.[58] And, of course, back in 1941, the NKVD's historically scrupulous screening of all intelligence corps candidates for political reliability failed to spot young Igor as a potential security risk. It is hardly surprising, then, that the GRU and NKVD officers in Ottawa might not have been so rigorously selected and trained as the reliably ruthless and efficient Soviet spymasters of the prewar era.

The Soviet Union's worldwide HUMINT effort suffered greatly from this (from their point of view) counterintelligence failure. The Soviets, no less than the Canadians, drew a number of expensive lessons from Gouzenko's defection, and revised their procedures and rules for overseas embassies accordingly. For example, the London KGB station began requiring that every case officer conduct a 5-hour surveillance detection route before and after every source meeting to avoid being followed and compromised by British intelligence, while the GRU's Ottawa station was nearly crippled for several years out of an excess of caution and reluctance to risk further exposure.[59] No one wanted to be the next Zabotin.

Taken as a whole, Gouzenko's situation, personality, and job performance created a number of obvious counterintelligence flags. He was perhaps the last GRU officer who should have been allowed to live and travel in town, talk to the locals, and get used to life as a free person. An attentive Soviet counterintelligence officer, understanding the various possible human vulnerabilities subject to exploitation by a hostile (i.e., Canadian or other Allied) intelligence service, might have detected Gouzenko's eventual willingness to defect, knowing what it would surely mean for his and his wife's families. Gouzenko was undeniably a highly intelligent man as well; perhaps this speaks to his ego as being a good point of entry for a case officer.

GOUZENKO'S LATER YEARS

As noted earlier, a number of more or less determined attempts were made by various Soviet agencies and assets to kill Gouzenko, despite Stalin's initial command to let him be. One of the more serious attempts was in 1973, when MI5 conducted a thorough investigation into Soviet penetration of its ranks throughout the previous three decades. Gouzenko was re-interviewed as part of the investigation. Around the same time, a Soviet embassy officer in Ottawa detailed a sleeper agent to kill Gouzenko. However, the would-be assassin had been in place long enough to develop loyalty to Canada and immediately surrendered to the Mounties with a trove of information on KGB death squads.[60]

Gouzenko and his family were eventually given new identities as Czech immigrants and resettled in Ontario, where they raised eight children. (Their new family name was Krysac, which means "rat" or "mole" in Czech. Gouzenko had rashly accused a Canadian Mountie, an intelligence officer of Czech heritage, of being a Soviet spy; that officer was subsequently assigned to the Gouzenkos' relocation team and presumably had a hand in choosing a "suitable" new name.[61]) There they lived long and sporadically dramatic, prosperous lives.

Gouzenko's less admirable character traits began to surface soon after his defection. A Mountie detailed to guard Gouzenko described him as

> a very difficult fellow. For instance, he seems to be torn by two desires. One is to be known as the Great Gouzenko, the fellow who sprung the trap on the spies. At the same time he knows bloody well it's not in his own interest to have it known who he is. . . .You get the feeling he's on the verge of shouting, "I'm Igor Gouzenko, goddammit. You should be looking at me. I'm important."[62]

Over the following decades, Igor's theatrical sense of entitlement and never-ending financial crises exasperated friends (most of whom eventually became former friends) and Canadian officials alike. The Mounties considered his behavior a classic case of defector syndrome, a "combination of paranoia, self-righteousness. . .and an overwhelming desire [for] attention.[63]" A senior RCMP officer relates the view of some of his colleagues that, far from plotting to kill Gouzenko as a traitor,

> the KGB was aware of the difficulty the son-of-a-bitch was causing us and didn't want to wipe him out. . . .[T]he Soviets were just sitting back and laughing. How could Gouzenko be a more disruptive influence than being alive and being a charge on the parish?[64]

Both Igor and Svetlana published books; Igor's second book, the 1954 novel *Fall of a Titan*, became an award-winning bestseller.[65] Neither of the Gouzenkos ever learned to handle money; they constantly received and squandered large sums from interviews, royalties, and well-wishers. Igor remained paranoid and sensitive to slights throughout his life, and engaged in dozens of lawsuits.[66] Igor died in 1982, Svetlana in 2001.[67]

PSYCHOLOGICAL ASSESSMENT OF IGOR GOUZENKO: WEAKNESSES AND MOTIVATIONS AS A HUMAN INTELLIGENCE ASSET

Igor Gouzenko, as an intelligence asset, differs markedly from agents such as Colonel Abel, Aldrich Ames, and other case officers or assets who worked in the field, exercising tradecraft in the employ or under the control of a foreign power. Having defected, Gouzenko immediately became a willing and witting source of information, and was carefully protected. Having been thoroughly "blown," he could never be used as an operational asset.

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What were Igor Gouzenko's motivations to defect? Measured against the classic human intelligence recruitment mnemonic, "Money, Ideology, Compromise, Ego" (MICE), Gouzenko's was arguably an ideological defection in the beginning. On the other hand, later interviews with his Canadian neighbors and acquaintances after the fact create an impression of Igor Gouzenko's infatuation with Western comforts and spacious apartments.[68] One might wonder whether the avarice of the older Gouzenko in the decades following his "idealistic" defection was simply better hidden by the careful young cipher clerk with every reason to hide his true character and motivations from his Western benefactors. However, Gouzenko always claimed, and the evidence certainly can support, a primarily ideological reason to defect in 1945, based on his observations of life in peacetime Ottawa versus wartime Moscow. Even if Gouzenko did become besotted, later in life, with money and respect, he would certainly not be the first young man spoiled by early success and fame.

As to the other elements of MICE, the later-in-life Gouzenko obviously prized money and ego gratification above most other inducements. Compromise as a lever to extract compliance, however, is another story. Gouzenko was nothing if not stubborn and self-regarding. A straightforward blackmail attempt, such as a "honeytrap," would have been unlikely to succeed. In any case, blackmail and extortion have never, or at least very rarely, formed part of the modern Western "recruitment toolkit."[69] Besides violating democratic ideals (which tend to manifest themselves not only in aspirational rhetoric, but also in detailed intelligence agency regulations, protocols, and standing orders, any of which the spy handler violates at his or her peril), coercive HUMINT recruitment is poor operational practice. Brutal recruitment methods not only compromise results and weaken confidence in any intelligence gained thereby, but also poison the well for future HUMINT operations, making it all the more difficult to build an asset network once word gets around in the area of operations.[70]

The MICE acronym, while it has the virtue of being easy for a young intelligence officer in training to remember, has drawbacks. It lacks subtlety, for one thing. Very few defectors, or anyone else, are driven solely by one or more of these four motivations—money, ideology, compromise, or ego. A second drawback of reliance on MICE as an evaluative HUMINT recruitment tool is that it categorizes potential espionage assets in a fairly perfunctory and even contemptuous way, but provides little specific guidance for the case office as to how to proceed with a successful source development and recruitment.

The work of psychologist Robert Cialdini suggests a more nuanced and productive approach to identifying and developing potential defectors and other intelligence assets. His six "weapons of influence," detailed in his best-selling book on the psychology of sales and persuasion, provide a nuanced and highly useful catalog of motivations.[71] Intelligence scholar Randy Burkett has analyzed Cialdini's insights into the art of persuasion, and rearranged them to form a new acronym as an alternative to MICE: Reciprocation, Authority, Scarcity, Commitment and Consistency, Liking, and Social Proof (RASCLS).[72]

Although Gouzenko of course was never identified, prior to his defection, by Canadian or Allied intelligence services as a potential intelligence asset, his case—both on its own facts, and as the basis for a counterfactual—provides a number of insights into spotting, assessing, and developing future defectors from the embassies of adversary states. Cialdini's "RASCLS" provides some lessons about the Soviet and GRU military and cultural failures to protect one of their own from Western "corruption."

A human intelligence officer must always be working to establish positive rapport with potential assets. As Cialdini notes, *reciprocation* is a key tool in gaining a target's trust—whether the target is a potential car buyer or a defector. As a junior member of the military staff, Gouzenko was at the bottom of an extremely rank-conscious hierarchy, in an extremely hierarchical society. He might well have anticipated very little return on his efforts, his subservience, or his mental and emotional expenditures in the GRU's service. Gouzenko cited the routine kindness of Canadians,

in contrast with their ignorance of his countrymen's contemptuous attitude and hostile intentions, as a major reason for his change of heart. It is human nature to feel internal pressure to return a kindness, and Gouzenko could have been made the target of a campaign of small kindnesses and favors, building up his urge to reciprocate which a savvy handler might then channel into providing some harmless service or bit of information—the thin edge of a wedge that could eventually pry his true loyalties away from his native country.

A human intelligence officer must always be working to establish positive rapport with potential assets. Reciprocation is a key tool in gaining a target's trust...

As a young, intelligent, artistic type, Gouzenko might have chafed under (Soviet-style) *authority*; transferring his allegiance to a Canadian handler of unquestioned authority could have been fairly straightforward. In such a case, a subtle approach is often most effective: rather than attempting to directly overawe the potential asset, it may be more effective simply to be seen as the object of others' respect, or the person who seems able to call in all kinds of favors.

Social proof, or the urge to conform, is a powerful motivator. An Allied case officer might have approached the young, socially isolated Gouzenko with evidence that that he was not alone as a young Soviet officer with divided loyalties. Having drawn him out in conversation, a savvy spymaster might then use the principles of *commitment and consistency*, seizing on any admission of less than perfect contentment to elicit more of the same. Anyone who has ever shopped for a car and been asked to show that he/she is a "serious" shopper (by taking a test drive, initializing a piece of paper, etc.) will recognize this tactic.

Gouzenko claimed to have defected largely out of *liking* for the Canadians around him, but not due to any particular relationship. The friendliness shown by most ordinary Canadians to Gouzenko, combined with his superiors' contempt for those same Canadians, might have formed the initial chink in his ideological armor. A friendly approach by a seemingly like-minded handler might have been effective—but only if he could overcome Gouzenko's paranoia about NKVD agents in disguise. (On the other hand, his willingness to let his family back home suffer and die for his defection indicates a limit to this approach.)

Gouzenko was able to constantly compare plentitude in Ottawa with *scarcity* in Moscow. A classic recruiter's tool would have been to evoke the certain impending scarcity of food and comfort once young Igor left Canada. Scarcity of time to take up the spy handler on his offer is another classic technique to put on the pressure: a special offer that expires soon, since after all the recruiter is busy as well and cannot wait around for a decision.

CONCLUSION

Igor Gouzenko would have been a fascinating and complex person even if he had never defected. His monumental and irrevocable decision did much to shape his character, on which, sadly, success, fame, and wealth had such a corrosive effect (although his wife and eight children appeared to idolize him). Had he remained loyal to the Soviet Union and returned to his native country after a few years in the West, he might well have retained his idealism within a Communist system he would have come to despise. Perhaps, too, his character was better suited to life in his native country than in Canada. Life in the land of plenty seemed to bring out a regrettable sense of insatiable greed for both material goods and unceasing worshipful recognition of his heroic escape to the West. In the Soviet Union, Gouzenko might have become an artist or author—perhaps even, eventually, a noble dissident of the later Cold War. In many ways, the consequences of Igor Gouzenko's defection eventually brought out the worst of his character, even as it did an incalculable service to his adopted country and its allies.

Notes

[1] J.L. Granatstein and David Stafford, *Spy Wars: Espionage and Canada from Gouzenko to Glasnost* (Toronto: McClelland & Stewart, 1992), 47.

[2] Wesley K. Wark, "The Origins of Signals Intelligence in Canada the Second World War," *Journal of Contemporary History* 22, no. 4 (October 1987), 639.

[3] Kurt F. Jensen, *Cautious Beginnings: Canadian Foreign Intelligence, 1939-51* (Vancouver: University of British Columbia Press, 2009), 72, 89.

[4] John Bryden, *Best-Kept Secret: Canadian Secret Intelligence in the Second World War* (Toronto, Ontario: Lester Publishing, 1993), 6.

[5] Granatstein, *Spy Wars*, 26.

[6] Ibid., 27; Sophie Turbide, "Werner Alfred Waldemar von Janowski: New Carlisle's Spy," *Gaspesian Heritage* web magazine, http://gaspesie.quebecheritageweb.com/exhibit/werner-alfred-waldemar-von-janowski-new-carlisle%E2%80%99s-spy, accessed March 2, 2014. One might wonder whether Janowski's dismal performance arose from mere arrogant incompetence, or a deliberate Abwehr scheme to insert its double agent into the Canadian intelligence system.

[7] Ibid.

[8] Ibid., 28.

[9] Wark, "The Origins of Signals Intelligence in Canada," 649. Colonel Yardley, founder during the Great War of the American cryptographic office, the "Black Chamber," had subsequently

made himself *persona non grata* in the U.S. and UK intelligence communities by writing a tell-all book in retaliation for U.S. Secretary of State Stimson's shutting down his codebreaking office. Yardley's book, in addition to revealing information many thought best concealed, had prompted the Japanese government to change its cryptographic codes.

[10] Granatstein, 33.

[11] Ibid., 48.

[12] Ibid., 49.

[13] Amy Knight, *How the Cold War Began: The Igor Gouzenko Affair and the Hunt for Soviet Spies* (New York: Carroll & Graf, 2005), 15.

[14] Granatstein, *Spy Wars*, 52.

[15] White, *The Soviet Spy System*, 83.

[16] White, 85. This demarcation of responsibility within the embassy highlights the purely espionage-focused role of Colonel Zabotin's military intelligence spy network; assets on his payroll were being paid to spy, not merely, like those in Goussarov's network, to "influence" or conduct other legal or quasi-legal activity on behalf of the Party.

[17] Ibid., 50.

[18] Ibid., 54.

[19] Ibid.

[20] Knight, *How the Cold War Began*, 15.

[21] Robert Bothwell and J.L. Granatstein, eds., *The Gouzenko Transcripts: The Evidence Presented to the Kellock-Taschereau Royal Commission of 1946* (Ottawa, Canada: Deneau, 1982), 125. The young Gouzenko's balance of motivations—material versus idealistic—remains uncertain; he seemed to genuinely believe that the Canadian way was better than the Soviet Union's. Yet, as discussed below, he showed himself later in life to be obsessed with making money and being seen as an important man.

[22] Knight, *How the Cold War Began,* 21.

[23] Bothwell, *Gouzenko Transcripts*, 59. This account is based on Gouzenko's initial debriefings by the Kellock-Teschereau Commission, declassified and published in 1982. However, later in life, Gouzenko admitted that he had actually started taking documents home several weeks before his defection. He thought this made him seem too calculating and mercenary, hence the differing accounts. Knight, *How the Cold War Began*, 33.

[24] Granatstein, *Spy Wars*, 53. One might ask why Gouzenko would have gone first to a small-town newspaper rather than the police or other authorities. As a native Russian, he was afraid that Soviet agents had infiltrated local law enforcement. Gouzenko would have known, after a year of life in Ottawa, that the Canadian press was (often obnoxiously) free of government influence, and that the chance of inadvertently defecting to an NKVD asset working the city beat were low. Knight, *How the Cold War Began*, 40. In the 1970s, Canadian journalist John Sawatsky interviewed "every living adult" who had worked at the *Ottawa Journal* and encountered Gouzenko on September 5-6, 1945. They report that Gouzenko produced no documents, seemed to be having a nervous breakdown, and spoke incomprehensibly primitive English. Sawatsky theorizes that Gouzenko simply blew his first attempt to defect, and later recast the encounter out of embarrassment. John Sawatsky, *Gouzenko: The Untold Story* (Toronto: Macmillan, 1984), xv, 22.

[25] Veteran journalist Marjorie Nichols recalls arriving at the *Ottawa Journal* in 1966 and being warned to thoroughly interview every single crank and lunatic who might ever arrive in the lobby, however obviously insane. Decades after the affair, the *Journal*'s rejection of Gouzenko's 1945 defection attempt lived on in the newspaper's corporate memory as "this collective blemish on the *Journal*. It was like the House of Atreus—this curse had been cast upon us. This was twenty years later and we still felt it…like a wooden leg." Sawatsky, *Gouzenko: The Untold Story*, 33.

[26] Granatstein, *Spy Wars*, 56. Hours after PM King's private comment, Soviet embassy personnel were seen searching river banks and other locations in Ottawa, as if for a suicide victim—a possible sign that the NKVD or GRU had assets close to the Prime Minister himself. William Stephenson, *Intrepid's Last Case* (New York: Random House, 1983), 56.

[27] Famed British intelligence officer William Stephenson is commonly reported, including in his 1976 biography, *A Man Called Intrepid*, to have been the British agent on the spot in Ottawa who helped persuade the Prime Minister to accept Gouzenko's defection. In fact, as John Bryden persuasively shows, Stephenson was in New York City at the time. But he later helped write a British intelligence history which put him, not Menzies, in Ottawa as the voice of reason and trigger to action. Given that Menzies had operational reasons as MI6 chief not to have his presence in Ottawa reported, Stephenson's version—which Bryden scornfully chalks up to the veteran intelligence officer's instinct for self-promotion—was easy to propagate. Bryden, *Best-Kept Secret*, 274.

[28] Ibid.

[29] Stephenson, *Intrepid's Last Case,* 73.

[30] Ibid.*,* 59.

[31] Granatstein, *Spy Wars*, 58.

[32] Stephenson, *Intrepid's Last Case,* 62.

[33] Ibid., 82.

[34] Knight, *How the Cold War Began*, 100.

[35] Stephenson, *Intrepid's Last Case*, 203, 280, 292. Kim Philby had planned to have Gouzenko killed immediately, but was forced to focus his energies elsewhere to deal with his potential exposure by a Soviet officer who had defected to Turkey, and who claimed knowledge of Soviet agents in MI5's London office (i.e., Philby himself).

[36] Bothwell, *The Gouzenko Transcripts*, 11.

[37] Sawatsky, *Gouzenko: The Untold Story*, 75.

[38] Bothwell, *The Gouzenko Transcripts,* 16. Those suspects savvy enough to retain lawyers almost all stood mute and were acquitted for lack of evidence, as the evidence in Gouzenko's stolen documents fell far short of establishing proof of guilt.

[39] In addition to atomic bomb data, Julius Rosenberg had passed to the Soviets a new radar proximity fuse, which the Soviets reverse-engineered and used to shoot down Gary Powers' U-2 surveillance aircraft in 1962. Knight, *How the Cold War Began*, 199.

[40] Merrily Weisbord, *The Strangest Dream* (Toronto: Lester & Orpen Dennys, 1983), 29.

[41] White, *The Soviet Spy System*, 64.

[42] Ibid.*,* 237.

[43] Chapman Pincher, *Treachery: Betrayals, Blunders, and Coverups: Six Decades of Espionage Against America and Great Britain* (New York: Random House, 2009), 219. Full disclosure: this author reviewed Pincher's book for the fall 2009 edition of the *American Intelligence Journal*. I opined that Pincher had built a strong case for Hollis' guilt, but that the

case against him was overwhelmingly circumstantial, lacking any one single, irrefutable piece of evidence.
[44] Ibid.
[45] Ibid.
[46] In an odd postscript to this oft-reported Hollis-Gouzenko encounter, veteran British intelligence officer William Stephenson—who later claimed falsely to have been present at Gouzenko's initial defection—wrote years later that he himself had dissuaded Hollis from interviewing Gouzenko at all. This contradiction remains unresolved, as MI5 continues to refuse to confirm or deny Hollis' involvement in Gouzenko's initial debriefings. Stephenson, *Intrepid's Last Case*, 74.
[47] Pincher, *Treachery*, 220.
[48] Knight, *How the Cold War Began,* 22.
[49] Kai Bird and Svetlana Chervonnaya, "The Mystery of Ales," *The American Scholar* website, published Spring 2007, http://theamericanscholar.org/the-mystery-of-ales-2/, accessed March 1, 2014.
[50] (Dimitri Prokhodov, *How Much to Sell One's Homeland?*) (N.p. Neva, 2005), 170.
[51] Knight, *How the Cold War Began*, 22.
[52] Ibid.
[53] Ibid., 100. Other sources state variously that Zabotin and his family were "merely" sent to a labor camp for several years, that he disappeared en route home, and that he was shot upon arrival. Stephenson, *Intrepid's Last Case*, 137. In 1954, Soviet defector Vladimir Petrov reported to the Australian government that Colonel Zabotin had not been executed, but had received, along with his wife, a 10-year prison term. Barton Whaley, "Biographical Index of Soviet Intelligence Personnel, Appendix C," Air Force Office of Scientific Research, document #70-1139 TR, issued 1970.
[54] Ibid. Other sources vary on the fates of the Gouzenkos' parents and siblings, though all of them certainly suffered terribly, whether or not they survived at all.
[55] Knight, 170.
[56] William Stevenson, *Intrepid's Last Case* (Guilford, CT: Lyons Press, 2002), 37.
[57] Christopher Andrew and Vasilii Mitrokhin, *The Sword and the Shield: The Mitrokhin Archive and the Secret History of the KGB* (New York: Basic Books, 1999), 81.
[58] Herbert Romerstein and Eric Breindel, *The Venona Secrets: Exposing Soviet Espionage and America's Traitors* (Washington: Regnery History, 2001), 239.
[59] Andrew and Mitrokhin, *The Sword and the Shield*, 141.
[60] Williamson, *Intrepid's Last Case*, 291.
[61] Knight, *How the Cold War Began*, 227.
[62] Sawatsky, *Gouzenko: The Untold Story*, 10.
[63] Nigel West, *Molehunt: The Full Story of the Spy in MI5* (London: Westintel Research, 1987), 57.
[64] Ibid., 183.
[65] Nigel West claims that *Fall of a Titan* was written largely by Gouzenko's ghost-writer, John Dalrymple, and his translator, Mervyn Black, and was extensively edited by journalist Laurie McKechnie. While West does not cite his sources, his claim seems plausible. Gouzenko's well-known litigiousness, combined with his insistence on his own authorship, made investigation into his book's true authorship an unattractive prospect during his lifetime. Ibid., 57. (On a personal note, this author recently ground through most of *Fall of a Titan* and found it to be readable, but little more. Apparently history has agreed, since the book has been out of print since the 1950s.)
[66] Knight, *How the Cold War Began,* 223. The many biographers of Igor Gouzenko agree (unfortunately for any would-be admirer of his youthful deed) on his less admirable personality traits throughout his later life as a Canadian. Journalist John Sawatsky's collection of interviews, published after Gouzenko's death, of his many associates, friends (mostly of the ex- variety), and business associates, is especially damning. Sawatsky, *Gouzenko: The Untold Story.*
[67] Ibid., 287.
[68] Sawatsky, *Gouzenko: The Untold Story*, 5.
[69] This discussion is limited to recruitments and operations involving human intelligence assets. It does not address "enhanced" or otherwise controversial interrogation methods which (a) this author strongly opposes, however, and by whom they are used, and (b) are not relevant to this topic.
[70] Espionage differs fundamentally in this respect (among many others) from law enforcement "confidential informant" operations. A police officer often has a firm figurative grip on the scruff of his informant, who faces criminal prosecution unless he informs on his fellows. Spy handlers, in contrast, generally have a more symbiotic relationship with their sources. Each party has a measure of power to harm the other through informing or otherwise double-dealing. Positive mutual rapport and trust, within the limits of the espionage relationship, therefore remain the Grail for most experienced spy handlers. (An exception might be an ongoing counterterrorism investigation involving an identified double agent—but that is more like a police operation in that the asset has already chosen to put his head into the noose, and cooperation to mitigate the damage he has caused may lighten his punishment.)
[71] Robert B. Cialdini, *Influence: The Psychology of Persuasion* (New York: HarperCollins, 2007). The following six "weapons of influence" are based on corresponding chapters of Cialdini's book.
[72] Randy Burkett, "An Alternative Framework for Agent Recruitment: From MICE to RASCLS," *Studies in Intelligence* 57, no. 1 (Extracts, March 2013), 7-17.

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Bearing Silent Witness:

A Grandfather's Secret Attestation to German War Crimes in Occupied France

by McKay M. Smith

RAYMOND JOSEPH MURPHY
JANUARY 23, 1924 — DECEMBER 29, 1970

Over half a century after the Nazi era, the U.S. Government continues to keep secret much of the information it has on Nazi war criminals. It is imperative that this information receive full scrutiny by the public. Only through an informed understanding of the Nazi era and its aftermath can we guard against a repeat of one of the darkest moments in history.[1]

Rep. Stephen Horn, July 1998

INTRODUCTION

The Nazi War Crimes Disclosure Act of 1998 required the U.S. government to expedite the release of classified intelligence information related to German war crimes committed during World War II.[2] In an effort to fulfill this mandate, an interagency working group was called upon to "locate, identify, recommend for declassification, and make available to the public at the National Archives and Records Administration, all classified Nazi war criminal records of the United States."[3] This working group would ultimately release over 8.5 million pages from documents "scattered among the vast quantities of files stored in the national archives and individual federal agencies."[4] As a result, this project would come to be regarded as the "largest congressionally mandated declassification effort in history."[5] Although members of Congress were successful in initiating an unprecedented release of information,[6] their efforts are notable for another reason as well — America's lawmakers failed to allocate funds for the continued research and preservation of this material.[7] Rather, they left this substantial responsibility to inquisitive historians and members of the general public.[8]

Scholars have acknowledged that the study of World War II era intelligence can be an extremely arduous undertaking.[9] Intelligence tradecraft, by its very nature, requires that certain information remain secret.[10] It necessitates the sustained concealment of activities and events.[11] Moreover, this government emphasis on secrecy often results in the suppression of sensitive information from historians and citizens alike.[12] Thus, it has "become a tradition in intelligence scholarship to look to the declassified records of the past for enlightenment."[13] This trend has led multiple historians to conclude that "there are remarkable fragments of the story which have lain undiscovered in improbable places for more than fifty years."[14] Consequently, those choosing to carry out archival research "will undoubtedly find their own discoveries in these declassified documents and in related records of the National Archives."[15]

This article should be regarded as a spirited departure from traditional legal scholarship. It endeavors to be a "largely empirical contribution to the start of a wider project"[16]— namely, one that examines fragments of declassified intelligence and attempts to place this information into a larger mosaic of historical events.[17] The following discussion utilizes the case study method to communicate a powerful message related to both law and history. Readers are encouraged to examine this narrative and related analysis in conjunction with the primary source material it references. More importantly, they are asked to evaluate relevant provisions of international law and to apply these principles to a specific declassified report. It is through a similar process that this article arrives at its central conclusion.

BACKGROUND

There is little doubt that memory is an essential concept for historians.[18] In their search for "the 'truth' of remembered account," scholars often turn to the case study method to "record and value" historical events.[19] In his recent work related to post-war intelligence, Michael Salter emphasizes the importance of the case study in placing declassified intelligence into its broader historical context.[20] Specifically, he suggests that "detailed case studies can be as revealing of wider historical and institutional tendencies as apparently broader sociological approaches that seek to capture and generalize about the entire field."[21] As Salter's viewpoints have gained acceptance among prominent academic circles, a new legal sub-discipline has started to emerge.

Socio-legal analysis is described as a "fluid, changing, open movement [that] defies a fixed descriptor."[22] At its core, however, this approach focuses on the intersection of law, intelligence, and human rights.[23] Proponents of this movement stress that it explores historical events "from the perspective of the various participants, emphasizing their 'lived experience.'"[24] As a result, some scholars have asserted that this legal sub-discipline "encourages the voice of the historian to be heard directly in the text," thereby making remembered account an integral piece of the ensuing narrative.[25] Thus, readers should be aware that throughout the remainder of this article "the authorial voice, my voice, disrupts this narrative… to allow other interpretations to emerge and to sabotage illusions of closure."[26] This was done deliberately and in an effort to familiarize the audience with the case study that follows.

In the summer of 2011, through hard work and a bit of luck, my father and I were able to learn more about the man who made our very existence possible, Lieutenant Raymond Murphy. The task of locating my grandfather was complicated by a number of factors, not the least of which was his misrepresenting his age by one year to join the U.S. Army Air Corps in 1942. In addition, my father never met his birth father and knew few particulars of the man's life. Although my grandfather passed away in 1970 at the age of 46, we were fortunate to discover a series of documents detailing his experiences during World War II.[27] Moreover, our journey led us to his final resting place at Arlington National Cemetery.

Although the details that led to this discovery are certainly noteworthy, this article seeks to examine something much more significant—the story my grandfather was able to share with us nearly 40 years after his death. On April 28, 1944, Lt Murphy was shot down by German anti-aircraft fire over Avord, France, on his sixteenth mission as a B-17 navigator with the 91st Bomb Group, 324th Squadron.[28] For the next three months, he successfully evaded German patrols and Nazi collaborators with the help of local French Resistance fighters known as *le Maquis*.[29]

Following his escape in August 1944, my grandfather was questioned by the U.S. Army Military Intelligence Service at Headquarters, European Theater of Operations.[30] The information he provided during his debriefing was recorded in narrative form and analyzed for intelligence related to the continued presence of German forces in occupied France. At the conclusion of his interview, my grandfather signed a security certificate forbidding him from disclosing any facts related to his wartime experience.[31] The resulting report was marked "SECRET" and titled *Escape and Evasion Report No. 866, Evasion in France.*[32] Only recently has this document been made available to the public in electronic format.[33]

...his declassified first person account is illustrative of a number of law of war topics, including the law related to land and aerial warfare, escape and evasion, and the duties owed to inhabitants during belligerent occupation. Most notably, however, my grandfather's report also evidences criminal atrocities committed by German soldiers.

Although my father and I will never be able to sit down with Lt Murphy and discuss his story, his words are compelling even 40 years after his death. As a scholar of intelligence law and history, I was struck by the significance of his experiences in the summer of 1944. When examined from a legal perspective, his declassified first person account is illustrative of a number of law of war topics, including the law related to land and aerial warfare, escape and evasion, and the duties owed to inhabitants during belligerent occupation. Most notably, however, my grandfather's report also evidences criminal atrocities committed by German soldiers.

The story told by Lt Murphy is one of great valor and sacrifice. Accordingly, this article will attempt to honor his memory while also providing a thorough legal analysis of the conduct that he witnessed. The following discussion will examine his experiences in the context of the law of war as it existed in 1944. It will also provide a modern perspective of how this body of law has evolved since World War II. In addition, the article will examine a particularly disturbing recollection reported by my grandfather to military intelligence officers and attempt to answer one important

question — could the terrible event described in *Escape and Evasion Report No. 866* constitute evidence of a long-forgotten war crime?[34]

THE LAW OF WAR IN HISTORICAL PERSPECTIVE

In order to analyze Lt Murphy's account, it is first necessary to provide some context to the war as it existed in the skies over Europe during this period. The experiences of my grandfather and the crew of his B-17 were in no way unique or exceptional. Rather, all airmen in the U.S. Eighth Air Force, or the "Mighty Eighth" as it was often referred to, took part in fierce aerial combat in the period leading up to the summer of 1944.[35] One aircrew in particular, the crew of the *Memphis Belle*, made my grandfather's squadron famous when they were the first to successfully complete 25 missions and return to the United States as celebrated heroes.[36]

Overall, the Eighth Air Force "took more casualties in World War II than the Marine Corps and the Navy combined."

The air war had raged in Europe "for two years by the time elements of the Eighth Air Force began to arrive in late 1942 and deploy across the misty English countryside."[37] As the conflict wound on, the air war "kept on creating and re-creating itself in a furious upward curve, attackers and defenders alike improvising tactics on a round-the-clock basis, ransacking science and engineering for new technology, any kind of edge – new bomber specs and new fighter-plane wrinkles…ever-higher ranges in antiaircraft fire."[38] In addition, the Eighth Air Force's mission in Europe was made all the more deadly by one major factor—daytime bombing missions.[39]

> The American forces had committed themselves to daylight bombing, against the advice of their British counterparts, who considered it suicidal and had long since switched to nighttime bombing. The Eighth still held to the theory that a tight formation, or a combat box, of B-17 Flying Fortresses, each bristling with guns, was capable of defending itself from enemy fighter aircraft. And the Eighth was finding that this was a mistake.[40]

The losses suffered by the Eighth Air Force were staggering. During the European Campaign, more than 30,000 U.S airmen were killed or missing and another 30,000 were captured as prisoners of war.[41] Overall, the Eighth Air Force "took more casualties in World War II than the Marine Corps and the Navy combined."[42] Of the 36 bombers that had originally crossed the Atlantic to form the 91st Bomb Group, "twenty-nine had been shot down, a casualty rate of 82 percent."[43]

As a result of the alarming rate of casualties, many survivors were troubled by the memories of friends and acquaintances who, just the day before, had been drinking next to them in a pub in England.[44] Although some men chose to talk openly about their experiences, others suffered in silence.[45] All airmen, however, speculated about what happened to those who were able to escape their crippled aircraft and survive their rapid descent to German occupied territory.[46] Robert Morgan, the pilot of the *Memphis Belle*, reflected on these men when he wrote:

> We knew every time we went up, that it was very possible, likely even, to get hit hard, maybe knocked out of the sky. We might get trapped and roasted at our stations, or riddled with flak or machine gun bullets, or captured and sent to prison camps if we bailed out, provided we survived the trip down.[47]

From 25,000 feet, the conflict below may have seemed somewhat impersonal or distant at times. When an airman found himself in the unfortunate situation of being shot down, however, the deadly reality of the situation quickly became apparent.[48] Rather than returning to base to enjoy a hot meal and shower, men like Lt Murphy and his crew members were forced to come face to face with the ground truth of land warfare.

In 1944 the law of land warfare was primarily regulated by the 1907 Hague Convention IV Respecting the Laws and Customs of War on Land (Hague IV).[49] The precursor to Hague IV was the 1899 Hague Convention II (Hague II).[50] Although Hague II represented the "first successful effort of the international community to codify a relatively comprehensive regime governing the laws of land warfare,"[51] the treaty provisions agreed upon by the parties to Hague IV are still in force today.[52]

Parties to both Hague II and Hague IV laid the foundation for what would become known as *jus in bello*, or "the laws and customs of war."[53] Notably, the Preamble to Hague IV also gave expression to certain "high ideals" which formed the basis for modern humanitarian law.[54] The Preamble reads in part:

> Animated by the desire to serve, even in this extreme case, the interests of humanity and the ever progressive needs of civilization; [t]hinking it important, with this object, to revise the general laws and customs of war…the high contracting Parties deem it expedient to declare that, in cases not included by the Regulations adopted by them, the inhabitants

> and belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usages established among civilized peoples, from the laws of humanity, and the dictates of the public conscience.[55]

This section of Hague IV, which would come to be known as the Martens Clause, makes a clear distinction between the "laws" versus the "customs" of war.[56] Thus, while Hague IV represented a "relatively comprehensive agreement on the law of land warfare,"[57] its provisions were not intended to be inclusive of all applicable law. Rather, the Martens Clause prescribes that "cases not included in the Regulations annexed to the Convention remain governed by customary international law relating to the conduct of warfare."[58] Consequently, this principle would be resoundingly reaffirmed in the 1949 Geneva Convention III Relative to the Treatment of Prisoners (GPW), the 1949 Geneva Convention IV Relative to the Protection of Civilian Persons in Times of War (GC IV), and the 1977 Geneva Protocol I Additional to the Geneva Conventions of 1949 (AP I).[59]

The "Geneva Law," as this post-war collective is sometimes referred to, dictates that the principles of humanitarian law are applicable to any conflict, even if a nation has clearly denounced the Conventions.[60] Thus, Hague IV, which regulated land warfare during World War II, contained many of the fundamental precepts for modern international agreements.[61] In effect, the Geneva Law "complemented and supplemented" these already existing legal norms.[62] German officials, however, had a much different interpretation of the duties owed under Hague IV in the build-up to World War II.[63] Although Germany signed and ratified the annexed Regulations, they maintained a specific reservation to Article 44.[64]

Kriegsraison ***is a concept that first appeared in German literature in the late 18th century. The literal translation of this term is "military necessity in war overrides the law of war."***

Germany's reservation to Hague IV should have served as a forewarning of events to come. Specifically, Article 44 states that a "[b]elligerent is forbidden to force the inhabitants of territory occupied by it to furnish information about the army of the other belligerent, or about its means of self-defense."[65] Thus, Germany's reservation to Hague IV could be viewed as evidence of the country's intention not only to invade neighboring territory, but also to gather information on a country's military defenses by forcing local inhabitants into collaboration.[66] These facts become even more troubling when coupled with the doctrine of *Kriegsraison geht vor Kriegsrecht* or, as it is more commonly referred to, *Kriegsraison*.[67]

Kriegsraison is a concept that first appeared in German literature in the late 18th century.[68] The literal translation of this term is "military necessity in war overrides the law of war."[69]

Accordingly, German proponents of the doctrine believed that "military necessity…renders inoperative ordinary law and the customs and usages of war."[70] Interestingly, this belief starkly contrasts with the contemporary law of war framework which recognizes that "[n]ecessity cannot overrule the law of war."[71] In fact, modern U.S. Army doctrine explains that "[m]ilitary necessity has been generally rejected as a defense for acts forbidden by the customary and conventional laws of war."[72] Of particular note, relevant law and custom are binding "not only upon states…but also upon individuals, and in particular, the members of their armed forces."[73]

Although *Kriegsraison* was overwhelmingly repudiated by the international community in the years following World War II, the facts and circumstances in *Escape and Evasion Report No. 866* strongly suggest that this doctrine was thriving among German forces in war-torn France.[74] While *Kriegsraison* allows a belligerent to violate rules of international law it deems "necessary for the success of its military operations,"[75] the underlying reasoning for this viewpoint is fundamentally flawed.[76] As German forces in World War II were the sole judge of what constituted military necessity, the "doctrine [was] really that a belligerent may violate the law or repudiate it or ignore it whenever [it was] deemed to be for its military advantage."[77] Thus, *Kriegsraison* had no basis in fundamental principles of international law, but rather relied on a practitioner's self-serving motivations and an innate "contempt" for the established law of war.[78]

THE FIRST TO LEAVE THE SHIP

At 1154 hours on April 28, 1944, two airmen in accompanying B-17s observed my grandfather's aircraft leaving formation with its "No. 3 engine on fire."[79] The weather conditions for the mission over Avord, France, were relatively clear with only "slight ground haze…[and] scattered clouds."[80] Although this provided the heavy bombers a great deal of visibility over their target, it also allowed German forces below to more effectively direct their anti-aircraft fire during this dangerous daytime mission. The first witness to the incident remembered seeing nine

parachutes before his vision was obstructed by other planes in the formation.[81] The second witness saw all ten airmen bail out of the crippled aircraft before it exploded in midair.[82]

My grandfather reported that his B-17 was "in pretty bad shape" after receiving a direct hit immediately over its target.[83] He had been wounded in both hands by exploding flak and observed a substantial amount of "fire on [the] wing."[84] The gas tank between the No. 3 and No. 4 engines was in flames,[85] which left the crew with little time to escape. My grandfather "was the first to leave the ship" and jumped from an altitude of approximately 15,000 feet.[86] He delayed opening his parachute to avoid German flak and machine gun fire.[87] Unfortunately, he waited too long and the resulting impact knocked him unconscious and fractured his back.[88] Shortly thereafter, local Frenchmen picked him up and carried him into the woods where they gave him some "wine and a woodman's jacket" and "helped [him] the best they could."[89]

Although the pilot, Lt James Cater, also escaped the crippled B-17, his exit from the nose hatch at 15,000 feet was less than ideal.[90] He jumped with his hand on the rip cord, and accidentally released his parachute while he was "still in the prop wash."[91] In all, Lt Cater hung from his parachute harness, exposed to exploding flak, for nearly 18 minutes.[92] During the final stage of his descent, he observed German "machine gun fire from the ground, directed at [him] and the other men."[93] Although he landed unharmed, he reported that other downed airmen were not so lucky. Lt Cater recounted that "[t]wo men were said to be shot by German machine gun fire" while trapped in their harnesses.[94] When interviewed by military intelligence officers after his escape, my grandfather was unsure of the fate of his fellow crewmembers.[95] He reported seeing seven parachutes open during his rapid descent, and remarked that the bombardier was exiting the aircraft "at the moment" the plane exploded.[96] When asked during his debriefing, "[w]hat is [the] source's opinion as to the fate of the other crew members," my grandfather's answer revealed the hopelessness he must have felt.[97] Lt Murphy responded matter-of-factly that all men were "believed to be prisoners or dead — no one [else] contacted the resistance."[98]

While my grandfather's predicament must have seemed quite desperate, he was fortunate to have survived such a harrowing experience. As he rightfully noted, he had not been killed during his escape nor had he been captured as a prisoner of war. Most importantly, the delayed release of his parachute had saved him from the indiscriminate machine gun fire directed at his crew while they hung defenseless from their parachutes. While such conduct on the part of German forces certainly seems less than chivalrous, it is also notable for another reason. It evidences a clear disregard for the laws and customs of war.

As a matter of course, "the belligerents in both World Wars accepted the 1907 [Hague] Conventions as governing their activities."[99] Although Hague IV provides limited guidance related to the targeting of defenseless airmen, it is notable that the annexed Regulations make reference to the use of "balloons" and "appliances in the air" during times of war.[100] Thus, while Hague IV's provisions were intended to apply to land warfare rather than aerial warfare, one could infer that it is often quite difficult to ascertain where one type of conflict ends and the other begins. This distinction is especially complicated when discussing the duty owed to those who have successfully parachuted to the earth after their aircraft has been destroyed.

While Hague IV contains guidelines related to the treatment and care of prisoners of war, my grandfather's situation was not directly analogous to that of a captured prisoner. Rather, he was a combatant who had successfully escaped his stricken aircraft and had not yet been given the opportunity to surrender.

While Hague IV contains guidelines related to the treatment and care of prisoners of war,[101] my grandfather's situation was not directly analogous to that of a captured prisoner. Rather, he was a combatant who had successfully escaped his stricken aircraft and had not yet been given the opportunity to surrender. He was admittedly unarmed and was effectively incapacitated at the time of his landing.[102] Despite the fact that Germany maintained a reservation to Article 44 of the annexed Regulations, it was bound by all other duties imposed by Hague IV when dealing with U.S. airmen.[103] In particular, Article 23 imposes a specific prohibition against killing or wounding an enemy "who, having laid down his arms, or having no longer means of defence [sic], has surrendered at [his] discretion."[104]

In addition, German soldiers were constrained by the rules of customary international law articulated in the 1923 Hague Rules of Aerial Warfare.[105] Although these draft rules were never adopted as legally binding, "they were regarded as an authoritative attempt to clarify and formulate rules of air warfare, and largely corresponded to [established] customary rules and general principles."[106] As evidence of their applicability during World War II, "both Axis and Allied powers proclaimed their adherence to the [Hague Rules of Aerial Warfare] and made accusations of their violation."[107] Specifically, Article 20 expressly forbids the type of misconduct witnessed by my grandfather and his

crew.[108] It states, "[w]hen an aircraft has been disabled, the occupants when endeavoring to escape by means of parachute must not be attacked in the course of their descent."[109]

Under the modern law of war, there is still no "formally binding agreement which exclusively addresses air warfare."[110] As if to emphasize the importance of the 1923 Hague Rules of Aerial Warfare, however, a number of its principles are reiterated in modern provisions of international law.[111] Notably, GPW formally recognizes the concept of combatant immunity,[112] which is further articulated in contemporary U.S. jurisprudence.[113] In recent times, combatant immunity has come to signify "a doctrine rooted in the customary international law of war, [which] forbids prosecution of soldiers for their lawful belligerent acts committed during the course of armed conflicts against legitimate military targets."[114]

Furthermore AP I, which has not been adopted by the United States but has come to represent persuasive customary international law,[115] provides unambiguous protections for escaping parachutists. Specifically, AP I forbids the targeting of a "person parachuting from an aircraft in distress" and further requires that a downed airman "be given an opportunity to surrender before being made the object of attack."[116] Thus, it is "generally considered a rule of customary international law that an aircrew baling out [sic] of a damaged aircraft are *hors de combat* and immune from attack whether by enemy aircraft or from the ground."[117] In addition, once an airman reaches the ground he shall not be made the object of attack if "he has been rendered unconscious or is otherwise incapacitated by wounds or sickness, and therefore is incapable of defending himself."[118]

Thus, the conduct of German forces described by both my grandfather and the pilot of his B-17 constituted violations of the laws and customs of war. Despite the fact that Hague IV contained no specific prohibition against the targeting of downed airmen descending from their crippled aircraft, these actions were strictly forbidden by established customary international law. In addition, it is unclear how such behavior could be justified under the doctrines of *Kriegsraison* or military necessity. Certainly, killing unarmed and incapacitated airmen is not indispensable for military success. Rather, it signifies a gross repudiation of the laws of war and an overall contempt for the humanitarian principles embodied in Hague IV.

SUCCESSFUL ESCAPE AND EVASION

While Lt Murphy was certainly fortunate to have escaped the fate of some of his fellow airmen at the hands of the Germans, his adventure was far from over. For the next three months he would be forced to evade capture by enemy soldiers and *la Milice Française*, local French militias loyal to occupying German forces.[119] My grandfather had been trained in escape and evasion in February 1944 by an intelligence officer in England and he found the lectures to be of significant value.[120] As revealed in *Escape and Evasion Report No. 866*, he took his duties very seriously. When asked about the destruction of "secret papers and equipment," my grandfather responded in partially capitalized letters, "I ATE them," as if to emphasize his resolve.[121]

In order for my grandfather to escape detection by German soldiers, it was necessary for him to blend in with the civilian population. He was lucky that the Frenchmen who initially found him saw fit to place a "woodman's jacket" over his shoulders.[122] Although my grandfather could barely walk because of the back injury he sustained during his landing, the jacket provided a much needed disguise.[123] He remarked:

> I started S by compass. Shortly after I started out, and while I was talking to some Frenchmen, three truckloads of Germans drove by, evidently searching for me. They paid no attention to me while the Frenchmen said "Bonjour" to them… [Subsequently] I kept well off the roads and stayed in the woods as much as possible.[124]

Throughout my grandfather's escape, German soldiers were in close pursuit. He was told by resistance fighters that the "Germans formed a circle from Avord and followed him as far as [the town of] Blet."[125] This was a distance of nearly twenty kilometers. At one point, "they were just three or four kilometers behind; one town they entered about four hours after [he] had left it."[126] My grandfather, however, had discovered a creative means of transportation in light of his injuries. He observed that "[b]icycling seemed to be quite safe as long as one ducked for cars."[127]

Following the D-Day invasion of June 6, 1944, travel became increasingly difficult.[128] My grandfather noted that German military operations were intensifying as a result of the Allied landing, and the "Gestapo ran patrols on the main roads, using chiefly motor cars."[129] In addition, the Germans did away with all "through trains in France" and transportation was limited only to those rail cars running east or northeast toward the German border.[130] In the meantime, however, my grandfather had been fortunate to come across a French family that put him in direct contact with *le Maquis*.[131]

After contacting the French Resistance, Lt Murphy was moved to the farm of a local resistance leader, Monsieur Camille Gerbeau.[132] At this point in his journey, my grandfather seemed less concerned with effecting his own escape and instead turned his attention toward assisting the

nearly 575 men training at this "center of resistance activities."[133] He was introduced to the *grand chef de resistance*, and "participated in the parachuting [of resistance forces] and in their radio work, decoding messages as they instructed [him]."[134]

As a result of his actions, my grandfather was now acting in concert with *le Maquis* and aiding their efforts as if he was a fellow resistance fighter rather than a downed U.S. airman. He writes that he was "sending out regular messages"[135] to Allied forces and was also relaying information related to German "V-1" and "V-2" weapons.[136] When he was finally rescued by the British Royal Air Force on August 5, 1944, he was fully immersed in the culture of the resistance fighter. As evidenced in *Escape and Evasion Report No. 866*, my grandfather often used the term "we" to describe the efforts of *le Maquis* against the occupying German forces.[137] Thus, on August 4, 1944, he recalls that "we got our operational messages over the BBC… that night we went to the [meeting location], armed with MG's [machine guns] and psitols [sic]."[138]

Finally, more than three months after his plane was shot down over Avord, Lt Murphy's long-awaited salvation arrived.[139] Although my grandfather returned to England on August 6, 1944, after a daring Royal Air Force rescue,[140] the danger he faced in occupied France is even more significant when analyzed from a law of war perspective. Prior to World War II, parties to a conflict presupposed that treaty obligations applied only to international armed conflicts or conflicts between states.[141] Notably, Hague IV and its annexed Regulations refer exclusively to "conflicts between nations."[142]

As demonstrated by my grandfather's narrative, however, the conflict in German-occupied France was extremely complex.[143] It had both the characteristics of an inter-state and intra-state conflict.[144] While German soldiers were forced to defend against aerial bombardment from traditional military forces stationed outside of German occupied territory, internal resistance fighters such as *le Maquis* were actively challenging German control from within.[145]

The multifaceted nature of this conflict allowed escaping combatants to more easily blend in with sympathetic members of the local French population in order to avoid capture.[146] Although my grandfather deliberately disguised himself in civilian clothing to avoid detection, his interactions with *le Maquis* appear to go well beyond that of a typical downed airman. As a result, he could no longer be considered as merely an escaping combatant. Rather, his activities are more accurately described as being analogous to that of a spy or saboteur.[147]

The term "spy," as it is generally understood under Hague IV, refers to a person who "collects information clandestinely behind enemy lines while wearing civilian clothing."[148] Specifically, a person is considered a spy when "he obtains or endeavors to obtain information in the zone of operations of a belligerent, with the intention of communicating it to [a] hostile party."[149] While my grandfather provided valuable assistance to the French Resistance, such activities were likely conducted with substantial risk to his well-being.

The term "spy," as it is generally understood under Hague IV, refers to a person who "collects information clandestinely behind enemy lines while wearing civilian clothing."

Hague IV makes a clear distinction between soldiers "carrying out their missions openly" and those seeking to conceal their identities by removing their uniforms.[150] In addition, the 1923 Hague Rules of Aerial Warfare requires members of the crew of a military aircraft to wear a "distinctive emblem… should they become separated from their aircraft."[151] Generally, "[a]ny person who collects information while in uniform retains his status as a combatant… and if captured is to be treated as a prisoner of war."[152] In contrast, spies and saboteurs do not enjoy protected status when captured by enemy forces.[153] Rather, they may be tried and sentenced to death for their actions.[154]

In contemporary conflicts, AP I provides that, as a matter of customary international law, "combatants are obliged to distinguish themselves from the civilian population while they are engaged in an attack or in a military operation preparatory to an attack."[155] Therefore, it would be contrary to the modern law of war for a combatant to disguise himself as a civilian while openly taking part in hostilities. AP I recognizes, however, "that there are situations in armed conflicts where, owing to the nature of the hostilities an armed combatant cannot so distinguish himself."[156] All that is required in these instances is that an individual "[carry] his arms openly."[157] A combatant that is captured by an enemy while refusing to comply with these provisions effectively "forfeit[s] his right to be a prisoner of war."[158]

Therefore, under the law of war as it existed in 1944 and in modern treaty provisions, it is highly advisable that "members of the armed forces engaged in the collecting of information or sabotage in…enemy-occupied territory should, whenever possible, wear [a] uniform."[159] To do otherwise would run the risk of being treated as a spy if captured. Given the remainder of the discussion contained

in this article, it seems likely that my grandfather would have been put to death without the benefit of a trial had he been captured while assisting *le Maquis*. In fact, Adolf Hitler had issued an order in 1942 calling for the immediate execution of Allied parachutists as a matter of military necessity.[160] Thus, like many downed airmen and French resistance fighters who met their fate, my grandfather's death might have served as yet another example of Germany's violent occupation.

THE HORRORS OF WAR AND GERMANY'S VIOLENT OCCUPATION

Lt Murphy survived the harrowing experience of parachuting from his stricken B-17 and subsequently evading capture. Specific details of his declassified account, however, reveal that he was likely unprepared for the horrific nature of land warfare.[161] As described in the remainder of *Escape and Evasion Report No. 866*, the conduct of German soldiers was not only contrary to the law of war as it existed in the summer of 1944; it was also morally reprehensible.[162]

Within the first two days of his attempted escape, my grandfather learned that survival was going to be a daily struggle. He slept in the woods at night and nearly froze to death.[163] He quickly exhausted the meager supplies in his survival pack and had no food or water.[164] As a result, he had to approach sympathetic civilians for assistance.[165] One of the few facts my father and I knew about my grandfather was that the man was a devout Catholic. Thus, it must have seemed like divine providence when in those first few days he was directed to a Catholic priest for assistance.[166]

Although my grandfather spoke no French, local inhabitants likely realized his religious preference from the engravings on his dog tags.[167] They gave him a letter and pointed him toward a nearby village.[168] He circled the small town at first, looking for signs of German patrols, and then proceeded directly to the church as he had been instructed.[169] When the priest appeared at the door, my grandfather handed him the note and pleaded for assistance.[170] The priest responded almost immediately with one simple phrase—"Au revoir."[171] Like most of the civilian population, this man of faith was likely frightened by the threat of retribution.

German forces had increased patrols because they knew "Americans were in the region."[172] In addition, *la Milice Française* was terrorizing the countryside at the behest of its German occupiers.[173] With few options, my grandfather slept on the bare earth and later concealed himself among horses in local stables.[174] He even hid in one family's "WC," or outhouse, on June 6, 1944, the day the Normandy landings took place.[175] His daily existence was fraught with peril and, during this time, German soldiers monitored all radio transmissions in the region.[176] As a result, a number of French operatives were captured after they signaled my grandfather's position to Allied troops.[177] One man who narrowly escaped had "literally been beaten half to death" during the incident.[178]

Being taken into custody by German forces or *la Milice Française* meant certain death for many members of *le Maquis*.[179] While staying at Monsieur Gerbeau's farm, my grandfather met a "tall very good looking young captain in the French Intelligence Service, Jean, who had arrived with a short very heavily bearded chap…having parachuted into France."[180] These men came to meet with the *grand chef de resistance* and assist with training operations at the farm.[181] Unfortunately, both men were captured and subsequently brutalized by German forces.[182] Jean, the tall good looking captain, was tortured.[183] His companion, the "bearded chap," was summarily murdered.[184]

German soldiers throughout France used violence as a tool of occupation.

Although these events are alarming, they represent only a hint of the true horror my grandfather witnessed. German soldiers throughout France used violence as a tool of occupation.[185] Furthermore, they were capable of far more egregious conduct than merely murdering local resistance fighters. While the deaths of members of *le Maquis* were certainly tragic, there is one particular recollection contained in *Escape and Evasion Report No. 866* that defies all explanation.[186] It can only be described as a grotesque and appalling perversion of war.

In a handwritten note scrawled in the margin of the report, my grandfather attests to having witnessed a shameful atrocity committed against the French population.[187] In his own voice, he painfully recalls:

> About 3 weeks ago I saw a town within 4 hours bicycle ride up the Gerbeau farm where some 500 men, women, and children had been murdered by the Germans. I saw one baby who had been crucified.[188]

There is no question that the event described by Lt Murphy signifies a complete abandonment of the laws and customs of war. Readers of his words, even 69 years after they were first transcribed, cannot help but succumb to the powerful and deplorable imagery they invoke. Such conduct seemingly transcends all conscionable bounds of cruelty. Furthermore, it suggests a gross repudiation of every principle of human decency. While the men who committed these crimes likely justified their behavior under the doctrine of *Kriegsraison*, the genuine rationale behind their conduct may be far simpler to explain. German soldiers were

attempting to terrorize French civilians into submission.[189] In effect, they were acting out of desperation as the war slowly slipped from their grasp.[190]

Despite the shocking content of this revelation, it is initially unclear whether the full significance of my grandfather's addendum was recognized by military intelligence officers overseeing his debriefing. As a practical matter, this hastily transcribed addition was not included in the final, typed version of the report.[191] The officer charged with conducting my grandfather's interview also failed to record any other information related to this grisly remembrance.[192] Rather, he seemed far more concerned with discussing German tactical movements and troop concentrations—the precise type of information that escape and evasion reports were intended to collect. Thus, it seems possible this classified postscript, which was unavailable for public scrutiny, went unnoticed by the approving official and the Army chain of command due to its nearly indecipherable penmanship.

By the time this document was first declassified in 1974, nearly thirty years had passed since the end of the war and four years since my grandfather's death.[193] In addition, the war crime trials at Nuremberg and other related war crimes proceedings had concluded over 25 years prior. During this intervening period, my grandfather was prohibited from openly discussing the particular facts of his wartime experience because of the security certificate he signed in 1944.[194] Moreover, it seems likely that he found it difficult to speak about such hellish recollections. In subsequently contacting members of the Murphy family, it was clear they had no knowledge of this report or the incident described therein. As a result, it has yet to be determined whether this long-faded and nearly forgotten attestation represents undiscovered evidence of a terrible criminal act perpetrated against the French population.[195]

During World War II, there was "no special provision in the law of armed conflict concerning the treatment of the civilian population in territory controlled by a belligerent…although atrocities against the civilian population of the adverse party would amount to war crimes."

One can only imagine how this experience affected my grandfather, a religious man forced to observe this scene of extreme malice. These memories likely haunted him for the remainder of his life. While German soldiers had demonstrated little regard for the law of war, nothing could prepare an individual for the horrific image of a crucified child. In addition, there is no feasible justification for why these activities would have been necessary for military success. Rather, such misconduct suggests an innate contempt for all humanitarian duties imposed under international law.

This event demonstrates an absolute disregard for the "high ideals" expressed in the Preamble to Hague IV.[196] Moreover, it represents multiple violations of the Articles contained in the annexed Regulations.[197] During World War II, there was "no special provision in the law of armed conflict concerning the treatment of the civilian population in territory controlled by a belligerent…although atrocities against the civilian population of the adverse party would amount to war crimes."[198] Rather, the duties inherent to belligerent occupation were expressed by a host of provisions in Hague IV.[199]

Generally, Hague IV's annexed Regulations "proscribe the rules of conduct and the limitations imposed upon the occupant on behalf of the inhabitants of the territory in question."[200] Article 43 dictates that "the authority of the legitimate power having in fact passed into the hands of the occupant, the latter shall take all the measures in his power to restore, and ensure, as far as possible, public order and safety, while respecting, unless absolutely prevented, the laws in force in the country."[201] Notably, the conduct described in *Escape and Evasion Report No. 866* seems to embody the antithesis of protecting public order and safety.[202]

The concept of distinction, which was first articulated in Article 25, requires that parties to a conflict distinguish at all times between combatants and peaceful civilians.[203] This provision effectively precludes "the attack or bombardment, by whatever means, of towns, villages, dwellings, or buildings which are undefended."[204] Articles 22 and 23 of the annexed Regulations prohibit the infliction of "unnecessary suffering" and "superfluous injury" during hostilities.[205] As noted, "[t]he right of belligerents to adopt means of injuring the enemy is not unlimited."[206] In addition, Article 50 declares that "[n]o general penalty, pecuniary or otherwise, shall be inflicted upon the population on account of the acts of individuals for which they cannot be regarded as jointly and severally liable."[207] Thus, collective punishment of the civilian population is forbidden.[208]

World War II was "catastrophic for many civilian populations, especially those in besieged and bombarded cities, and in occupied territories."[209] At the end of hostilities, however, "there was broad international acceptance of the need to adopt an international agreement for the protection of civilians."[210] As a result, GC IV was the "first treaty devoted exclusively to the protection of civilians in time of war."[211] Article 3 of GC IV reemphasizes the humanitarian principles outlined in the Martens Clause when

it requires that "[p]ersons taking no active part in the hostilities… shall in all circumstances be treated humanely."[212] Furthermore, Article 4 introduces the term "protected persons" which is defined as "those who, at a given moment and in any manner whatsoever, find themselves, in case of a conflict or occupation, in the hands of a party to the conflict or Occupying Power of which they are not nationals."[213]

In contemporary conflicts, GC IV requires that certain common protections be applied to protected persons, in particular women and children.[214] For example, "[p]rotected persons are entitled, in all circumstances, to respect for their persons, their honour, their family rights, their religious convictions and practices, and their manners and customs...[t]hey shall at all times be humanely treated, and shall be protected especially against all acts of violence."[215] Article 32 of GC IV also forbids "physical suffering or extermination of protected persons…[t]his prohibition applies not only to murder, torture, corporal punishment, mutilation…but also to any other measures of brutality whether applied by civilian or military agents."[216]

In addition, GC IV's provisions have been heavily supplemented by AP I which deals with the protection of civilian persons during times of war.[217] Notably, Article 35 of AP I reiterates Hague IV's prohibition on superfluous injury and unnecessary suffering.[218] Moreover, Article 51 states that the "civilian population and individual civilians shall enjoy general protection against dangers arising from military operations…[they] shall not be the object of attack."[219] Thus, "[a]cts or threats of violence the primary purpose of which is to spread terror among the civilian population" are expressly prohibited.[220]

As such, there is little question that the event described in *Escape and Evasion Report No. 866* constitutes a gross violation of both the historical and contemporary laws of war. In addition, this incident signifies a repudiation of the humanitarian principles outlined in the Preamble to Hague IV and in relevant customary international law. Despite Germany's reliance on the doctrine of *Kriegsraison*, there was no general exception to applicable treaty provisions which allowed for indiscriminate attacks and infliction of unnecessary suffering based upon military necessity.[221] Rather, the event described by my grandfather should have been characterized as an egregious war crime and punished accordingly.

CONCLUSION

The study of declassified intelligence has the potential to reshape modern conceptions of history. In particular, World War II-era records provide valuable insight into "aspects of German behavior, and thus of Western European culture in the first half of the twentieth century."[222] As German forces swept across Europe, Nazi leaders worried "that 'weaker' contemporaries and subsequent generations might not understand the 'necessity' of their actions."[223] Thus, they attempted to conceal not only the corpses of their victims but also the homicidal policies underlying their wartime indiscretions.[224] At the conclusion of this great conflict, thousands of war criminals escaped prosecution due in part to an "intelligence failure" by Allied forces.[225] Scholars acknowledge that "this failure had less to do with collecting information than with recognizing its significance."[226]

Socio-legal methods have a tendency to reveal alternative viewpoints or reconstructions of historical events.[227] As Salter notes, "[n]o single and supposedly self-sufficient academic discipline can ever be adequate to any research topic."[228] Thus, proponents of this interdisciplinary approach understand that "history is a work in progress."[229] They appreciate that by elevating the experience of the individual above the collective, researchers are able to challenge the assumptions of traditional historians. When ordinary soldiers "include personal comments in their correspondence, or write in pencil on the margins of reports…[t]hey are not writing diaries for posterity."[230] Rather, these historical witnesses are "writing in the moment to satisfy military requirements."[231] As a result, their words should be afforded additional deference by virtue of their having experienced these events firsthand.[232]

Unfortunately, modern war crimes scholarship is often dominated by "pessimism, disapproval, and critique."[233] This environment of negativity has led some to reject the study of declassified intelligence, and by implication socio-legal analysis, as a "naive search for heroes."[234] Such academic detachment ignores "the possibility of alternative histories…[as well as] a broader understanding and recognition of the personal roles of individuals."[235] Moreover, it marginalizes the voices of victims whose stories have yet to be told.[236] Most scholars fail to understand that only by questioning established orthodoxy can we truly "expose and destabilize claims to the authority of objectivity."[237] Thus, "our best hope of completing this complex mosaic…are aggressive and inquisitive historians who believe that there are no real secrets."[238]

Although critics of this article will contend that numerous treatises have dealt with German atrocities committed during the war, there is one important distinction that must be made. As with any historical research, it is often difficult to shift from a theoretical analysis of events to a precise study of "temporal and geographic locations."[239] Thus, I went to great lengths to determine the accuracy of the information contained in my grandfather's report. In October 2011, I traveled to the Cher region of France. More importantly, I

was accompanied by a remarkable historical witness, Tech Sergeant Clement Dowler, the 87-year-old ball turret gunner from my grandfather's fateful flight.[240]

Mr. Dowler and I saw many memorable things as we retraced my grandfather's journey south through the French cities of Avord, Bourges, Sancoins, and Sagonne. Thanks to the generosity of the French Air Force, we gazed out upon the old runway of the Avord Airbase where Mr. Dowler fractured his leg during a rough parachute landing on the afternoon of April 28, 1944. We also visited with the wonderful townspeople of the region who sheltered my grandfather and still referred to him as the "*géant américain*" due to his surprising height.[241] In addition, historians associated with *le Musée de la Résistance* in Bourges introduced us to extraordinary men who served with *le Maquis* during this tumultuous period in French history.[242]

Of particular note, not one of the individuals present—scholar, resistance fighter, or Mr. Dowler himself—could state with certainty where the dreadful event described by my grandfather occurred. In subsequent correspondence, a historian in the region, Frederic Henoff, described the difficulties he encountered during his search for related information:

> Regarding your grandfather's [Escape and Evasion Report], I had also read this handwritten note. When he was hidden at Mr. Gerbeau farm [sic], at the time of the Normandy landing, a city not far from there — Saint-Amand-Montrond — was for a short time a place of fights between the French underground and the Germans...But we don't know [the whole] story, and perhaps your grandfather saw things which were forgotten then in the storm of the following fights, at the time of the liberation of the area.

The scale of the carnage described in *Escape and Evasion Report No. 866* strongly suggests that my grandfather bore witness to the aftermath of the massacre at Oradour-sur-Glane.[243] This infamous mass murder represents one of the most disgraceful wartime atrocities committed by German forces in occupied France. Moreover, he may have been recalling the fighting that took place in Saint-Amand-Montrond, or events that transpired in another nearby village, as Mr. Henoff maintains. It is clear that Lt Murphy traveled through this region, and he likely overestimated the number of victims he observed. Nonetheless, there is one other alternative that has significant historical and moral implications—no matter how improbable it may seem, this declassified intelligence report could contain evidence of an undocumented German war crime.

Criminal acts were witnessed by many, including Mr. Dowler, during his 5-month escape from German-occupied France. Despite this fact, the victims described in my grandfather's report are no less deserving of justice than the millions of innocents who suffered during this brutal conflict. At the conclusion of hostilities in World War II, it was widely acknowledged that the "Germans had ill-treated and in many cases executed Allied personnel belonging to both regular and resistance forces, as well as civilians…in occupied territories."[244] As a result of Germany's disregard for the tenets of humanitarian law, the Nuremberg Tribunal was established pursuant to the London Charter of 1945 for the purpose of securing "just and prompt trial and punishment of the major war criminals of the European Axis."[245]

The London Charter was notable in that it first provided a clear definition of what constituted a war crime for the purpose of the ensuing proceedings.[246] The principles established in the Charter and in the Nuremberg Tribunal's resulting judgment would come to be regarded as declaratory of the law of war.[247] The term "war crime" was given broad application in the proceedings and included conduct that evidenced "violations of the laws *and customs* of war."[248] In addition, the Charter introduced a new subset of war crimes described as crimes against humanity.[249] This designation included such transgressions as "murder, extermination, enslavement, deportation, and other inhumane acts committed against any civilian population."[250]

Interestingly, the Nuremberg Tribunal gave little credence to the use of military necessity as a defense to German war crimes.[251] Many felt that, by distorting this concept, German soldiers reduced "the entire body of the laws of war to a code of military convenience, having no further sanction than the sense of honour [sic] of the individual military commander."[252] Thus, within the guidelines set forth by the Nuremberg Tribunal, my grandfather's account unequivocally demonstrates that *Kriegsraison* is both morally reprehensible and criminal. In effect, this doctrine allows a belligerent to justify even the most abhorrent behavior under the guise of military necessity. Consequently, it serves as nothing more than a means of enabling wartime misconduct.

While the Nuremberg Tribunal is now a fixture of the past, the majority of German war criminals were tried by national courts.[253] This trend continues to the present day.[254] One only has to look to the May 2011 conviction of a former guard at a Nazi concentration camp to see the utility of this forum for prosecuting war crimes which occurred many years ago.[255] Although my initial intent in writing this Article was to pay tribute to Lt Murphy's bravery and sacrifice, my thoughts often turned to the innocent French civilians whose lives were extinguished in the summer of 1944. I pondered whether the perpetrators of this vicious crime were

punished and whether the true extent of their acts had been exposed to the world.

As a result, my final conclusion related to *Escape and Evasion Report No. 866* is that the facts outlined in this document simply demand further scrutiny. In essence, this Article is a humble appeal for renewed investigation of this historical evidence. National courts still provide a feasible venue for determining culpability should my grandfather's report lead to evidence that is more substantial in nature. Furthermore, the Nuremberg Tribunal did not place a statute of limitations on war crimes or crimes against humanity, nor should the French government.[256]

Thus, even though my grandfather passed away over 40 years ago, his story could finally bring justice for the men, women, and children who suffered unlawful deaths at the hands of their German occupiers. Although I never had the pleasure of meeting Lt Murphy, I strongly suspect that he, and the honorable men that fought alongside him, would have wanted it that way.

[Author's Note: The views expressed in this article are mine alone and do not necessarily represent the views of the Department of Justice, the Department of Homeland Security, or the United States government. I would like to dedicate this article to my father, Mike Smith, a man who taught me the value of family. I would also like to thank my uncle, Mike Murphy, for his extraordinary kindness and generosity of spirit.]

Notes

[1] Nazi War Crimes Disclosure Act: Hearing on H.R. 4007 and S. 1379 Before the Subcomm. on Gov't Mgmt., Info., and Tech. of the H. Comm. on Gov't Reform and Oversight, 105th Cong. 1 (1998) [hereinafter Hearing] (Statement of Rep. Stephen Horn, Chairman, Subcomm. on Gov't Mgmt., Info., and Tech.).
[2] Nazi War Crimes Disclosure Act, Pub. L. No. 105-246, 112 Stat. 1859 (1998) (codified as amended in 5 U.S.C. § 522 note).
[3] *Id*. at § 2(c)(1). *See also* Nazi War Criminal Records Interagency Working Group, *Implementation of Nazi War Crimes Disclosure Act: An Interim Report to Congress* (1999).
[4] Nazi War Crimes and Japanese Imperial Government Records Interagency Working Group, *Final Report to Congress*, at 1, 5 (2007) [hereinafter *Final Report*].
[5] *Id*. at xv, 1.
[6] *See generally* Hearing, *supra* note 1, at 2 (describing congressional intent behind the Nazi War Crimes Disclosure Act of 1998).
[7] Implementation of the Nazi War Crimes Disclosure Act: Hearing Before the Subcomm. on Gov't Mgmt., Info., and Tech. of the H. Comm. on Gov't Reform and Oversight, 106th Cong. 8 (2000) (Statement of Dr. Michael Kurtz, Assistant Archivist of the United States, Nat'l Archives and Records Admin.).
[8] *See id.* at 15; *see also Final Report*, *supra* note 4, at 1, 2 (clarifying that agency participants did not receive independent funding for the prolonged study of these documents—rather, their mandate was to release these records to the general public).
[9] Richard Breitman et al., U.S. Intelligence and the Nazis 8 (2005); Richard Aldrich, The Hidden Hand: Britain, American, and Cold War Secret Intelligence 16 (2001).
[10] Mark Lowenthal, Intelligence: From Secrets to Policy 1 (2009); John Radsan, *The Unresolved Equation of Espionage and International Law*, 28 Mich. J. Int'l L. 595, 599-602 (2007).
[11] *See* Lowenthal, *supra* note 10, at 1.
[12] *See id*. (explaining that secrecy can be a source of consternation to private citizens, especially in a democratic society such as the United States).
[13] Lorie Charlesworth, *2 SAS Regiment, War Crimes Investigations, and British Intelligence: Intelligence Officials and the Natzweiler Trial*, 6 J. Intelligence Hist. 21 (2006) [hereinafter Charlesworth, *2 SAS Regiment*].
[14] Aldrich, *supra* note 9, at 15. *See also* Breitman et al., *supra* note 9, at 8; Michael Salter, Nazi War Crimes, U.S. Intelligence and Selective Prosecution at Nuremberg: Controversies Regarding the Role of the Office of Strategic Services 2, 3 (2007).
[15] Breitman et al., *supra* note 9, at 8.
[16] Salter, *supra* note 14, at 4.
[17] Aldrich, *supra* note 9, at 15, 16; Salter, *supra* note 14, at 5 (discussing the inherent difficulty in researching events that are recorded in documents scattered across various archival collections); Charlesworth, *2 SAS Regiment*, *supra* note 13, at 21 (comparing the study of declassified intelligence to assembling a larger mosaic of historical information).
[18] Lorie Charlesworth, *Forgotten Justice: Forgetting Law's History and Victim's Justice in British "Minor" War Crimes Trials* 1945-48, 74 Amicus Curiae 2 (2008) [hereinafter Charlesworth, *Forgotten Justice*].
[19] *See id*. at 4.
[20] *See* Salter, *supra* note 14, at 3. *See also* Michael Salter, *Intelligence Agencies and War Crimes Prosecution: Allen Dulles's Involvement in Witness Testimony at Nuremberg*, 2 J. Int'l Crim. Just. 826 (2004) (describing CIA Director Allen Dulles's involvement in the Nuremberg proceedings); Michael Salter, *Trial by Media: The Psychological Warfare Background to OSS's Contribution to the Nuremberg War Crimes Trials*, 9 J. Intelligence Hist. 15 (2010) (analyzing the role of the Office of Strategic Services in the Nuremberg proceedings); Ian Bryan & Michael Salter, *War Crimes Prosecutors and Intelligence Agencies: The Case for Assessing their Collaboration*, 16 Intelligence & Nat'l Security 93 (2001) (providing additional discussion of the involvement of intelligence agencies in monitoring war criminality).
[21] Salter, *supra* note 14, at 3.
[22] Charlesworth, *Forgotten Justice*, *supra* note 18, at 3.
[23] *See id*. (referencing socio-legal studies in the context of Salter's emphasis on intelligence studies and humanitarian scholarship).
[24] *Id*.
[25] *Id*. at 4.
[26] *Id*.
[27] The information in this Article is primarily drawn from Missing Air Crew Report (MACR) No. 4235 and Escape and Evasion Report *(E&E) No. 866*. During World War II, U.S. Army Air Corps Bomb Groups were required to submit MACRs when airmen were lost during combat operations. E&E Reports were required when personnel subsequently avoided capture by enemy forces. Notably, the National Archives and Records Administration recently made E&E reports publicly available in

electronic format. Thus, the primary source material contained in MACR No. 4235 and *E&E No. 866* should be examined in conjunction with this Article. Please see relevant citations and associated hyperlinks to access publicly available versions of these documents.

[28] *See generally Escape and Evasion Report No. 866, Evasion in France* (Aug. 15, 1944) [hereinafter *E&E No. 866*], *available at* http://media.nara.gov/nw/305270/EE-866.pdf?bcsi_scan_0F6519961A220080=0&bcsi_scan_filename=EE-866.pdf.

[29] *Id*. *See also* Julian Jackson, France: The Dark Years 1940-1944 (2001); Claude Chambard, The Maquis: A History of the French Resistance Movement (1976) (providing a more thorough discussion of French Resistance efforts and the structure of *le Maquis* generally).

[30] *See E&E No. 866*, *supra* note 28, at 1. *See, e.g.*, Charlesworth, *2 SAS Regiment*, *supra* note 13, at 13 (demonstrating that intelligence collection played a critical role in post-War proceedings such as the Nuremberg Trials and other minor war crimes trials).

[31] *E&E No. 866*, *supra* note 28, at 21.

[32] *Id.* According to the National Archives, E&E Reports were developed to collect and evaluate data on escape and evasion activities in the European Theater of Operations. They included a brief questionnaire as well as a typed or handwritten narrative provided by the escapee or evader. Notably, these reports were not intended to collect information on war crimes or other criminal acts perpetrated by enemy forces.

[33] National Archives, NARAtions: The Blog of the United States National Archives, World War II Escape and Evasion Reports Are Now Available Online (Sept. 14, 2010), http://blogs.archives.gov/online-public-access/?p=2751 (stating that digitized versions of Escape and Evasion Reports first became available on NARA's website in September 2010); *see also* National Archives, Prologue: Pieces of History, http://blogs.archives.gov/prologue/?p=1798.

[34] *See* Leslie C. Green, The Contemporary Law of Armed Conflict 50, 320 (2008); Salter, *supra* note 14, at 6 (illustrating that under Article 6 of the London Charter of 1945, the International Military Tribunal at Nuremberg was given jurisdiction over crimes against peace, war crimes, and crimes against humanity — although crimes against peace and humanity had never been previously defined under international law, these terms were given broad application under these proceedings).

[35] Roger Freeman, The Mighty Eighth: A History of the Units, Men and Machines of the US Eighth Air Force (1970); Marion Havelaar, The 91st Bombardment Group in World War II (1995). *See also* Rob Morris, Untold Valor: Forgotten Stories of American Bomber Crews in World War II (2006) (detailing personal accounts of airmen from the 8th Air Force during World War II).

[36] Ron Powers & Robert Morgan, The Man Who Flew the Memphis Belle: Memoir of a World War II Bomber Pilot (2001).

[37] *Id*. at 102. *See also* Havelaar, *supra* note 35, at 9 (describing the arrival and deployment of the 8th Air Force in 1942).

[38] Powers & Morgan, *supra* note 36, at 102.

[39] *See* John Keegan, The Second World War 425-26 (1989); *see also* David Metz, The Air Campaign: John Warden and the Classical Airpower Theorists 28 (1999) (describing daylight bombing and the theoretical underpinnings for this wartime practice).

[40] Morris, *supra* note 35, at 54.

[41] Powers & Morgan, *supra* note 36, at 106. *See also* Freeman, *supra* note 35; Havelaar, *supra* note 35 (providing more specific casualty reporting for the 8th Air Force and 91st Bomb Group).

[42] Powers & Morgan, *supra* note 36, at 106.

[43] *Id*. at 132.

[44] *See id*. at 132-33; *see also* Travis Ayres, The Bomber Boys: Heroes Who Flew the B-17s in World War II (2005); Bert Stiles, Serenade to the Big Bird 69 (2001) (detailing personal accounts of airmen who served in World War II).

[45] *See* Powers & Morgan, *supra* note 36, at 133.

[46] *See* Kay Sloan, Not Without Honor: The Nazi POW Journal of Steve Carano 129 (2008) (providing Bill Blackmon's personal account of the events of April 28, 1944 — notably, Blackmon spent months in German captivity after his B-17 was shot down during the bombing run on Avord, France); *see also* Stuart Hadaway, Missing Believed Killed: Casualty Policy and the Missing Research Service and Enquiry Service 1939-1952 (2008) (describing the search for missing Allied airmen in Europe).

[47] Powers & Morgan, *supra* note 36, at 165.

[48] Sloan, *supra* note 46, at 136. *See also* Thomas Childers, In the Shadows of War: An American Pilot's Odyssey Through Occupied France and the Camps of Nazi Germany (2002).

[49] *See* Michael Schmitt, *Military Necessity and Humanity in International Humanitarian Law: Preserving the Delicate Balance*, 50 VA. J. INT'L. L. 795, 800, 806 (2010); Chris Jochnick & Roger Normand, *The Legitimation of Violence: A Critical History of the Laws of War*, 35 Harv. J. Int'l L. 49, 52 (1994).

[50] *See* Adam Roberts & Richard Guelff, Documents on the Laws of War 67, 68 (2000). *See also* Kevin Chamberlain, War and Cultural heritage 9 (2004).

[51] Green, *supra* note 34, at 41.

[52] Fritz Kalshoven & Liesbeth Zegveld, Constraints on the Waging of War: An Introduction to International Humanitarian Law 23 (3d ed. 2001).

[53] Green, *supra* note 34, at 22. *See also* Robert Sloane, *The Cost of Conflation: Preserving the Dualism of Jus ad Bellum and Jus in Bello in the Contemporary Law of War*, 34 Yale J. Int'l L. 47, 49 (2009); Carsten Stahn, '*Jus ad bellum', 'jus in bello' . . . 'jus post bellum'? – Rethinking the Conception of Law of Armed Force*, 17 Eur. J. Int'l L. 921, 925 (2006).

[54] Green, *supra* note 34, at 22, 23.

[55] Convention Respecting the Laws and Customs of War on Land (Hague IV), pmbl., Oct. 18, 1907, 36 Stat. 2277, 1 Bevans 631, 632-33 (1968) [hereinafter Hague IV].

[56] Roberts & Guelff, *supra* note 50, at 68. *See also* Thedor Meron, *The Martens Clause, Principles of Humanity, and Dictates of Public Conscience*, 94 Am. J. Int'l L. 78, 79 (2000); William Downey, *The Law of War and Military Necessity*, 47 Am. J. Int'l L. 251 (1953).

[57] Roberts & Guelff, *supra* note 50, at 68. *See also* Schmitt, *supra* note 49, at 797.

[58] Roberts & Guelff, *supra* note 50, at 68.

[59] *Id*. *See also* Rupert Ticehurst, *The Martens Clause and the Laws of Armed Conflict*, 317 Int'l Rev. Red Cross 125-34 (1997).

[60] *See* Kalshoven & Zegveld, *supra* note 52, at 53-54; *see also* Green, *supra* note 34, at 23.

[61] Roberts & Guelff, *supra* note 50, at 68. *See also* Schmitt, *supra* note 49, at 807-11 (explaining the evolution of the law of war).

[62] Roberts & Guelff, *supra* note 50, at 68.

[63] *See* The War Book of the German General Staff (J.H. Morgan trans., McBride, Nast &

Co. 1915) [hereinafter WAR BOOK], *available at* http://books.google.com/books?id=j3kDAAAAYAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false (provid-ing a pre-World War II translation of the German War Manual). *See also* James Garner, *The Ger-man War Code*, 15 U. ILL. BULL. 1, 9-10, 20 (1918) (containing a complimentary analysis of the doctrine of *Kriegsraison* and its relation to Hague IV).

[64] *See* ROBERTS & GUELFF, *supra* note 50, at 84. Germany signed the annexed Regulations of Hague IV on October 18, 1907 and subsequently ratified these provisions on November 27, 1909. *Id.* at 83, 84. At the time of signature they made note of their specific reservation and maintained this reservation until ratification, as did Austria-Hungary, Japan, Montenegro, and Russia. *Id.*

[65] Hague IV, *supra* note 55, art. 44.

[66] *See* Garner, *supra* note 63, at 10, 20.

[67] Scott Horton, *Kriegsraison or Military Necessity? The Bush Administration s Wilhelmine Attitude Towards the Conduct of War*, 30 FORDHAM INT'L L.J. 576, 585-87 (2000). For a more detailed discussion of the doctrine, see also GARY D. SOLIS, THE LAW OF ARMED CONFLICT: INTERNATIONAL HUMANITARIAN LAW 266 (2010). Solis writes that "*Kriegsmanier* was the conduct of war according to the customs and laws of war; *Kriegsraison*, its opposite, was the non-observation of those customs and laws." *Id.* He further asserts that while *Kriegsraison* was embraced by some German politicians and military officers, "it is probable that the resort to this doctrine was above all based on contempt for the law." *Id.*

[68] SOLIS, *supra* note 67, at 266. *See also* Garner, *supra* note 63, at 11.

[69] SOLIS, *supra* note 67, at 265. *See also* WAR BOOK, *supra* note 63, at 68. Notably, this German manual on land warfare states that: A war conducted without energy cannot be directed merely against the combatants of the Enemy State and the positions they occupy, but it will and must in like manner seek to destroy the total intellectual and material resources of the latter. Humanitarian claims such as the protection of men and their goods can only be taken into consideration in so far as the nature and object of the war permit.

[70] SOLIS, *supra* note 67, at 266 (citing Louis Doswald Beck, *International Humanitarian Law and the Advisory Opinion of the International Court of Justice on the Legality of the Threat or Use of Nuclear Weapons*, 316 INT'L REV. RED CROSS 33 (1997)).

[71] *Id*. at 265.

[72] Department of the Army, *The Law of Land Warfare, Field Manual 27-10*, Appendix A-1 (July 1956) [hereinafter *The Law of Land Warfare*]. *See also* JUDGE ADVOCATE GENERAL'S SCHOOL: LAW OF WAR HANDBOOK 164-65 (2005).

[73] *The Law of Land Warfare*, *supra* note 72.

[74] *See* Downey, *supra* note 56, at 253 (discussing the doctrine of *Kriegsraison* and its application in World War II); *see also* Norman Dunbar, *Military Necessity in War Crimes Trials*, 29 BRIT. Y.B. INT'L L. 441, 446-67 (1952).

[75] SOLIS, *supra* note 67, at 267.

[76] Horton, *supra* note 67, at 586; *see also* Schmitt, *supra* note 49, at 797-99.

[77] SOLIS, *supra* note 67, at 267 (citing CLAUD MULLINS, THE LIEPZIG TRIAL: AN ACCOUNT OF THE WAR CRIMINALS' TRIALS AND A STUDY OF GERMAN MENTALITY 123 (1921)).

[78] *Id*.; *see also* Jochnick & Normand, *supra* note 49, at 63-64.

[79] *See* Missing Air Crew Report (MACR) No. 4235 (May 2, 1944) [hereinafter MACR No. 4235], *available at* http://heroesoffreedom.nl/42-97199.pdf; *see also* HAVELAAR, *supra* note 35, at 118.

[80] MACR No. 4235, *supra* note 79, at 2.

[81] *Id*. at 3.

[82] *Id*.

[83] *E&E No. 866*, *supra* note 28, at 12.

[84] *Id*.

[85] *Id*. *See also* HAVELAAR, *supra* note 35, at 188.

[86] *E&E No. 866*, *supra* note 28, at 1.

[87] *Id*.

[88] *Id*.

[89] *Id*.

[90] *See generally Escape and Evasion Report No. 827, Evasion in France* (July 14, 1944) [hereinafter *E&E No. 827*], *available at* http://media.nara.gov/nw/305270/EE-827.pdf?bcsi_scan_0F6519961A220080=0&bcsi_scan_filename=EE-827.pdf. Lt. James Cater also survived the destruction of my grandfather's aircraft over Avord, France. *Id.* His personal account is recorded in E&E No. 827, dated July 1944. Thus, his rescue preceded that of my grandfather by approximately one month. Although these two men did not act in concert to escape German occupied France, they were both able to evade German forces by working in close coordination with *le Maquis*. *Id.*

[91] *Id*. at 1.

[92] *Id*.

[93] *Id*.

[94] *Id*. at 10.

[95] *E&E No. 866*, *supra* note 28, at 12.

[96] *Id*.

[97] *Id*.

[98] *Id*. *See also* CLAUDE GRIMAUD, ILS ETAIENT DIX-SEPT MAI-JUIN 1944, at 56-64 (2011). Although Lt. Murphy did not encounter any of his crewmembers in occupied France, he was mistaken when he asserted that "no one [else] contacted the resistance." *E&E No. 866*, *supra* note 28, at 12. Four other airmen found shelter with *le Maquis* including James Cater, Clement Dowler, Regis Carney, and Herbert Campbell. GRIMAUD, *supra*, at 56. Their story was recently recounted by French historian Claude Grimaud. *Id.*

[99] GREEN, *supra* note 34, at 44. *See also* Jochnick & Normand, *supra* note 49, at 52.

[100] Hague IV, *supra* note 55, arts. 29 & 53.

[101] *See id.* ch. II (containing provisions related to prisoners of war); *see also* Adam Klein & Benjamin Wittes, *Preventive Detention in American Theory and Practice*, 2 HARV. NAT. SEC. J. 85, 96 (2011); THE JUDGE ADVOCATE GENERAL'S LEGAL CENTER AND SCHOOL, LAW OF WAR DESKTOP 74 (2011).

[102] *E&E No. 866*, *supra* note 28, at 1, 10.

[103] ROBERTS & GUELFF, *supra* note 50, at 84; Garner, *supra* note 63, at 7, 8.

[104] Hague IV, *supra* note 55, art. 23.

[105] *See generally* Hague Rules of Air Warfare (1923); NATALINO RONZITTI & GABRIELLA VENTUINI, THE LAW OF AIR WARFARE: CONTEMPORARY ISSUES 43 (2006); RICHARD WYMAN, THE FIRST RULES OF AERIAL WARFARE (1984).

[106] ROBERTS & GUELFF, *supra* note 50, at 139.

[107] *Id*. at 140.

[108] Hague Rules of Air Warfare, *supra* note 105, art. 20.

[109] *Id*.

[110] ROBERTS & GUELFF, *supra* note 50, at 141.

[111] Ronzitti & Ventuini, *supra* note 105, at 10, 21, 45, 96.
[112] Geneva Convention (III) Relative to the Treatment of Prisoners of War, arts. 87, 99 (Aug. 12, 1949) [hereinafter GPW].
[113] United States v. Lindh, 212 F. Supp. 2d 541, 553 (Ed. Va. 2002). *See also* Geoffrey Corn & Chris Jenks, *Two Sides of the Combatant Coin: Untangling Direct Participation in Hostilities from Belligerent Status in Non-International Armed Conflicts*, 33 U. Pa. J. Int'l L. 313, 336 (2011); Major Alex Peterson, *Order Out of Chaos: Domestic Enforcement of the Law of Internal Armed Conflict*, 171 Mil. L. Rev. 1, 19 (2002).
[114] *Lindh*, 212 F. Supp. 2d at 553.
[115] Green, *supra* note 34, at 177; Michael Matheson, Deputy Legal Adviser, U.S. Dep't of State, *Remarks at the Sixth Annual American Red Cross – Washington College of Law Conference on International Humanitarian Law: A Workshop on Customary International Law and the 1977 Protocols Additional to the 1949 Geneva Conventions*, 2 Am. U. J. Int'l L. & Pol. 415, 419, 422–29 (1987). *See also* Michael Schmitt, *Deconstructing Direct Participation in Hostilities: The Constitutive Elements*, 42 N.Y.U. J. Int'l L. & Pol. 697, 716-17 (2010).
[116] Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts, art. 42 (1977) [hereinafter AP I].
[117] Green, *supra* note 34, at 177. *See also* The Judge Advocate General's School, Air Force Operations and the Law 16, 25 (2009).
[118] AP I, *supra* note 116, arts. 41(2)(c) & 42(1).
[119] *See E&E No. 866*, *supra* note 28, at 5. *See also* Herbert Lottman, The Purge: The purification of French Collaborators after World War II (1986). While *le Maquis* was composed of rural French Resistance fighters, *la Milice Française* was a paramilitary militia loyal to the Vichy Regime. In his narrative, Lt. Murphy described how he was weary of not only traditional German forces but also French collaborators. For periods up to a week in duration, he was forced to sleep "in the woods carefully concealed, for the Milice were raising hell in the section." *E&E No. 866*, *supra* note 28, at 5.
[120] *E&E No. 866*, *supra* note 28, at 19.
[121] *Id*. at 22.
[122] *Id*. at 1.
[123] *Id.*
[124] *Id*.
[125] *Id*. at 4.
[126] *Id*. at 1.
[127] *Id.* at 2.
[128] *Id*.
[129] *Id*.
[130] *Id.*
[131] *Id*. at 4.
[132] *Id*.
[133] *Id*. at 5.
[134] *Id*.
[135] *Id.*
[136] *Id. See also* Peter Cooksley, Flying Bomb: The Story of Hitler's V-Weapons in World War II (1979); Ayres, *supra* note 44, at 216. *See also* Richard Holmes, World War II: the Definitive Visual History 278 *(*2009). The German V-Weapons, known as the V-1 flying bomb and the V-2 rocket, were pilotless, free-flight rockets developed for use against England. Holmes, *supra*, at 278. Notably, these weapons were largely indiscriminate and inflicted substantial casualties on Allied civilians. *Id.*
[137] *E&E No. 866*, *supra* note 28, at 5.
[138] *Id*.
[139] *Id*.
[140] *Id*.
[141] Green, *supra* note 34, at 66.
[142] Hague IV, *supra* note 55, pmbl.
[143] *See generally E&E No. 866*, *supra* note 28.
[144] Sylvain Vite, Typology of Armed Conflicts in International Humanitarian Law: Legal Concepts and Actual Situations (2009); Roy Schondorfat, *Extra-State Armed Conflicts: Is There a Need for a New Legal Regime*, 37 N.Y.U. J. Int'l L. & Pol. 1, 68 (2004); Waldemar Solf, *The Status of Combatants in Non-International Armed Conflicts Under Domestic Law and Transnational Practice*, 33 Am. U.L. Rev. 53, 58–59 (1983).
[145] *See generally E&E No. 866*, *supra* note 28.
[146] *Id. See also* Childers, *supra* note 48, at 173-98.
[147] Radsan, *supra* note 10, at 599-602.
[148] Green, *supra* note 34, at 176 (citing Hague IV, *supra* note 55, art. 24).
[149] Hague IV, *supra* note 55, art. 29.
[150] *Id*.; Radsan, *supra* note 10**,** at 601-02.
[151] Hague Rules of Air Warfare, *supra* note 105, art. 15.
[152] Green, *supra* note 34, at 176.
[153] *Id.* at 145; Radsan, *supra* note 10, at 1277–78.
[154] Hague IV, *supra* note 55, art. 30; *see also Ex parte* Quirin, 317 U.S. 1 (1942). In this historic decision, the U.S. Supreme Court upheld the jurisdiction of a military tribunal that sentenced eight German-born conspirators to death when they were captured entering the United States during World War II for the purposes of espionage and sabotage. *Ex parte* Quirin, *supra*, at 48. These individuals initially wore German military uniforms. *Id.* at 21. After penetrating inland, however, they buried their uniforms and disguised themselves in civilian attire. *Id.* Notably, Article 30 of Hague IV requires that "a spy taken in the act shall not be punished without previous trial." Hague IV, *supra* note 55, art. 30. In fact, in modern conflicts it is widely understood that to "punish [a spy] without a proper trial is a war crime." Green, *supra* note 34, at 176.
[155] AP I, *supra* note 116, art. 44(3).
[156] *Id*.
[157] *Id*.
[158] AP I, *supra* note 116, art. 44(4).
[159] Green, *supra* note 34, at 176.
[160] Charlesworth, *2 SAS Regiment*, *supra* note 13, at 12. Charlesworth writes that this Commando Order and subsequent Supplementary Order of the Fuhrer "called for all captured parachutists to be handed over . . . for disposal." *Id.* at 18**.** Notably, both documents cite military necessity as justification for such conduct. *Id.* To view a translation of this primary source material, see Hitler's Commando Order (Oct. 18, 1942), *available at* http://www.combinedops.com/Hitlers_Commando_Order.htm.
[161] *See generally E&E No. 866*, *supra* note 28.
[162] *Id*.
[163] *Id*. at 8.
[164] *Id*. at 9.
[165] *Id*. at 8.
[166] *Id*.
[167] *Id*.
[168] *Id.*
[169] *Id*. at 8-9.
[170] *Id.* at 9.

[171] *Id.*
[172] *Id.* at 4.
[173] *Id*. at 5.
[174] *Id.*
[175] *Id.* at 4.
[176] *Id*. at 5.
[177] *Id.*
[178] *Id.*
[179] JACKSON, *supra* note 29, at 544-46. *See generally* CHAMBARD, *supra* note 29.
[180] *E&E No. 866*, *supra* note 28, at 5.
[181] *Id.*
[182] *Id.*
[183] *Id.*
[184] *Id.*
[185] MAX HASTINGS, DAS REICH: THE MARCH OF THE 2ND SS PANZER DIVISION THROUGH FRANCE (1982) (documenting the 2nd SS Panzer Division's march through France to reinforce German soldiers battling the advancing American Army).
[186] *E&E No. 866*, *supra* note 28, at 5.
[187] *Id.*
[188] *Id*.
[189] HASTINGS, *supra* note 185 (describing savage reprisals taken against civilians by the 2nd SS Panzer Division in central France).
[190] *Id*.
[191] *See generally E&E No. 866*, *supra* note 28.
[192] *Id.*
[193] According to the National Archives and Records Administration, *E&E No. 866* was declassified under Declassification Project Number NND 745001 in 1974. E-mail from National Archives and Records Administration, to author (June 2, 2011, 15:46 EST) (on file with author). Thus, the report remained classified for a period of thirty years after its initial transcription and classification. Notably, this declassified document was only recently made available to the public in electronic format on the National Archives website.
[194] *E&E No. 866*, *supra* note 28, at 21.
[195] *See* SARAH FARMER, MARTYRED VILLAGE (1999); JEAN-JACQUES FOUCHE, MASSACRE AT ORADOUR FRANCE, 1944: COMING TO GRIPS WITH TERROR (2005); ANDRE DESOURTEAUX, ORADOUR/GLANE: NOTRE VILLAGE ASSASSINE (1998). Atrocities similar to that described in *E&E No. 866* occurred in a west central French village named Oradour-sur-Glane. FARMER, *supra*, at 1. On June 10, 1944, a special unit of German forces indiscriminately massacred 642 men, women, and children. *Id.* On June 11, "all that remained of Oradour was a smoldering mass of burnt farms, shops, and houses." *Id* at 24. The ruins of the town, sometimes referred to as *village martyr*, were left untouched after the war as a memorial to those who were murdered. *Id.* at 2. It is unclear from Lt. Murphy's account whether this is the town in question.
[196] GREEN, *supra* note 34, at 41; Meron, *supra* note 56, at 79. *See generally* Downey, *supra* note 56, at 251.
[197] *See generally* Hague IV, *supra* note 55.
[198] GREEN, *supra* note 34, at 256.
[199] *See generally* Hague IV, *supra* note 55, pmbl. & arts. 22, 25, 43, 50.
[200] GREEN, *supra* note 34, at 284. For primary source material related to the American view of the Law of Occupation during World War II, see The Judge Advocate General's School, *The Law of Belligerent Occupation* (1944) [hereinafter *Law of Occupation*], *available at* http://www.loc.gov/rr/frd/Military_Law/pdf/law-of-belligerent-occupation_11.pdf.
[201] Hague IV, *supra* note 55, art. 43. *See also Law of Occupation*, *supra* note 200, at 36, 38, 54, 55, 70.
[202] *See generally E&E No. 866*, *supra* note 28.
[203] Hague IV, *supra* note 55, art. 25. For a modern discussion of the concept of distinction, see Ganesh Sitaraman, *Counterinsurgency, the War on Terror, and the Laws of War*, 95 VA. L. REV. 1745, 1780-91 (2009); Mark Maxwell & Richard Meyer, *The Principle of Distinction: Probing the Limits of Customariness*, 2007 ARMY L. 1 (2007).
[204] Hague IV, *supra* note 55, art. 25.
[205] *Id.* arts. 22 & 23(e).
[206] *Id.* art. 22.
[207] *Id*. art. 50. *See also Law of Occupation*, *supra* note 200, at 116.
[208] For a discussion of the evolution of civilian immunity under Hague IV, see Richard Rosen, *Targeting Enemy Forces in the War on Terror: Preserving Civilian Immunity*, 42 VAND. J. TRANSNAT'L L. 683, 699-702 (2009).
[209] ROBERTS & GUELFF, *supra* note 50, at 300.
[210] Id.
[211] Id. at 299.
[212] Geneva Convention IV Relative to the Protection of Civilian Persons in Time of War, art. 3 (1949) [hereinafter Geneva Convention IV]. *See also* SOLIS, *supra* note 67, at 234-37; Michael Schmitt, *The Interpretive Guidance on the Notion of Direct Participation in Hostilities*, 1 HARV. NAT. SEC. J. 5, 28, 39 (2010).
[213] Geneva Convention IV, *supra* note 212, art. 4.
[214] *Id*. art. 27. *See also* SOLIS, *supra* note 67, at 311.
[215] Geneva Convention IV, *supra* note 212, art. 27.
[216] *Id*. art. 32.
[217] ROBERTS & GUELFF, *supra* note 50, at 300. *See also* SOLIS, *supra* note 67, at 121-25.
[218] AP I, *supra* note 116, art. 35.
[219] *Id*. art. 51. *See also* Mark Maxwell, *The Law of War and Civilians on the Battlefield: Are We Undermining Civilian Protections?*, MIL. L. REV. 18 (Sept-Oct. 2004) (citing International Committee of the Red Cross, Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, at 615).
[220] AP I, *supra* note 116, art. 35.
[221] Charlesworth, *Forgotten Justice*, *supra* note 18, at 10 (theorizing that Nazi law itself "constituted a 'state of exception,' thereby conferring a separate cocoon-like status upon law in Nazi Germany").
[222] *Id*. at 9.
[223] BREITMAN ET AL., *supra* note 9, at 3.
[224] *Id. See also* Charlesworth, *Forgotten Justice*, *supra* note 18, at 10 (explaining that Nazi rule sanctioned gross misconduct "all the while ensuring that it was publicly unmentionable . . . The taboo was not the doing but the talking about what was done").
[225] BREITMAN ET AL., *supra* note 9, at 6. *See also* Charlesworth, *2 SAS Regiment*, *supra* note 13, at 21. While Breitman notes the partial intelligence failure of Allied forces, Charlesworth adds that this situation was complicated by the size of the displaced population in postwar Europe. She writes, "It has been estimated that seven million German soldiers had surrendered in

the west, one and a half million German civilians had fled from the Red Army into the other occupied zones, some eight million foreign workers were displaced and ten million German urban residents had fled to the countryside." *Id.*

[226] Breitman et al., *supra* note 9, at 6.

[227] Charlesworth, *Forgotten Justice*, *supra* note 18, at 3.

[228] Salter, *supra* note 14, at 3.

[229] Charlesworth, *Forgotten Justice*, *supra* note 18, at 4.

[230] *Id*. at 7.

[231] *Id*.

[232] *Id*.

[233] *Id*.

[234] *Id.*

[235] *Id*. at 8.

[236] *Id*. at 9.

[237] *Id*. at 4.

[238] Aldrich, *supra* note 9, at 16.

[239] Charlesworth, *Forgotten Justice*, *supra* note 18, at 3.

[240] *See generally Escape and Evasion Report No. 1669, Evasion in France*, Sept. 7, 1944, *available at* http://media.nara.gov/nw/305270/EE-1669.pdf.

[241] *See* Laurent Boudier, Lurcy-Levis: D'Hier et D'Aujord'Hui 169 (1965) (explaining the general history of the region and providing specific description of Lt. Murphy's involvement with resistance efforts during the war).

[242] *See* Natalee Seely, *Dowler Thanks French for Saving Him: Evaded German Capture During World War II*, Parkersburg News & Sentinel (Nov. 11, 2011), *available at* http://www.newsandsentinel.com/page/content.detail/id/554025.html (providing more informa-tion on Mr. Dowler's recent visit to France).

[243] For additional discussion of the massacre at Oradour-sur-Glane, see generally Farmer, *supra* note 195. Notably, the village of Oradour is within a 4r-hour bicycle ride of the Cher department. In addition, this is the general area where by grandfather and Tech Sergeant Clement Dowler independently participated in resistance activities from the period May through August 1944. Interview with Clement Dowler, former Tech Sergeant, in Avord, France (Oct. 12, 2011).

[244] Green, *supra* note 34, at 320.

[245] *Agreement for the Prosecution and Punishment of the Major War Criminals of the European Axis, and Charter of the International Military Tribunal*, art. 1, Aug. 8, 1945, 82 U.N.T.S. 280 [hereinafter London Charter]. For primary source material related to the judgment at Nuremberg, see Telford Taylor, *Final Report to the Secretary of the Army on the Nuernberg War Crimes Trials* (Aug. 15, 1949), *available at* http://www.loc.gov/rr/frd/Military_Law/pdf/NT_final-report.pdf.

[246] Taylor, *supra* note 245, at 324. *See also* Theodor Meron, *Reflections on the Prosecution of War Crimes by International Tribunals*, 100 Am. J. Int'l L. 551, 562 (2006).

[247] Green, *supra* note 34, at 320.

[248] London Charter, *supra* note 245, art. 6 (emphasis added).

[249] *Id*.

[250] *Id.*

[251] *See generally* U.N. Secretary-General, The Charter and Judgment of the Nurnberg Trial –
History and Analysis, U.N. Doc. A/CN.4/5 (1949), *available at* http://untreaty.un.org/ilc/documentation/english/a_cn4_5.pdf. *See also* Jochnick & Normand, *supra* note 49, at 64; Schmitt, *supra* note 49; Downey, *supra* note 56.

[252] Green, *supra* note 34, at 148. *See also* Horton, *supra* note 67, at 585-87; Solis, *supra* note 67, at 266.

[253] Roberts & Guelff, *supra* note 50, at 11; Charlesworth, *Forgotten Justice*, *supra* note 18. *See also* Meron, *supra* note 246, at 557; M. Cherif Bassiouni, *"The War to End all Wars" and the Birth of a Handicapped International Criminal Justice System*, 30 Denv. J. Int'l L. & Pol'y 244, 253 (2002).

[254] Roberts & Guelff, *supra* note 50, at 11.

[255] *See generally* Jack Ewing & Alan Cowell, *Demjanjuk Convicted for Role in Nazi Death Camp*, N.Y. Times, *available at* http://www.nytimes.com/2011/05/13/world/europe/13nazi.html. On May 12, 2011, John Demjanjuk was found guilty by a German court of taking part in the murder of 28,000 people in 1943. *Id.* He served as a guard at the Sobibor concentration camp in German occupied Poland during World War II. *Id.* After decades of legal proceedings, Demjanjuk's conviction was hailed by many as evidence of the immutability of justice. *Id.*

[256] The applicability of statutes of limitation to war crimes and crimes against humanity has been an area of debate in France. National law and subsequent decisions by the Court of Cassation seemingly indicate that war crimes prosecutions are constrained by a statute of limitations. *See* Barbie Case (1985). Nonetheless, France unequivocally supported non-applicability during debate in front of the U.N. General Assembly. *See* Statement Before the U.N. General Assembly (1967). In addition, they signed the European Convention on the Non-Applicability of Statutory Limitations to Crimes against Humanity and War Crimes. *See* Signatories to the Convention (1968).

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Army Intelligence:
Where Are We Now?

by CPT (USA) Charles A. Harrison III

This "white paper" addresses lessons learned and the current state of Army intelligence after over ten years of war as it applies to reach-back, fusion, and synergy. The main point is that analysts must be pushed forward in order to provide accurate and timely intelligence. In addition, the Army should change its approach to training all-source fusion analysts, and the incorporation of privatized national security provides a way to lessen the burden of intelligence-related duties.

Intelligence reach-back is important because it allows analysts to be near the fight, while concentrating on producing accurate and timely intelligence analysis to support the battlefield commander. Reach-back is made possible due to improvements in technology which overcome communication, staffing, and equipment requirements at the company and platoon level. Some intelligence sections prefer to have analysts at the battalion level; however, analysts are most effective while forward-deployed due to the ability to gain actionable intelligence to support organic units, higher headquarters, adjacent units, and coalition forces. Battalion intelligence sections can operate efficiently and effectively without intelligence analysts as long as there is a small staff of aggressive officers who are able to act with initiative, make rapid decisions/recommendations, and exercise good judgment.

The Army should change its approach to training all-source fusion analysts because analysts often fail to provide commanders with an accurate understanding of complex environments. To correct this deficiency the Army should train analysts to do the following: understand their own biases, know how to assess populations as intrinsically complex, and convey the operational environment through holistic, all-source fusion analysis. This would allow analysts to understand people and groups are not inanimate objects; instead, they are people and groups with the ability to possess multiple identities which act without external input. This leaves the Army with the two possible solutions of creating a specialized class of analysts or "graying the force" as it pertains to training all-source fusion analysts. Specialization will create analysts who are capable of conducting holistic, all-source analysis for complex operations; however, "graying the force" will affect all types of analysts, not just analysts concerned with complex operations. "Graying the force" emerges as the best possible solution, although it is the most challenging to achieve because of the required training, funding, and resources required to create this type of analyst.

Synergy as it pertains to Army intelligence can be seen with the development of the national security complex. The national security complex allows for outsourcing to private contractors in all aspects of government which spans interrogators, military trainers, prison guards, intelligence agents, warfighters, intelligence analysts, and homeland security contractors. Private companies no longer simply provide arms, but they also offer their services on the war front to alleviate the burden on Army intelligence personnel and to allow Army intelligence professionals to focus on the demands of high-priority missions. The only drawback is that, as corporations extend their influence into Army intelligence, they pose a greater threat due to the ability to gather information which could undermine democratic governance.

Reach-back, fusion, and synergy are significant to the Army's military intelligence community. It should be noted several improvements can be made to make Army intelligence operations more efficient as addressed by the points of this white paper. If all aspects of reach-back, fusion, and synergy are used effectively, accurate and timely intelligence will be provided to commanders, a robust understanding of the common operating picture will be gained to conduct operations, and Army intelligence professionals will be able to focus on analysis without consideration of minor, less critical duties.

CPT (USA) Charles A. Harrison III is an Assistant Brigade S2 assigned to HHC, 1st Maneuver Enhancement Brigade, at Fort Polk, LA. Previous assignments relevant to the subject matter of his article have included UAV Platoon Leader, Assistant Battalion S3, and Battalion S2. In terms of civilian education he has earned an AAS degree in Avionic Systems Technology, a BS in Management, and an MA in Organizational Security Management. For questions or follow-up discussion the author can be contacted at charles.a.harrison.mil@mail.mil.

NMIA Bookshelf

THE RISE AND FALL OF INTELLIGENCE: AN INTERNATIONAL SECURITY HISTORY

Michael Warner.
Washington, DC, Georgetown University Press. 2014.
424 pages.

Reviewed by Dr. Edward M. Roche, of the Columbia Institute for Tele-Information, under the business school of Columbia University, from which he holds a PhD, and the Grenoble Ecole de Management. He is also a lawyer and the author of The Cyber Intelligence of Asyngnotic Networks and the Industrial Espionage section of *The Guide to the Study of Intelligence*, published by the Association of Former Intelligence Officers (AFIO).

If I had read this book earlier, I would have avoided much work. Rather than reading about intelligence from the perspective of dozens of writers with different stories to tell, I would have had the advantage of this integrated version covering the period long before World War I up to today. The author now works at the U.S. Cyber Command, but his real occupation and career have been as a historian working for the U.S. Army. Obviously, he has had access to much classified information but from an examination of the footnotes it is clear that he has spent his entire career reading, reading, and reading some more because the references are truly astounding. [Editor's Note: Before moving to USCYBERCOM, Dr. Warner was the inaugural historian of the Office of the Director of National Intelligence.]

"Spying dates to the dawn of civilization," writes the author referencing 3,200 BCE Sumerian cuneiform tablets. There are references to the Old Testament, Kautilya in India who wrote *Arthashastra*, and Sun Tzu in China who wrote *The Art of War*. Both "articulated an understanding of the craft of espionage." In 1467 Leon Battista Alberti invented the polyalphabetic cipher disk, which still was used in the U.S. Civil War. In the Age of Enlightenment, nation-states had started to organize their secret activities. The "first military information bureaus were usually in charge of map-making." By the 1870s, "typewriters, index cards, and file cabinets" were in use. It was 1880 when Herman Hollerith created the punch card and started what would become IBM. "By 1900, the outlines of an international surveillance system had taken place." The late 1800s also witnessed "spy mania" in England where a Decyphering Branch was set up in 1844. Espionage was being transformed into professional intelligence, complete with institutions and bureaucracies. Meanwhile, U.S. capabilities remained "small and crude."

In the age of revolution, starting around 1914, nation-states would develop "sustained and dedicated technological collection," analysis, and integration of analytical products and operations. The author covers the role of intelligence in the First World War, including the Battle of Jutland, "the greatest clash of big-gun ships in history," but driven by signals intelligence. Codebooks were rescued from sunken German submarines. Stakes were driven into the ground to intercept telegraph signals of the enemy in the deadly trenches. Reconnaissance by balloons, later airplanes, using cameras led to the art of photo-interpretation. The interception of the Zimmerman Telegram led to the U.S. entering the war. Only in 1917 did the U.S. make espionage a federal crime.

Technologies such as the Typex (UK), the Enigma (Switzerland), and the U.S.-produced SIGABA and M-209 made machine coding a standard part of military operations. Herbert Yardley in the U.S. Army MI8 group broke the Japanese codes, and this changed the ratio of ships agreed to in the 1922 Washington Naval Conference. At the same time, Felix Dzerzhinsky in Russia started the Cheka, which later became the KGB and is now the FSB.

The Second World War is described in great detail. Science became "forever … an element of all aspects of the intelligence field." Intelligence was a crucial aspect of the war, and it gave rise to an "extended Anglo-American security empire." Codebreaking, the atomic bomb, intelligence for strategic bombing, the massive use of secret agents for resistance, radar, spying and sabotage, finding the V-1 and V-2 rockets—all of these and more led to the Allied victory. "A truly multinational intelligence instrument had been forged by the exigencies of war," the author observes.

The U.S. was in first place in technological intelligence, but the Soviet Union was superior in human intelligence. The Cold War witnessed the uncovering of a massive spy network in the United States, but the FBI with the help of decrypted Venona transcripts rooted it out. The UK/U.S. agreement on signals intelligence created an enduring Cold War intelligence alliance. The Soviet Union remained difficult to penetrate, but new technologies such as the U-2 high-altitude plane and then satellites unlocked the mystery of the "missile gap" and were crucial in management of the Cuban crisis. The Soviets continued to excel in industrial espionage. "By the early 1970s the United States had become the undisputed world intelligence leader … but its lead was a shaky one."

This book covers every conflict in the Cold War including revolutions in the developing world, war in the Middle East, and the provision of Stinger missiles to Afghanistan and Angola. This leads to the computer age of intelligence, and the security advantages and vulnerabilities it would bring. Here the U.S. had the technological advantage, and the Soviet Union dissolved. "The 1990s began with the Anglo-American intelligence superpower seemingly supreme." The NSA started investing in supercomputers. In 1990 the Pentagon gave up governance of the Internet but created its own internal system, the Interlink. The world went online, and the Internet became a new and massive area for intelligence collection. Nevertheless, the intelligence superpower started to become vulnerable because terrorists and others could use the same tools to penetrate networks, steal information, and conduct sabotage. The new cyber world was one in which "societies themselves were now vulnerable to digital attacks."

Apart from the specifics of intelligence and its use primarily in war, this book has an overall thesis. Intelligence, once the purview of kings and statesmen, now has become commonplace and can be used by anyone. Apart from nation-states, there are "so many intelligence actors" including corporations, criminal enterprises, terrorist groups, and even individuals. Advancing technology can transform an intelligence superpower into a vulnerable Gulliver. The genie has leaked out of the bottle. Intelligence has become a commodity.

This book is not a quick read. It is best to take the time and go slowly, perhaps with a bottle of aged cognac. Major events are summed up in single sentences, but any reader can follow up on a detail by using the adequately supplied references. One should think this book will become required reading for all military and intelligence classes as well as international relations graduate programs around the world. It already is a classic.

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IRAN'S REVOLUTIONARY GUARD: THE THREAT THAT GROWS WHILE AMERICA SLEEPS

Steven O'Hern.
Dulles, VA, Potomac Books, Inc. 2012.
271 pages.

Reviewed by COL (USA) William Phillips, former Chief of Contingency Plans at USSOUTHCOM. He holds three defense-related degrees: Master of Defense Studies from the Royal Military College of Canada; Master of National Security and Strategic Studies from the U.S. Naval War College at Newport, RI; and Master of Military Art and Science from the U.S. Army's School of Advanced Military Studies at Fort Leavenworth, KS. A former RAND Military Fellow and Army War College Fellow, COL Phillips is currently a part-time student at National Intelligence University, pursuing a Master of Science of Strategic Intelligence degree.

Given the varying positions of U.S. government agencies, departments, and institutions regarding the threat Iran poses to U.S. foreign interests, Mr. Steven O'Hern's literary work provides an independent assessment of the global Iranian threat, especially to the Americas. In his book, ***Iran's Revolutionary Guard***, O'Hern writes from the premise that the Iranian Revolutionary Guard Corps (IRGC), the protector of the Islamic Revolution, is at work around the world—active in Iraq, Lebanon, Afghanistan, Africa, Europe, and Latin America. The author's research allows him to assert that, even though U.S. authorities have for decades recognized the IRGC and Hezbollah threat in the Americas, to include the so-called "Tri-Border Area" between Paraguay, Argentina, and Brazil, it has done little to counter it. According to him, inaction by the U.S. government has allowed the IRGC and Hezbollah time to posture themselves to bring the fight to the doorsteps of America and its institutions and facilities—government buildings, stateside military installations, and electrical grids. O'Hern believes that, given the history of the IRGC and the U.S. response to date, conflict with the IRGC is seemingly inevitable—and more likely than avoiding conflict. Nevertheless, he also believes and insists that by acting now the United States can still prevail against the Iranian threat that is crouching at the threshold of America!

In ten chapters O'Hern methodically makes a solid case establishing the existence of a credible Iranian threat to U.S. interests internationally, including in the Americas. He sounds the alarm regarding the threat to the United States and the need for U.S. government action to counter the threat. By grouping the chapters, the book can be assessed through the lens of four broad focus areas. First, the author describes the early formation and allegiance of the IRGC and Hezbollah. Next, he discusses how the threat organizations are funded and supported. Then, the nuclear weapon, Iran's ultimate prize, is discussed. Finally, he outlines evidence of Hezbollah's pattern of infiltration in areas of interest which enables the group to build capacity and a capability to strike within Latin America and the United States. Yet, without leaving the reader with a sense of helpless inevitability, O'Hern is careful to offer a list of actions or steps the U.S. government can implement to counter and prevail against the Iranian-sponsored IRGC and Hezbollah threats.

Early Formation and Allegiance of the IRGC and Hezbollah

According to O'Hern, like a son of destiny the Iranian Revolutionary Guard Corps was born to provide support to the 1979 Iranian Revolution which overthrew Mohammad Reza Pahlavi, the Shah of Iran. During the Revolution, Ayatollah Khomeini used the Revolutionary Guard concept, an armed revolutionary force, to recruit young radical men with military experience in fighting who opposed the leadership of the Shah. Later, after Khomeini rose to power in Iran, a decree was issued to constitutionally establish the IRGC to support the actions of the clerics and protect the Islamic Revolution. The IRGC morphed into an armed and trained 30,000-member national military force. O'Hern's research prompts him to assert that the modern-day IRGC is not only involved in controlling Iran's border, and its leaders, but also oversees military and government functions including the country's nuclear weapons program.

Hezbollah, the second threat, was initially formed in 1982 as resistance fighters who opposed the Israeli invasion of Lebanon. Within two years, the IRGC and radical clerics allied within Iran teamed up to form a new group. Eventually, radical members of Amal and the Da'wa Party transformed the group forming Hezbollah. Prior to the September 11, 2001, attacks by al-Qaeda, Hezbollah was charged with killing more Americans abroad.

Hezbollah and IRGC Funding and Support

O'Hern suggests that criminal activity, along with a network of foreign operatives and smuggling routes, is one of Hezbollah's and the IRGC's primary sources of funding. He suggests that this nexus between transnational organized crime and smuggling routes is very evident in Latin America. The author insists that drugs, extortion, economic trade, alliances with anti-American despots, the making and selling of counterfeit goods, and smuggling (including human trafficking and the illegal arms trade) are mainstays of the IRGC strategy for Latin America. Additionally, Hezbollah and the IRGC benefit from extortion and credit card fraud. O'Hern's research findings suggest that the actions of Hezbollah and IRGC in the Western Hemisphere may be part of a larger strategy to build a base of support in the backyard of the United States. He further believes that the networks and resources the Revolutionary Guard and Hezbollah have placed in Latin America enhance their ability to mount attacks there and against U.S. interests.

From a support perspective, O'Hern confirms that Hezbollah receives financial support from multiple sources, including from Lebanese-American businessmen in the United States and other countries. Additionally, Iran, Hezbollah, and the IRGC are supported by the anti-U.S. leaders of Venezuela, Bolivia, Paraguay, and Nicaragua. According to O'Hern, Hezbollah and the IRGC have penetrated Latin America's Tri-Border Area between Paraguay, Argentina, and Brazil. According to the author, Hezbollah has a strong presence in the town of Puerto Iguazu, Argentina, which is also a well-known location for smugglers, counterfeiters of U.S. currency and consumer goods, tax cheaters, and terrorists.

Like one sounding a trumpet signaling the proximity of an adversary, O'Hern warns that the IRGC and Hezbollah have surreptitiously established an infrastructure of support among their South American allies. The income and support from national leaders sympathetic to their cause, and those who simply oppose the United States, enable the IRGC and Hezbollah to generate income and establish a base for operations against the U.S. homeland and interests in Latin America.

Hezbollah and the IRGC Inside the United States and Pattern of Infiltration

In the book, O'Hern establishes the position that Iranian proxies are currently operating within the United States. He addresses Hezbollah in particular. His research findings enable him to identify the group's pattern of infiltration.

O'Hern believes that for over 20 years Hezbollah and the IRGC have been establishing their capability to strike targets in the Americas and within the United States. This position is supported by reports and testimony from former FBI agents and other individuals. One featured FBI report underscores Hezbollah's active recruitment inside the United States and the fact that its members have gained access to explosives and firearms and have received tactical training. Another FBI report attests to a criminal activities trend that includes insurance fraud, credit card fraud, narcotics trafficking, and counterfeiting. The book also includes testimony from a third former FBI agent stating that Hezbollah is highly organized, disciplined, trained, and capable of conducting terrorist actions inside the United States and against U.S. interests on several fronts and on several continents. Yet, in an effort not to cause readers to draw a partisan conclusion from a few reports, O'Hern further asserts that other agents are not so dogmatic about the IRGC's and Hezbollah's operational capabilities.

In addition, by highlighting Hezbollah's pattern of infiltration, O'Hern offers readers a valuable glimpse into the organization's pattern of infiltration. He explains that Hezbollah first moves into an area that has a Lebanese community. Then the group establishes communications lines followed by the development of financing and support, defining dual roles for criminal and other activities. Finally, surveillance and mobility networks are established.

Iran's Ultimate Prize – Nuclear Weapons

In Chapter 8, "Nukes: The Ultimate Weapon," O'Hern makes it clear to readers that the IRGC is most trusted by the Iranian regime leadership. He insists the IRGC is not only in charge of Iran's national missile force but also controls the country's nuclear weapons program. In this chapter, O'Hern builds a case for the existence of a nuclear weapons program and outlines the U.S. government's and the international community's efforts to slow and stop Iran's nuclear weapons ambitions. Additionally, O'Hern is pragmatic in describing Iran's rationale for nuclear weapons—they enable deterrence against U.S. military actions against Iran; give it power, prestige, and influence; and allow Iranian self-sufficiency. Nevertheless, O'Hern outlines decades of denial and deception by the Iranian government regarding the existence of the program. His research reveals that intelligence received from the MEK and National Council of Resistance of Iran corroborated the existence of Iran's nuclear program and reactor sites. Importantly, in addition to highlighting the importance of the IRGC to Iran's nuclear program, O'Hern states, "We don't know for certain the intentions of the IRGC and the Iranian regime leadership. But the Revolutionary Guard is prepared to bring the fight to our doorsteps, to our government buildings and stateside military installations and to our electrical grid" (p. 184).

Actions to Counter and Prevail Against the Iranian-Sponsored IRGC and Hezbollah Threats

Finally, after establishing a credible case for readers to acknowledge the threat that the IRGC and Hezbollah pose to U.S. interests in the Americas and the United States, O'Hern does not end his analysis with gloom and doom—a sense of inevitable terrorist strikes and war; instead, he challenges U.S. policymakers to act to thwart terrorist aggression. In the final chapter of the book titled "The United States Can Prevail – But Only If It Wakes Up," O'Hern offers a multiple-step solution for countering and prevailing against the IRGC and Hezbollah threats.

O'Hern believes that the United States can prevail by implementing eight steps. First, explain the threat to Americans; U.S. government leaders must recognize the threat posed by the IRGC and Hezbollah. Second, counter the IRGC's and Hezbollah's influence in South America—take offensive action by attacking the IRGC's buildup in South America by reinvigorating and restating the Monroe Doctrine as it applies to the operations of the IRGC and Hezbollah. Third, adopt a zero tolerance stance on Hezbollah's activities inside the United States. Fourth, uphold sanctions aimed at preventing Iran from making nuclear weapons; in the long term, sanctions add to the regime's internal pressures and Iranian receptivity to opposition to the regime. Fifth, continue to support the Iraqi government; U.S. continued support may encourage Iraqi clerics to oppose the IRGC and the Iranian mullahs. Sixth, sort out friends and enemies—exercise caution in picking allies and expatriate supporters. Seventh, do not support or be distracted by the MEK; although the organization opposes many policies and actions of the Iranian government, it is still labeled a terrorist group by the U.S. government. Eight, consider the merits of an Iranian regime change; although retaliation by the IRGC and Hezbollah is certain, a U.S. military-supported regime change should remain an executable option. Lastly, establish deterrence with decisive action. Although the U.S. government has failed to act decisively during the past thirty years, the country must prepare itself for targeted military action; when directed, the U.S. government must act decisively on multiple fronts to retaliate against Iran and its proxies.

In summary, despite O'Hern's meticulousness in building a formidable case for the existence of IRGC and Hezbollah threats to U.S. interests abroad, including in the Americas, the proposed steps to address the threat have shortcomings. Although the author presents a list of eight steps or actions that the United States can pursue, decisive military action against Iran's proxies—IRGC and Hezbollah—stands out as being possibly the last best option. This is especially true given the fact that seven of the eight steps or actions are already being implemented in some form and level by the U.S. government.

Additionally, in the book, O'Hern seems to allude to a U.S. unilateral approach rather than a robust multilateral whole of government approach to countering the Iranian- sponsored IRGC and Hezbollah threat. While it is understood that the aim of the book is to shed light on the threat posed by the IRGC and Hezbollah and highlight offensive inaction by the United States, it may be helpful to U.S. government decision-makers to offer more analysis on solutions directed at the true sources of the Iranian threat—the government, senior clerics, and the Supreme Leader.

Although O'Hern does a masterful job highlighting the IRGC's and Hezbollah's international influence, especially in Latin America, there is a gap in identifying viable options for U.S. engagement and operations within the sovereign boundaries of countries in Latin America. Identifying multilateral engagement opportunities to combat the IRGC and Hezbollah threat in Latin America, especially the Tri-Border Area, would be helpful to U.S. military and interagency strategists and planners as well as partner nations in the region.

Nevertheless, O'Hern's literary work is a must read for those inspiring to understand Iran's global influence through the IRGC and Hezbollah. His book is an easy read that not only provides lessons in history but also projects the future.

While exploring the contents of the book, some may be surprised and appalled to know that actual terrorist organizations are thriving in strategic locations near our doorstep in Latin America, supported by a network that reaches to and across the United States. In the book ***Iran's Revolutionary Guard: The Threat that Grows while America Sleeps,*** Steven O'Hern, the sentinel, sounds the alarm regarding the threat Iran and its proxies—the IRGC and Hezbollah—pose to the United States.

[Editor's Note: Obviously, both the book and the review were written before the so-called "peace deal" was negotiated between Iranian and Western nations. It remains to be seen how all that ultimately pans out.]

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EXTORTING PEACE: ROMANIA AND THE END OF THE COLD WAR, 1978-1989, VOL. 2

Larry L. Watts.
Bucharest, Editura RAO. 2013.
765 pages.

WITH FRIENDS LIKE THESE: THE SOCIET BLOC'S CLANDESTINE WAR AGAINST ROMANIA, VOL. 1

Larry L. Watts.
Bucharest, Editura Militara. 2010.
733 pages.

Reviewed by LTC (USAR, Ret) Christopher E. Bailey, a faculty member at the National Intelligence University specializing in national security law, processes, intelligence ethics, and strategy. He is a 2008 graduate of NIU's Denial & Deception Advanced Studies Program and the U.S. Army War College. He is licensed to practice law in California and the District of Columbia, and is a member of the National Security Law section, American Bar Association.

Larry Watts has authored the second in a series of three "must have" volumes for national security professionals, especially for practitioners with an interest in Eastern Europe since World War II. His initial volume, *With Friends Like These: The Soviet Bloc's Clandestine War Against Romania* (2010), covering the period 1878-1978, examined Romania's historic relations with its neighbors; its strategic position as a member of the Warsaw Pact, to include its relations with Moscow and other erstwhile allies; the motivations behind its independent foreign policy position in defiance of Moscow during the Cold War; and the responses by Moscow and its partners in their relations with Bucharest. His recently published second volume, *Extorting Peace: Romania and the End of the Cold War, 1978-1989,* extends the study of Moscow's clandestine war against Romania, while the third and yet to be published volume will cover Romania's December 1989 revolution and its entry into Europe after 1989. The first two volumes, both extremely well-researched using former Warsaw Pact and U.S. government archives, offer meticulous analysis regarding Romania's strategic situation, how the United States saw (or often misapprehended) Romania's position in the former Warsaw Pact, and how the Soviet Union conducted denial and deception activities against the West about what was really going on in Bucharest. Indeed, the first two volumes make liberal use of many recently declassified documents. We will not likely see the third volume until 2016.

Mr. Watts is uniquely qualified to discuss Romanian security issues both during and after the Cold War. He is an associate professor at the National School for Political Studies and Public Administration in Bucharest. During 2011-13 he was a visiting professor for Security Studies and Intelligence Analysis in a master's degree program run jointly by the University of Bucharest and the Romanian Intelligence Service (SRI). Most notably, he served as an advisor to General Ioan Talpeº, a former director of the Romanian foreign intelligence services and national security advisor to President Ion Iliescu. Talpeº penned the foreword to the first volume. Watts also served as a security sector reform advisor to Romania's Defense Oversight Committee; Presidential Counselor for National Security, Defense Ministry; to the Foreign Intelligence Service (SIE); and with the Police General Inspectorate during the period 1991-2009. This work earned him awards for promoting military reform and North Atlantic Treaty Organization (NATO) integration, implementing democratic oversight, promoting ethnic reconciliation, and fostering Romanian-American relations. He served concurrently as a senior consultant and Bucharest office director for the Princeton-based Project on Ethnic Relations from 1991 to 1997, engaging in mediation efforts throughout the former Warsaw Pact. His earlier publications include a 1993 biography of Romania's controversial World War II leader Marshal Ion Antonescu and a 1998 work titled *Incompatible Allies: Neorealism and Small State Alliance Behavior in Wartime*, which examines German relations with its Romanian, Hungarian, and Finnish allies during World War II.[1] In 2003 Watts made a model contribution to Romanian security through *NATO: Partners and Players in Central and Eastern European Security*, a multi-authored work edited by Charles Krupnick of the U.S. Army War College.[2]

In both *With Friends Like These* and *Extorting Peace*, Mr. Watts challenges the prevailing conventional views on Romanian foreign policy and security during the Cold War.

He argues that Bucharest pursued an independent foreign policy, often challenging Moscow's claim to leadership in the Warsaw Pact. For example, he examines the 1980 Warsaw Pact statute designed to provide for Soviet wartime command and control over its East European allies; he shows how Bucharest opposed Soviet leadership and sought greater national autonomy over its armed forces. Bucharest even encouraged the other Bloc members to act more independently as well, albeit with marginal success (except for Czechoslovakia during the mid-1960s). Watts further argues that, in response to Romanian actions, the Soviet Union conducted a *maskirovka* (i.e., imitation, camouflage, or disinformation) campaign in an effort to convince Western observers that Moscow had, in fact, orchestrated the entire range of Romanian actions. He takes the readers on a Romanian journey through the Cold War, offering important information for intelligence practitioners about the impact of mindsets upon prevailing views, how Western intelligence analysts grappled with difficult problems in interpreting the evidence, and how the Soviet Union worked through its allies to mislead the West.

The first two volumes provide detailed—if not brilliant—analysis for intelligence practitioners with an interest in denial and deception issues, to include how adversary efforts can impact both intelligence collection and analysis. According to Mark Lowenthal, former Vice Chairman of the National Intelligence Council, a targeted nation (here, the Soviet Union) can use knowledge about foreign intelligence capabilities to avoid collection (denial) or it can use the same knowledge to transmit false information to a collector (deception).[3] In fact, deception can occur by either increasing or decreasing ambiguity for the adversary. On one hand, the "ambiguity increasing" variant is designed to create general confusion and to distract an adversary through blanket noise that makes it more difficult for collectors and analysts to discern the true story. On the other hand, the "ambiguity decreasing" variant is designed to mislead an enemy into believing a specific story. One good example of this would be the Allied effort in World War II to convince German leader Adolf Hitler that the Allies would invade France at Pas de Calais instead of Normandy.

Here, with regard to Romania during the late Cold War, the Soviet Union likely employed both deception variants, taking advantage of the overall strategic situation in Southeastern Europe. Indeed, Moscow was motivated to act in the face of Romanian defiance. First, in 1947-48, the rather overt Soviet response to Yugoslavia's split from the Communist Bloc quickly gained Belgrade massive financial and military assistance from the West. This meant that an assertion of independence on the part of Romanian leader Nicolae Ceau'escu would be plausible to Western observers, and equally troubling to Soviet leaders. Second, the Soviet Union had been confronted with earlier popular uprisings in East Germany (1953), Hungary (1956), and Poland (1956). Thus, any acknowledgment of Romanian independence could only have rekindled earlier feelings against Soviet rule. Third, the Soviet Union had withdrawn its ground forces from Romania in 1958. From this move, combined with Western focus on the remaining large Soviet forces deployed in East Germany, Hungary, and Poland, Western observers could infer that Romanian foreign policy was under Moscow's control (a mindset commonly held by many during the Cold War). By all appearances, for many Western observers who could not possibly have known about many mid-level intra-Warsaw Pact machinations, Romania remained a committed member of the Warsaw Pact. In fact, Moscow was able to use its loyal ally in Budapest to fan hard-to-verify concerns about the human rights abuses against ethnic Hungarians living in Romania. Hence, Soviet leaders had important reasons, both in terms of Warsaw Pact and Western audiences, for obscuring the motives behind Romanian foreign policy moves. Romania presented the Soviet Union with a complex foreign policy/security problem and Moscow's deception story was likely worked out over time with adaptation as the circumstances required.

For the purposes of intelligence collection and analysis, an adversary's use of denial and deception practices can greatly complicate matters—especially if that adversary is an experienced practitioner. Here, the Soviet Union, with longstanding experience in deception dating back to the Tsars, held many advantages, while the Western nations, with increasing reliance on technical collection systems during the late Cold War, were at a disadvantage. From the Soviet perspective, Romania was still an ally, albeit not necessarily a reliable one, and much of the "evidence" about Romanian views could be kept from public view or explained away. For example, without a well-placed human source the Western intelligence agencies could not know what was actually said during high-level Warsaw Pact or bilateral Soviet-Hungarian meetings, much less be able to investigate claims about alleged abuses against ethnic Hungarians. Indeed, given the U.S. interest in human rights issues beginning in the late 1970s, the Soviet Union and its allies could paint Bucharest in an unfavorable light. From the U.S. perspective, the USSR was the main adversary in Central Europe; the United States and its NATO allies were focused on the threat of a Soviet invasion through the Fulda Gap, plus the threat posed by Soviet mobile SS-20 ballistic missiles that could be aimed at Western Europe. This was also a threat well- suited to the technical collection capabilities of Western intelligence agencies. The United States and its allies could probably count tanks, armored vehicles, and ballistic missiles using imagery satellites, and also likely intercept communications to/from such units. In short, without a Soviet threat aimed at Central Europe *from* Romania, there simply was not the same level of interest in that country as compared to East Germany or Poland.

Intelligence officers face complex analytical problems when confronted with adversarial denial and deception activities. Scott Hatch, writing for the Central Intelligence Agency's journal, offers a useful taxonomy of intelligence failure.[4] Hatch posits that intelligence officers face cognitive, organizational, and policy environmental challenges; Watts illustrates each of these types of challenge in his analysis of Romanian security policy vis-à-vis the Soviet Union during the late Cold War. The Western cognitive challenges included problems with analyst mindsets and biases, the complexity of change processes in Eastern Europe during the Soviet period, the lack of Western human sources with placement and access who could collect against discrete targets, and problems differentiating between signals and noise. Western organizational challenges included problems with group mindsets about the nature of the Soviet threat, the emphasis on technical collection systems focused on the Soviet Union, and the unwillingness to collect in high-risk situations. Western policy environmental challenges included consumer mindsets and needs (e.g., human rights concerns and the need to address priority issues involving the Soviet Union at the expense of long-term systemic issues with its allies). Here, Watts argues that U.S. Presidents Lyndon Johnson, Richard Nixon, Gerald Ford, and Jimmy Carter often preferred to dismiss intelligence assessments to engage in their own discussions with senior Romanian officials. Nonetheless, while intelligence officers are typically trained to use rigorous analytical methods and guard against deception, it can be difficult to prevent intelligence failure in the face of such broad challenges.

As intelligence officers pull together a wide range of sources—some ambiguous, some conflicting, and some incomplete—it can be difficult to assess the true state of affairs from several plausible explanations, much less see that the real story is the one not on the table (e.g., Sherlock Holmes' point about spotting the curious dog that is not barking). How does the intelligence officer identify that null hypothesis and then ascertain the evidence that must be collected to confirm/deny its existence? Intelligence officers must question the reliability and weight of the evidence, to include an examination of its diagnostic value (the extent to which evidence supports/negates one hypothesis to the exclusion of alternatives); assess the adversary's deception motives, opportunities, and means; evaluate one's own vulnerabilities; and consider any past opposition (here, Soviet) practices. In short, did Western intelligence officers miss the true state of affairs in Bucharest during the late Cold War? If so, what brought about that intelligence failure?

The author provides the reader with a *tour de force* regarding Romania's struggle for national autonomy against both the Soviet Union and its irredentist neighbor Hungary. This is a well-researched, well-written book that deserves the attention of serious scholars. The book certainly offers a much-nuanced view of Romanian dictator Nicolae Ceau'escu arguing that, following his predecessor, he established Romania as a more or less responsible international actor, even while leading the country down the road to economic ruin in the 1980s. Nonetheless, many will still argue whether Bucharest truly sought to make the Warsaw Pact more democratic and consultative in its processes, and over the extent to which the Soviet Union conducted a *maskirovka* campaign against the West. I believe that Watts has provided well-supported and persuasive analysis, amply arguing his case regarding Bucharest's campaign for democratizing the alliance as a means of encumbering Soviet militarism and increasing its own autonomy.

[Editor's Note: A shorter, more critical review of Mr. Watts' first book discussed above, by Dr. Joseph L. Gordon of NIU, appeared in *AIJ*, Vol. 29, No. 2, 2011. Mr. Bailey feels that the record needs to be set straight. This book review would probably have fit better in the next issue of *AIJ*, which will focus on the theme "Denial and Deception." However, I did not want to hold it up any longer and Mr. Bailey will review another book for that issue. Readers should consider the review above a foretaste of more D&D delights to come.]

Notes

[1]Larry L. Watts, *Romanian Cassandra* (East European Monographs, 1993); Larry L. Watts, *Incompatible Allies: Neorealism and Small State Alliance Behavior in Wartime* (Umea, Sweden: University of Umea, 1998).

[2] Charles Krupnick et al., *NATO: Partners and Players in Central and Eastern European Security* (Lanham, MD: Rowman & Littlefield, 2003).

[3] Mark Lowenthal, *Intelligence: From Secrets to Policy*, 5th ed. (Washington, DC: SAGE, 2012), 82.

[4] Scott Hatch, "Managing the 'Reliability Cycle': An Alternative Approach to Thinking About Intelligence Failure," *Studies in Intelligence* 57, no. 2 (June 2013): 29-37.

HISTORICAL DICTIONARY OF SIGNALS INTELLIGENCE

Nigel West.
Lanham, MD, Scarecrow Press. 2012.
338 pages.

Reviewed by Col (USAF, Ret) Michael Grebb, who works for the Office of the Director of National Intelligence. He had several Air Force intelligence assignments at overseas bases, NSA, DIA, and the Office of the Secretary of Defense where he was the Deputy Director for Signals Intelligence. Mike is a longtime member of the NMIA board of directors.

The *Historical Dictionary of Signals Intelligence* is a readable and useful reference document. As the author points out, the sensitive nature of the discipline has resulted in relatively few books published about signals intelligence (p. 275), or SIGINT, its familiar U.S. military acronym. The book is primarily a list of defined terms such as "one-time pad" (pp. 164-165) [a cipher technique], "Code Talkers" (pp. 60-61) [American Navajo and other native American soldiers in World Wars I and II who used their native languages to communicate securely], and project names such as "RIVET JOINT" (p. 190) [a USAF aircraft used for SIGINT operations]. Codename projects and jargon are well covered: e.g., "COBRA MIST" (a U.S. Air force over-the-horizon radar in England) and "Chicksands Priory," an English location that has figured in British and American signals intelligence history.[1] The book has a timeline from Alexander Graham Bell's London telephone exchange in 1878 to the Syrian opposition using Internet social media to evade regime security in 2012. The book's introduction will be helpful to readers who may want to gain perspective on SIGINT. The book has appendices with interesting historical documents such as the "British-U.S. Communications Intelligence Augment," March 5, 1946 (pp. 271-274).

The terms described in the book include a variety of intelligence subjects. Many national and historic terms are defined. Examples include the "National Security Agency" [NSA] (pp. 157-160) [the U.S. Intelligence Community Signals Intelligence Organization], the "Polish Cipher Bureau" (pp. 173-174) [the World War II organization that helped the Allies decipher German codes], and the Government Communications Headquarters (pp. 109-112) ["The principal British cryptographic organization..."]. Historic SIGINT terms are clearly explained: "ULTRA: The generic codename…to replace BONIFACE for signals-intelligence summaries from cryptographic work on German Enigma and Geheimschreiber communications..." (p. 219), and "Horchdienst: The Luftwaffe's [World War II] principal signal-intelligence organization" (p. 123). Historical events such as the Vietnam War and the VENONA disclosures are also covered. VENONA deserves special mention since the book provides good detail and an appendix about the declassified intercepts of former Soviet intelligence organizations.

As part of this review, I looked for U.S. signals intelligence terms. I found the historic NSA cryptologic military components: Naval Security Group (NSG), Army Security Agency (ASA), and "Air Force Security Service," more properly the USAF Security Service (USAFSS). "Arlington Hall," an important Arlington, VA, location in U.S. Army signals intelligence history, was included. However, the Central Security Service (CSS) was not defined in the book. NSA's website states, "The CSS was established by presidential directive in 1972 to promote full partnership between NSA and the Service Cryptologic Components of the U.S. Armed Forces… The Director of NSA is dual-hatted as the Chief of CSS."[2] The new U.S. Cabinet-level Director of National Intelligence (DNI) is not described. The DNI's role was established in 2004 by U.S. law.[3] The U.S. Joint Chiefs of Staff publishes joint doctrine with defined terms. The reviewer feels national definitions of signals intelligence would have interested readers. For example, the U.S. Joint Chiefs of Staff Joint Publication 2-0, *Joint Intelligence*, defines "signals intelligence" as "1. A category of intelligence comprising either individually or in combination all communications intelligence, electronic intelligence, and foreign instrumentation signals intelligence, however transmitted. 2. Intelligence derived from communications, electronic, and foreign instrumentation signals. Also called SIGINT."[4] Definitions of communications intelligence and electronic intelligence are included in the book, but are not from U.S. Joint Staff sources. The author's style does make the dictionary readable, and the reviewer understands that the dictionary is historical.

Notes

[1] Several of the author's former colleagues warned him of the legendary RAF Chicksands ghost when he was assigned to the U.S. Air Force Security Service.

[2] See nsa.gov website, https://www.nsa.gov/about/central_security_service/index.shtml.

[3] See dni.gov website, http://www.dni.gov/index.php/about/organization. The often-quoted Executive Order 12033 makes the Director of NSA the functional manager for signals intelligence under the DNI. See Executive Order 12333 changes, paragraph 1.3 (12), http://georgewbushwhitehouse.archives.gov/news/releases/2008/07/20080731-2.html. See also 108th Congress (December 17, 2004), "Intelligence Reform and Terrorism Prevention Act of 2004," U.S. Bill S. 2845.

[4] See DTIC website, http://www.dtic.mil/doctrine/new_pubs/jp2_0.pdf.