

Analyst, Thought Leader, Teacher Extraordinaire

By James Bruce

Life can only be understood backwards; but it must be lived forwards.

—Soren Kierkegaard , 1843

Jack Davis is a legend among intelligence analysts. Managing Editor Andy Vaart’s thoughtful remembrance in the June edition of *Studies in Intelligence* beautifully captured Jack’s most important contributions, many published by CIA’s Center for the Study of Intelligence, as an analyst, thought leader, and teacher of intelligence analysis. Jack’s academic writings, if fewer, have expanded on these important ideas.

Jack had a special gift for identifying key challenges that analysts face in the workplace. Many creep in stealthily and appear unexpectedly. Often, by the time we see them, it’s too late to correct for them. In his “Why Bad Things Happen to Good Analysts” below, Jack confronts the most important psychological hurdles that can trip up even the best analysts in their daily work—and often do. Here he explores perils in making analytic judgments and coordinating them, along with the more practical issue of dealing with the bureaucracies that analysts work in, and grappling with the insidious trap of policy bias. His remedies are found chiefly in “alternative” and “challenge” analysis, now readily available through rigorous use of structured analytic techniques.

This article first appeared in *Analyzing Intelligence*, the volume that Roger George and I co-edited in 2008. When we thoroughly revised the book for its second edition in 2014, of the dozen original chapters that we retained, Jack’s was the only one that needed no revision or updating. This was best explained by a reviewer who observed that Jack’s article was timeless.

Such contributions do not come easily. Jack demonstrated an uncommon capacity for professional growth. On the occasion of his being honored with the Lifetime Achievement Award in July 2014 by the International Association for Intelligence Education, he reflected on his 50-year experience as an analyst, acknowledging how hard it is to change:

It took some 20 years for me fully to appreciate and vigorously to promote the analytic benefits of structured analysis, especially the insurance provided against the hazards of judgments based solely on internalized critical thinking, unstructured peer debate, and subjective boss review.

Jack’s own training as an analyst didn’t come from the yet-to-be created Sherman Kent School of Intelligence Analysis in CIA, but rather on the job, enjoying both successes and “teaching moments” along the way, and later in the now-famous course he pioneered, “Intelligence Successes and Failures.” Much of what he learned and taught in that course became case studies to identify best and worst practices. Some of the most insightful of these cases are discussed in his article, which follows.

As a lucky alumnus of the first running of ISF, I benefitted greatly—as did hundreds of his students over the years—from learning two powerful insights Jack taught: First, to understand the intelligence problem “from the policymaker’s trench,” as he put it. And second, to know the potential sources of error in your analysis before you brief your customer or go to press. His intensive case study method of teaching brought these and many points home in convincing ways.

Next to the durable wisdom of Sherman Kent, perhaps Jack’s favorite quotation originates with the philosopher Kierkegaard cited in the epigraph above. Jack’s article reproduced here illustrates how we can better understand analysis by looking backwards, and how best to conduct it into the future.



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Why Bad Things Happen to Good Analysts

By Jack Davis

Intelligence analysis—the assessment of complex national security issues shrouded by gaps in authentic and diagnostic information—is essentially a mental and social process.

Intelligence analysis—the assessment of complex national security issues shrouded by gaps in authentic and diagnostic information—is essentially a mental and social process. As a result, strong psychological influences intrude on how analysts faced with substantive uncertainty reach estimative judgments, coordinate them with colleagues, satisfy organizational norms, and convey the judgments to policy officials. Effective management of the impact of cognitive biases and other psychological challenges to the analytic process is at least as important in ensuring the soundness of assessments on complex issues as the degree of substantive expertise invested in the effort.

An understanding of the psychological barriers to sound intelligence analysis helps answer the question of critics inside and outside the intelligence world: How could experienced analysts have screwed up so badly? Ironically, after the unfolding of events eliminates substantive uncertainty, critics also are psychologically programmed by the so-called hindsight bias to inflate how well they would have handled the analytic challenge under review and to understate the difficulties faced by analysts who had to work their way through ambiguous and otherwise inconclusive information.

An Introduction to Methodology and Definitions

This chapter benefits from numerous discussions the author has had with Richards Heuer about his groundbreaking book *Psychology of Intelligence Analysis*, which consolidates his studies during the 1960s and 1970s on the impact of the findings of cognitive psychology on the analytic process.¹ The chapter also takes into account recent reports on what Central Intelligence Agency analysts did wrong and how they should transform themselves.²

The chapter's insights are essentially consistent with the authorities cited above. However, they were independently shaped by my half century of experience at CIA as practitioner, manager, and teacher of intelligence analysis—and from hallway and classroom discussions with CIA colleagues with their own experiences. Informal case studies presented by analysts in the Seminar on Intelligence Successes and Failures—a course the author ran for CIA from 1983 to 1992—were particularly valuable.³ Discussions of intelligence challenges on an early 1980s electronic discussion database called Friends of Analysis also were informative.

“Bad things” are defined for this chapter's purpose as well-publicized intelligence failures, as well as major errors in analytic judgments generally. As a rule, little is made publicly of the failure of analysts to anticipate favorable developments for US inter-

ests, such as the collapse of the East German regime and reunification of Germany, or Slobodan Milošević's caving in to NATO after more than two months of bombings. But the pathology of misjudgment is much the same as with harmful "surprise" developments, and because the hindsight bias is again at play, sharp criticism from intelligence and policy leaders often ensues.

"Good analysts" are defined as those well-credentialed practitioners of intelligence analysis who have earned seats at the drafting table for assessments on war and peace and the other issues vital to national security—a prerequisite for turning instances of estimative misjudgment into an intelligence failure.

Take, for example, the senior political analyst on Iran who said in August 1978, five months before revolutionary ferment drove the pro-US shah from power, that Iran was "not in a revolutionary or even a 'pre-revolutionary' situation." The analyst had worked on the Iran account for more than twenty years, visited the country several times, read and spoke Farsi, and kept in general contact with the handful of recognized US academic specialists on Iran in the 1970s. More than once in the years before 1979, I had heard CIA leaders wish they had more analysts matching the profile of the senior Iran analyst.⁴

Key Perils of Analysis

This chapter examines the psychological obstacles to sound estimative judgments that good analysts face in four key stages of the analytic process:

When one is dealing with national security issues clouded by complexity, secrecy, and substantive uncertainty, the psychological challenges to sound analysis must also be better understood and better managed.

- When analysts *make judgments* amid substantive uncertainty and by definition must rely on fallible assumptions and inconclusive evidence
- When analysts *coordinate judgments* with other analysts and with managers who are ready to defend their own subjective judgments and bureaucratic agendas
- When analysts, in their efforts to manage substantive uncertainty, *confront organizational norms* that at times are unclear regarding the relative importance of lucid writing and sound analysis
- When analysts whose ethic calls for substantive judgments uncolored by an administration's foreign and domestic political agendas seek to *assist clients* professionally mandated to advance those agendas

To be sure, the countless post-mortem examinations of intelligence failures conclude that better collection, broader substantive expertise, and more rigorous evaluation of evidence would have made a difference. However, if good analysts are most often held responsible for intelligence failures, then such improvements would be necessary but not sufficient conditions for sounder analytic performance. When one is dealing with national security issues clouded by complexity, secrecy, and substantive uncertainty, the psychological challenges to sound analysis must also be better understood and better managed.

The emphasis should be placed on substantive uncertainty, inconclusive information, and estimative judgment. To paraphrase a point made recently by former CIA director Michael Hayden: When the facts speak for themselves, intelligence has done its job and there is no need for analysis.⁵ It is when the available facts leave major gaps in understanding that analysts are most useful but also face psychological as well as substantive challenges. And especially on such vital issues as countering terrorism and proliferation of weapons of mass destruction (WMDs), US adversaries make every effort to deny analysts the facts they most want to know, especially by exercising tight operational security and by disseminating deceptive information. In short, it is in the crafting of analytic judgments amid substantive uncertainty where most perils to intelligence analysts exist.

Assigning Blame

One does not become an apologist for intelligence analysts if one proposes that an experience-based "scorecard" for analytic failure should generally place the blame on those most responsible for not managing psychological and other obstacles to sound analysis:

- If regularly practiced analytic tradecraft (that is, "methodology") would have produced a sound estimative judgment but was not employed—blame the analysts.

These cognitive biases cluster into the most commonly identified villain in postmortem assessments of intelligence failure: mind-set.

- If analytic tradecraft was available that would have produced a sound judgment but was not regularly practiced because of competing bureaucratic priorities—blame the managers.
- If analytic tradecraft was available that would have produced a sound judgment but was not employed for political reasons—blame the leaders.
- If no available tradecraft would have produced a sound judgment—blame history.

Psychological Perils at the Work Station

To paraphrase Mark Twain's observation about the weather, everyone talks about the peril of cognitive biases, but no one ever does anything about it. No amount of forewarning about the confirmation bias (belief preservation), the rationality bias (mirror imaging), and other powerful but perilous shortcuts for processing inconclusive evidence that flow from the hardwiring of the brain can prevent even veteran analysts from succumbing to analytic errors. One observer likened cognitive biases to optical illusions; even when an image is so labeled, the observer still sees the illusion.⁶

In an explanation of why bad things happen to good analysts, cognitive biases—which are essentially unmotivated (that is, psychologically based) distortions in information processing—have to be distinguished from motivated biases (distortions

in information processing driven by worldview, ideology, or political preference). These cognitive biases cluster into the most commonly identified villain in postmortem assessments of intelligence failure: mind-set. More rigorous analysis of alternatives as an effective counter to cognitive biases is discussed later in the chapter. Though there is no way of slaying this dragon, analysts can learn ways to live with it at reduced peril.

“Mind-set” can be defined as the analyst's mental model or paradigm of how government and group processes usually operate in country “X” or on issue “Y.” In the intelligence world, a mind-set usually represents “substantive expertise” and is akin to the academic concept of mastery of “normal theory”—judgments based on accumulated knowledge of past precedents, key players, and decisionmaking processes. Such expertise is sought after and prized.⁷ The strategic plans of CIA's Directorate of Intelligence [since June 2015 called the Directorate of Analysis] invariably call for greater commitment of resources to in-depth research and more frequent tours of duty abroad for analysts—which amounts to building an expert's mind-set.⁸

True, a mind-set by definition biases the way the veteran analyst processes increments of inconclusive information. But analytic processing gets done, and thanks to a well-honed mind-set, current and long-term assessments get written despite time and space constraints. In between analytic failures, the overconfidence inherent in relying on mind-set for

overriding substantive uncertainty is encouraged, or at least accepted, by analysts' managers. And because most of the time precedents and other elements of normal theory prevail—that is, events are moving generally in one direction and continue to do so—the expert's mental model regularly produces satisfactory judgments. More than one observer of CIA analytic processes and the pressures to make judgments amid incomplete information and substantive uncertainty has concluded that mind-set is “indispensable.” That is to say, an open mind is as dysfunctional as an empty mind.⁹

All analysts can fall prey to the perils of cognitive biases. A case can be made that the greater the individual and collective expertise on an issue, the greater the vulnerability to misjudging indicators of developments that depart from the experts' sense of precedent or rational behavior. In brief, substantive experts have more to unlearn before accepting an exceptional condition or event as part of a development that could undermine their considerable investment in the dominant paradigm or mind-set. This phenomenon is often described as the “paradox of expertise.” Experts are often biased to expect continuity and are hobbled by their own expert mind-sets to discount the likelihood of discontinuity.

To start, the so-called confirmation bias represents the inherent human mental condition of analysts to see more vividly information that supports their mind-set and to discount the significance (that is, the diagnostic weight) of information that contradicts what they judge the forces at work are likely to produce.¹⁰ “Analysis by anecdote” is no substi-

tute for systematic surveys or controlled experiments regarding analyst behavior. But consider this example from one of CIA's most bureaucratically embarrassing intelligence failures: the assessment informing Secretary of State Henry Kissinger on October 6, 1973, that war between Israel and Egypt and Syria was unlikely—hours after he had learned from other sources that the Yom Kippur War was under way.

CIA analysts were aware of force mobilizations by both Egypt and Syria, but they saw the military activity across from Israeli-held lines as either training exercises or defensive moves against a feared Israeli attack. To simplify the analysts' mental model: Shrewd authoritarian leaders such as Egypt's Anwar Sadat and Syria's Hafez al-Assad did not start wars they knew they would lose badly and threaten their hold on power. In particular, before launching an attack Egypt was assumed to need several years to rebuild its air force, which Israel had all but destroyed in the 1967 Six-Day War. And besides, the Israelis who were closest to the scene did not think war was likely until Egypt rebuilt its air force.

As it happened, in a masterly deception campaign it was the Sadat government that had reinforced the argument bought by both US and Israeli intelligence that Egypt could not go to war until it had rebuilt its air force. All along, Sadat had planned to use Soviet-supplied surface-to-air missiles to counter Israeli battlefield air superiority.¹¹

What follows is an anecdotal depiction of the power of the confirmation bias. A decade after the event, the supervisor of Arab-Israeli military

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analysts gave his explanation of the intelligence failure: "My analysts in 1973 were alert to the possibility of war, but we decided not to panic until we saw 'X.' When 'X' happened, we decided not to sound the alarm until we saw 'Y.' When we saw 'Y,' we said let's not get ahead of the Israelis until we see 'Z.' By the time we saw 'Z,' the war was under way."¹²

The paradox of expertise explains why the more analysts are invested in a well-developed mind-set that helps them assess and anticipate normal developments, the more difficult it is for them to accept still-inconclusive evidence of what they believe to be unlikely and exceptional developments. This is illustrated by two additional anecdotes about the Yom Kippur War.

The chairman of the Warning Committee of the Intelligence Community was concerned about the prospect of war and was ready, in two successive weeks, to sound an alarm in his report to intelligence community leaders on worldwide dangers. Twice he gathered CIA's Middle East experts to his office to express his alarm, only to bow to their judgment that war was unlikely. After all, he explained, he covered developments all over the world and only recently was reading with any detail into the Middle East situation. They were the experts long focused on this one issue.¹³ Similarly a top-level official later reported that after surveying traffic selected for him by the CIA Watch Office, he smelled gun smoke

in the air. But when he read the seemingly confident assessment of the responsible analysts to the effect that war was unlikely, he decided, to his regret, to send the report on to Kissinger.¹⁴

The paradox of expertise is also demonstrated through the many remembrances of the those who worked on the September 1962 national estimate on the Soviet military buildup in Cuba, the unpublished 1978 estimate on prospects for the shah of Iran, and the high-level briefings given in 1989 on why the fall of the Berlin Wall was not yet likely. In the latter, less well-known case, a senior analyst who "got it wrong" made a frank observation: "There was among analysts a nearly perfect correlation between the depth of their expertise and the time it took to see that what was happening on the streets of Eastern Europe (e.g., collapse of government controls) and what was not happening (e.g., Soviet intervention)." These signs could not trump the logic of the strongly held belief that the issue of German unification was "not yet on the table."¹⁵ On November 9, 1989, while CIA experts on Soviet and East German politics were briefing President George H. W. Bush on why the Berlin Wall was not likely to come down any time soon, a National Security Council staff member politely entered the Oval Office and urged the president to turn on his television set—to see both East and West Germans battering away at the wall.¹⁶

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The rationality or coherence bias, also known as “mirror imaging,” is another cognitive challenge that helps explain why seasoned analysts can be blindsided by epochal events. Obviously, analysts must understand the *modus operandi* of the leaders and factions of the countries and nonstate entities that are key to US national security interests, especially regarding adversaries. A great deal of effort is spent on obtaining effective insight into, for example, the intentions, risk calculations, sense of opportunity, and internal constraints of foreign leaders and groups. The effort usually includes tracking speeches and foreign media, reading biographies and histories, parsing human intelligence (HUMINT) reporting, debriefing people with direct experiences meeting such world leaders, and brainstorming with colleagues.

With justification, then, veteran intelligence analysts bridle at charges of “mirror imaging” and of using US values and experience to anticipate actions of foreign leaders and entities. Many of the analysts, for example, who tried to assess the intentions of Soviet leader Nikita Khrushchev in the run-up to the 1962 Cuban Missile Crisis were accomplished Kremlinologists who had spent years trying to capture the operational codes of behavior exhibited by Khrushchev and other Soviet leaders.¹⁷

These efforts are usually good enough. But the analysts’ psychological drive for coherence often causes them to fill in any gaps in understanding with what they, as American-trained rationalists, think would make sense to the foreign leader or

group under assessment. The effect that alternative, egocentric, self-declining, and self-destructive forms of rationality have on what is usually associated with exceptional events or paradigm shifts only becomes clear to analysts after the failure of collective expert mind-set.

CIA analysts, for example, eventually learned that Khrushchev in 1962 thought he faced less risk to his hold on power by ignoring US warnings against placing nuclear weapons in Cuba than he would by rejecting his military’s demands that the huge US nuclear advantage be reduced by a crash military production program (that might have destabilized the Soviet economy) or by some other costly means.¹⁸ Similarly, CIA’s Middle East analysts eventually learned that Egypt’s Sadat in 1973 was convinced he would lose power if he did not risk war with Israel in hopes of restarting negotiations to regain the Egyptian Sinai lost in 1967.¹⁹ And as CIA analysts learned to their regret, Iraq’s Saddam Hussein’s deliberate ambiguity regarding possession of WMDs in 2002 reflected a seemingly distorted risk calculation in which his fear of Iranian knowledge that he did not have such weapons outweighed US judgments that he did.²⁰

To summarize workstation challenges, when normal circumstances prevail, the hardwired cognitive pathways known as cognitive biases provide formidable benefits to good analysts, and their investment in the development, recognition, and defense of established patterns of behavior underwrites timely and useful support to policy clients. These

cognitive biases become psychological obstacles for dealing with the relatively infrequent emergence of exceptional or unprecedented, unexpected, or even unimagined developments. And there is no known theory, practice, or methodological tool for infallible determination of whether a normal or exceptional course of events lies ahead.²¹

Perils of Review and Coordination

On intelligence problems and other complex issues, no matter how accomplished the principal researcher, subsequent review by a well-functioning team of diversified experts generally adds substantially to the soundness of an assessment. And as a rule, even CIA’s often labyrinthine review processes increase the overall quality of assessments, especially by improving poorly argued drafts. That said, psychological phenomena similar to those already discussed—but this time reflecting the interpersonal dimension of intelligence cadres—can and do cause bad things to happen to good analysts. These phenomena include groupthink, boss think, tribal think, and no think.

Groupthink is a phenomenon on which critics of the analytic performance of the intelligence community have leaned heavily as a psychological explanation of flawed assessments. As originally defined, it depicts the dynamic of a cloistered and like-minded small group that highly values consensus and reinforces collective confidence in what can turn out to be a flawed set of assumptions and conclusions.²² Such groups exist in the intelligence analysis world. But in my direct and indirect experiences with analytic failures, the process

most often involved a large number of analysts from diverse bureaucratic offices—many with a penchant for argument, some under orders from their bosses to “fix” the final text so that it conforms to office or agency interests. For example, Sherman Kent, the renowned chief of estimates at the time, observed that at least a thousand intelligence professionals (probably no more than a score of whom he knew personally) contributed directly or indirectly to the flawed 1962 community judgment that the USSR would not install nuclear weapons in Cuba.²³ Thus the malfunction of analytic groups most often lies in other maladies, such as boss think, tribal think, and no think.

Boss think is not a criticism of the dwindling cadre of CIA gray-haired senior analysts and supervisors who have saved many a junior analyst from flawed assumptions or other analytic errors on an assigned issue. Rather, it occurs when the more senior practitioners who have worked complex substantive issues the longest often act as if they “own” the paradigm through which inconclusive evidence is assessed. Thus boss think can combine with the paradox of expertise at times in causing delayed recognition of a paradigm shift or a mind-set that was built on oversimplified key assumptions. For example, some decades ago, when I was national intelligence officer for Latin America, I delayed the publication of a junior analyst’s assessment because it contradicted my view of the country. As it happened, events soon proved me wrong, and luckily the assessment was published in time for CIA to garner praise for being on top of the issue.

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Tribal think, as well, is not a criticism of the necessary division of responsibility for substantive issues among many analysts within and beyond an analyst’s organizational unit. The process of “coordination” allows analysts with different substantive responsibilities and experiences to critique and, as a rule, improve and enrich draft assessments. However, when an analyst tries to deviate from the prevailing paradigm, colleagues heavily invested psychologically in different parts of the issue can be quick to prevent what they see as misinterpretations of events and reports.

One example of tribal think came several months *before* the battering of the Berlin Wall. A CIA analyst circulated a draft assessment that argued that the well-known obstacles to German reunification were no longer strong enough to keep the issue of reunification “off the table.” This was a bold and prescient departure from CIA’s prevailing expert opinion. His well-informed and well-intentioned colleagues each asked for “small changes” to avoid an overstatement of the case here and a misinterpretation of the case there. After the coordination process had finished its watering down of the original conclusions by the mending of “small errors,” a senior reviewer delivered the coup de grâce by all but eliminating the innovative argument from the paper’s key judgments. A reader of the final version of the paper would have to delve deeply into the text to uncover the paradigm-breaking analysis.²⁴

In another case, in 1983, eight years before the Soviet Union collapsed, an analyst invested in extensive research and an innovative methodology to conclude that strikes, riots, and other forms of civil unrest were a harbinger of substantial instability. A host of Soviet experts within CIA strongly resisted this departure from the established position that there was no serious threat to regime stability. The original text was watered down considerably during nearly six months of debate. Even after incorporating numerous changes to accommodate the mind-set of the expert critics in CIA, they refused to be associated with even the watered-down assessment, which was then published by the National Intelligence Council without the formal concurrence of the CIA analysts.²⁵

No think, as a psychological barrier to sound analysis, is the analysts’ conscious or unmotivated resistance to changing an “agreed-on” assumption or estimative judgment that took hours, if not days, of overcoming tribal think to reach. Even if newly obtained information poses a challenge to prevailing opinions, it can be difficult psychologically for the leading analysts to revisit agreed-on language as long as the body of available information remains ambiguous, contradictory, and otherwise inconclusive. The cost of changing the mind-set of one obstinate analyst, much less that of a group of like-minded experts, can be quite high. Rather than calling the consensus view into question, some analysts might prefer not to focus attention on nonconforming information.

Technically specialized experts, considered science and technology analysts, who work on a single aspect of a WMD issue can be especially vulnerable to a combination of boss think, tribal think, and no think. Once the senior regional analysts or the well-respected national intelligence officers set the broad analytic framework regarding an adversary's intentions, then the science and technology specialists set about assessing the available information. They are probably predisposed to put more weight on the evidence that supports the assumptions set out by the generalists rather than any disconfirming evidence that would require rethinking or rewriting.

This tendency was singled out for criticism in the several postmortem examinations of the flawed 2002 national intelligence estimate on Iraqi WMDs. In an interview, one of the CIA's weapon analysts acknowledged accepting as "given" the principal analysts' judgment that the Saddam regime harbored such weapons and sifting through the evidence critically but with the expectation that the case for a particular suspected weapon system was there to be made.²⁶

In sum, great deference to the authority of the principal analysts on complex and uncertain issues and their psychological drive to preserve mind-set-driven judgments work well in producing reasonably sound assessments under normal circumstances. But the practice is vulnerable to missing exceptional, at times momentous, developments. Perhaps there is an analogy between analysis driven by mind-set and nuclear power plants. Both are great for ensuring production—in between meltdowns.

Obstacles in the Organizational Culture

As in any large organization, especially one lacking the discipline of a money-based market, CIA's norms on what constitutes distinctive value-added analysis to policymakers have not always been made clear. One key to why bad things happen to good analysts has been conflicting organizational signals regarding promotion of overconfidence ("making the call") versus promotion of more rigorous consideration of alternative hypotheses and the quality of information, and thus more guarded judgments for dealing with substantial uncertainty.

Whatever the formal norms regarding the quality of analysis, the operational norms over past decades usually have prized the volume of production over sound tradecraft. Emphasis on volume (as well as on speed and conciseness) of production in turn has placed a premium on analytic overconfidence. Put in other terms, informal norms have tended to trivialize the complexity and uncertainty of many national security issues by encouraging analysts to depict and defend a single interpretation of complex events or a single forecast of unknowable future developments.

In part this institutional overconfidence reflected the aforementioned organizational acceptance of "assessment via mind-set"—the experienced analysts' view of how things usually work. In part it reflected an unacknowledged conflation of lucid writing and sound analysis. An assessment that read well was given credit, deserved or not, for having analyzed events, trends, and prospects effectively. So the "gold standard" for

analysis as found in analyst training, as well as in the evaluation of published product, was often assessments with catchy titles and strong topic sentences that "make the call" and marshal compelling albeit selective reporting that supports that judgment.

This forceful and confident-sounding communication style has worked well enough for reporting current "normal" events affecting US interests. It often sufficed when the continuity of trends allowed the experts' mind-set to provide informed linear interpretations and projections of events. At other times, however, an understating of the complexity and fluidity of political dynamics in countries of concern to US interests led to woefully inelegant judgments. Twice in my years as an analyst I won recognition by timely prediction of military coups against regimes policymakers considered a threat to US interests. Unfortunately, my subsequent predictions of when the military would turn power over to duly elected civilian governments were off, in one case by twelve years and in another case by more than twenty.

As a result of unprecedented criticism of analytic performance over the past decade, leaders of CIA analysis are working assiduously and with promising initial results to change the operational norms to emphasize quality of analysis over quantity of production. As former CIA director Michael Hayden has indicated, analysts have to distinguish between the issues on which they can use a laser beam (aimed at the right answer) and the issues on which drawing the sidelines within which policymakers will have to operate would be more suitable.²⁷

Policy Bias: The Elephant in the Room

As other contributors to this volume—notably John McLaughlin and James Steinberg—have pointed out, tensions between intelligence analysts and policymakers are inevitable. Though they point out that many factors are at play, the greatest tensions arise essentially from conflicting professional ethics and objectives. Analysts, as a rule, are charged with assessing events abroad without conscious biasing of conclusions to either support or oppose an administration's foreign policy and domestic political agendas. As a rule, policy officials feel obliged to connect and advance these agendas in any way they can. In most cases analyst–policymaker tensions prompt both sides to enhance the utility of their contributions to the national interest. But these tensions can contribute to the perception as well as the commission of flawed analytic judgments.

As noted elsewhere in this volume, analysts have to get close enough to policymaking processes to know where clients are on their learning curves and decision cycles, if their substantive expertise and tradecraft are to have an impact on decisionmaking. That means getting close enough to be exposed to, and at times seduced by, the politics of decisionmaking. Policy officials at times challenge the first cut of analysts' judgment and, among other things, ask them to take another look at the evidence, rethink the judgment, or change the question. As Steinberg makes clear in chapter 6, at times policymakers' criticism is levied because of professional concerns about the quality and utility of the analysis. At times, however, the

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policymaker's goal is political—that is, to use intelligence as leverage against competing policy colleagues or to ensure congressional and public support of departmental or administration initiatives.

Up to a point analysts should prefer to be challenged rather than ignored by their clients. Historically, however, analysts and managers at times have resorted to politicization in response to criticism by deliberately distorting a judgment to support, or even oppose, presidential policies.²⁸

What is of greater concern for this chapter is the influence of unmotivated (psychologically based) biases in the evaluation of evidence and the calibration of judgments. Whether acknowledged or not, there is often “an elephant in the room” when analysts and their managers know what kind of policy support officials would prefer from their intelligence counterparts. In preparing the 1962 Intelligence Community assessment on Soviet military intentions in Cuba, for example, the drafters knew that President John F. Kennedy would welcome conclusions discounting the threat and allowing him to improve relations with the USSR so that he could run for reelection in 1964 as the “peace candidate.” In preparing the Iraqi WMD estimate some forty years later, the drafters knew that President George W. Bush wanted strong emphasis on the threat that lent support to his decision to invade Iraq.

Analysts in these and similar circumstances admit to the presence of policy pressures but tend to deny that the pressures have an effect on their judgments. Yet there is evidence

in postmortem reports and academic studies that analysts, in making judgments amid uncertainty at a subconscious level, often are influenced by knowledge of the policy preference of either or both the administration and Congress.²⁹ My own experiences as a producer and observer of analysis on politically sensitive issues would indicate that. Knowledge of what a president or his congressional opposition wants can subtly influence the analytic process, and this accommodation in evaluating incomplete and ambiguous information in part can explain estimative malfunctions by experienced analysts.³⁰

Coping Mechanisms: The Rigor of Alternative Analysis

My earlier reference to the similarity in benefits and risks between nuclear power plants and analysis by mind-set applies as well to the solutions. Redundant safeguards are funded to reduce the threat of power plant meltdowns. Similarly, redundant safeguards are needed to reduce the threat of analytic meltdowns caused by the limitation of the mental faculties of even the brightest of analysts. To ensure against error in established analytic judgments, CIA is vigorously promoting alternative analysis formats, including forms of challenge analysis (for example, Devil's Advocacy) and structured analysis (such as Analysis of Competing Hypotheses). In a complementary effort, CIA is promoting more rigorous analysis of alternatives in first reaching judgments on complex and fluid issues—that is, the systematic generation and critical review of alternative hypothe-

Challenge analysis serves well even if the exercise only motivates analysts to reassess their previous line of argumentation before deciding to retain their original judgments

ses, as outlined in chapter 9 by James Bruce on epistemology.³¹

Think of the estimative misjudgments touched upon earlier in this chapter. The requirement for deliberate assessment of a range of plausible explanations of events and projections of developments might have shown gaps and contradictions in the assumptions supporting the prevailing mind-set and a need for rigorous scrutiny of the authenticity and “diagnosticity” of available information. As a rule, the more important the intelligence issue and the greater the uncertainty and information gaps, the greater need for incorporating alternative explanations and projections into the text of an assessment. Even a “high-confidence” judgment implies enough doubt for the properly skeptical analyst to develop a list of tipping points and signposts for one or more “wild card” developments.

Perhaps the most important contribution managers can make when their analysts present a draft assessment based on a paradigm of an issue the managers were proud to have developed in past years is to ask:

- (1) What new evidence would make you change your key assumptions?
- (2) Why not review all the evidence through the optic of those altered assumptions?
- (3) Why not consider

the costs and benefits of including that alternative argument in your assessment?

Externally structured analysis—such as the Analysis of Competing Hypotheses, Argument Mapping, and Signpost Analysis—might have overcome the barriers to sound analysis set up by boss think, tribal think, and no think, as well as by the elephant in the room. As a former practitioner of “analysis by mind-set,” I bridle at the accusation that my judgments were “intuitive” or not backed by serious thinking. Much deliberative but internalized structuring took place before, during, and after the initial drafting, including via the coordination and review processes. But neither I nor my colleagues could take effective account of hidden and contradictory assumptions and of the overweighting and underweighting of individual reports that supported a hypothesis. If I had committed to external structuring, my sleep these days might be less disturbed by recall of my personal collection of poorly argued or overconfident intelligence judgments.

Challenge analysis—such as Devil’s Advocacy, “What If?” Analysis, and High-Impact/Low-Probability Analysis—might have provided analysts and managers with an additional measure of insurance on issues they

“couldn’t afford to get wrong.” Challenge analysis usually is undertaken after the analysts in charge of an issue have reached a strong consensus and are in danger of becoming complacent with their interpretative and forecasting judgments. It is essentially “argument for argument’s sake”—that is, a rigorous evaluation of the evidence, including gaps in evidence, from a plausible if seemingly unlikely set of alternative assumptions. As a rule, the primary target audience for challenge analysis is not the policymaker but the analytic community. The primary objective is to test hypotheses and refine judgments or confidence levels and not necessarily abandon judgments.

Challenge analysis serves well even if the exercise only motivates analysts to reassess their previous line of argumentation before deciding to retain their original judgments—as is usually the case. Challenge analysis provides a distinctive service—as is sometimes the case—when it prompts the responsible analysts to alter collection requirements, analytic methodology, or levels of confidence in existing views. In the end, some combination of the often creative insights of analysis by expert opinion (that is, mind-set) and the insurance against cognitive biases provided by more rigorous and structured consideration of alternatives will best serve the reputation of the community of intelligence analysts, the professional needs of policy clients, and the national interest.



Notes

1. Richards J. Heuer Jr., *Psychology of Intelligence Analysis* (Washington, DC: Center for the Study of Intelligence, CIA, 1999). Also available at <http://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/psychology-of-intelligence-analysis/index.html>
2. For example, see Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, *Report to the President of the United States, March 31, 2005* (Washington, DC: Government Printing Office, 2005) (hereafter, *WMD Commission Report*); Rob Johnston, *Analytic Culture in the U.S. Intelligence Community: An Ethnographic Study* (Washington, DC: Center for the Study of Intelligence, CIA, 2005), also available at <http://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/analytic-culture-in-the-u-s-intelligence-community/index.html> ; and Jeffrey Cooper, *Curing Analytic Pathologies: Pathways to Improved Intelligence Analysis* (Washington, DC: CIA, 2005), also available at <http://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/curing-analytic-pathologies-pathways-to-improved-intelligence-analysis-1/>.
3. CIA director William J. Casey (1981–87), who had a low opinion of CIA analysts and averred that at least they should learn from their own mistakes, reportedly requested this course. This story was recounted to the author by an agency training official in 1983.
4. The quoted judgment is cited by Gary Sick, at the time the Iran specialist on the National Security Council staff, in his book *All Fall Down: America's Tragic Encounter with Iran* (New York: Random House, 1978), 92. Columbia University professor Robert Jervis, in his unpublished “Analysis of NFAC’s Performance on Iran’s Domestic Crisis, Mid-1977” (November 7, 1978), comments that “the leading political analyst . . . seems to have had as good a general feel for the country as can be expected” (p. 8); released under the Freedom of Information Act in 1995 as CIA-RDP86B00269R00110011003-425X1.
5. Office of Public Affairs Press Release, CIA, November 30, 2006, www.cia.gov/cia/public_affairs/press_release/2006/pr11302006.html.
6. For a discussion of the impact of these and other cognitive biases on intelligence analysis, see Heuer, *Psychology of Intelligence Analysis*, 111–72.
7. Jack Davis, “Combating Mind-Set,” *Studies in Intelligence* 36, no. 5 (1992): 33–38; also available at <http://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/unclass1992.pdf>.
8. See John A. Kringen (director of intelligence), “How We Have Improved Intelligence,” *Washington Post*, April 3, 2006.
9. Davis, “Combating Mind-Set,” 33.
10. Heuer, *Psychology of Intelligence Analysis*, 111.
11. Richard K. Betts, *Surprise Attack: Lessons for Defense Planning* (Brookings Institution Press, 1982), 71, and Chaim Herzog, *The War of Atonement: October 1973* (Little, Brown, 1975), 24–25.
12. Interview with CIA supervisor, 1984.
13. Interview with senior warning officer, 1987.
14. Interview with assistant to former CIA official, 2006.
15. Case study presented in a CIA seminar on intelligence successes and failures by a senior CIA briefer, 1990.
16. Ibid.
17. Sherman Kent, “A Crucial Estimate Relived,” in *Sherman Kent and the Board of National Estimates: Collected Essays*, ed. Donald P. Steury (Washington, DC: CIA, 1994), 183–84; also available at <http://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/sherman-kent-and-the-board-of-national-estimates-collected-essays/toc.html>.
18. Fritz Ermarth, reviews of *Essence of Decision: Explaining the Cuban Missile Crisis* by Graham T. Allison and *Victims of Group Think* by Irving L. Janus, in *Studies in Intelligence* 18, no. 1 (Spring 1974): 104 (hereafter, Ermarth, “Book Reviews”), available at <http://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol18no1/pdf/v18i1a05p.pdf>; and Max Frankel, *High Noon in the Cold War: Kennedy, Khrushchev, and the Cuban Missile Crisis* (Ballantine, 2004), 8–10.
19. Herzog, *War of Atonement*, 23. The Insight Team of the London *Sunday Times*, *The Yom Kippur War* (Doubleday, 1974), chap. 3.
20. See the Iraq Survey Group, *Comprehensive Report of the Special Advisor to the DCI on Iraq’s WMD, 30 September 2004* (CIA, 2004), vol. 1, 4–6.
21. Richard Betts, “Warning Dilemmas: Normal Theory vs. Exceptional Theory,” *Orbis* (Winter 1981): 38–46, makes a similar point about academic assessments of foreign policy issues.
22. Ermarth, “Book Reviews,” 105–6. I am indebted to Fritz Ermarth for “boss think” and other terms used in this section, although my interpretations may differ from his views.
23. Kent, “Crucial Estimate,” 175.
24. Presentation to a CIA seminar on intelligence successes and failures by the CIA office director responsible for analysis of East Germany, 1990; interview with the office senior analyst, 2007.
25. Interview with the principal analyst, 2007. A redacted version of the assessment was declassified and cited as an example of CIA’s successful analytic tracking of the pending collapse of the Soviet Union. See Douglas J. MacEachin, *CIA Assessments of the Soviet Union: The Record versus the Charges—An Intelligence Memorandum* (Washington, DC: CIA, 1996), 18; also available as a product of the Center for the Study of Intelligence at <http://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/cia-assessments-of-the-soviet-union-the-record-versus-the-charges/foreword.html>. The 1983 assessment was *Dimensions*

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- of *Civil Unrest in the Soviet Union*, NIC Memorandum 83-1006, April 1983; released in February 1994. It can be found at http://www.foia.cia.gov/sites/default/files/document_conversions/89801/DOC_0000273394.pdf
26. Author's interview with a CIA weapons analyst, 2005. The general point is made in *WMD Commission Report*, 169–71.
 27. Kringen, "How We Have Improved Analysis." See also "Opening Statement by Michael V. Hayden before the Senate Select Committee on Intelligence," May 18, 2006, 3, www.globalsecurity.org/intell/library/congress/2006_hr/060518-hayden.htm.
 28. Jack Davis, "Intelligence Analysts and Policymakers: Benefits and Dangers of Tensions in the Relationship," *Intelligence and National Security* 21, no. 6 (December 2006): 1008.
 29. For example, see Robert Jervis, "Reports, Politics, and Intelligence Failures: The Case of Iraq," *Journal of Strategic Studies* 29, no. 1 (February 2006): 36–38.
 30. Davis, "Intelligence Analysts and Policymakers," 1007–9.
 31. See also chap. 14 by Randolph H. Pherson and Richards J. Heuer Jr., as well as Roger Z. George, "Fixing the Problem of Analytical Mind-sets: Alternative Analysis," *International Journal of Intelligence and Counterintelligence* 17, no. 3 (Fall 2004): 385–404.

