Transforming Intelligence:
From What, to What?

by Dr. Mark M. Lowenthal

"Would you tell me, please, which way I ought to go from here?"[said Alice].
"That depends a good deal on where you want to get to," said the Cat.
"I don't much care where—-," said Alice.
"Then it doesn't matter which way you go," said the Cat.
"—so long as I get somewhere*," Alice added as an explanation.*
"Oh, you're sure to do that," said the Cat, "if you only walk enough."

　　　　　　— Lewis Carroll, *Alice in Wonderland*

If Jane Austen had been an intelligence analyst she might have begun *Pride and Prejudice* (a title apt for intelligence analysis): "It is a truth universally acknowledged, that an intelligence analyst in possession of a good idea, must be in want of a better means of doing his work."[1]

Many professions see themselves as overly prone to self-flagellation (with the possible exception of lawyers and bankers), but intelligence analysis has to be in the uppermost rungs of the ladder in this regard. Why? I think there are several reasons:

- We recognize the imperfection of what we do. Even though we say that we are not here simply to make calls on future events, that is what much of our work comes down to and we recognize just how difficult this is.
- We deeply love what we do; we see ourselves as a profession (not everyone would agree) and therefore we want to do better.
- Finally, despite the fact that much of what we do is intellectual in nature, we work in a milieu that is strikingly anti-intellectual.

THE ADVENT OF THE DNI: THE BEGINNING OF TRANSFORMATION

The history of intelligence transformation is relatively brief. We may date it from the advent of the Director of National Intelligence (DNI). Ambassador John Negroponte became the first DNI in April 2005. The act creating the DNI, the Intelligence Reform and Terrorism Prevention Act (IRTPA), is worth looking at in this regard. The act that established the U.S. Intelligence Community, the National Security Act of July 1947, was a barebones affair. It said little about the structure and role of the Intelligence Community and contained huge loopholes such as "perform such other functions and duties related to intelligence affecting the national security as the President or the national security may direct."[2] We know, of course, that this referred to operations, but the original act is striking for how little it said about analysis other than the correlation responsibilities of the CIA under the then-Director of Central Intelligence (DCI).

The IRTPA, on the other hand, goes on at great length and in great detail about analysis. It talks about the goals of information sharing, mandates a report on creating an "alternative analysis" function, and requires the identification of some individual who will be responsible for analytic objectivity. Interestingly, at its very outset, the IRTPA talks about the "Transformation of the CIA." Something had clearly happened between 1947 and 2004. Actually, we need not be coy. What had happened had occurred closer to the IRTPA, in 2001 and 2002: 9/11 and Iraq WMD. We tend to see 9/11 as the main driver of the IRTPA, coming as it did on the heels of the 9/11 Commission Report (more formally, the National Commission of Terrorist Attacks Upon the United States), one of the most archly political commission reports ever published. But the various requirements levied on intelligence analysis had very little to do with the findings (let alone the recommendations) of the 9/11 Report; they had everything to do with Iraq WMD and the National Intelligence Estimate (NIE) of October 2002. I have written elsewhere about the various erroneous legends that have grown up around the Iraq WMD NIE and will not

repeat these here.[3] There was clearly a view prevalent in the Congress that flaws in analysis could be fixed through legislation—as if the few points upon which they touched would, of necessity, result in analysis that was less flawed and therefore more likely correct.

The bulk of the Iraq WMD NIE was wrong—although not all of it—and there was a "never again" feeling about intelligence analysis prevalent in Congress and the press. It is also important to recall that in the summer of 2004 the Bush administration, which had been very supportive of the Intelligence Community up until then, had "fallen out of love" and believed, as did *The Wall Street Journal*, that the Intelligence Community was actively working to secure the election of Democratic nominee Senator John Kerry. The result was that the Intelligence Community had no political "top cover" as the IRTPA went through a greatly abbreviated legislative process.

The transformation theme began early under the new DNI. In October 2005, seven months into the job, Negroponte issued his *National Intelligence Strategy*, subtitled "Transformation through Integration and Innovation."[4] One of the mission objectives of the strategy (p. 3) was "[to] Transform our capabilities in order to stay ahead of evolving threats to the United States, exploiting risk while recognizing the impossibility of eliminating it." Later (p. 4), the strategy said, "Transformation of the Intelligence Community will be driven by the doctrinal principle of integration. Our transformation will be centered on a high-performing intelligence workforce that is:

- Results focused
- Collaborative
- Bold
- Future-oriented
- Self-evaluating
- Innovative."

Finally (p. 5), there was a list of ten Enterprise Objectives that would "transform our capabilities faster than threats emerge." There is little to argue about in the actual objectives but it is also difficult to see how they are "transformative." Many of them reflect longstanding and perhaps intractable issues.

BACK TO DEFINITIONS

Part of the problem may be definitional. What does "transform" mean? According to Merriam-Webster, "transform" means "(a) to change in composition or structure; (b) to change the outward form or appearance of; (c) to change in character or condition." One is struck, initially, at how inapt "transform" is when applied to what

people have talked about with regard to the Intelligence Community. A secondary reaction is that most people are probably talking about some form of the (c) definition "to change character or condition." But what we have gotten has been mostly (a) and (b), changing composition, structure, or the outward form of appearance.

But this leads to a more important question: How much of what the Intelligence Community does is truly susceptible to transformative change? I would argue that the answer is "Not much."

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As much as we all deride the intelligence process (which some erroneously call the "intelligence cycle," even though it is far from cyclical), the process is both sensible and it works. The main steps are and have been:

- Requirements: what do policymakers need to know?
- Collection: what intelligence must we gather to meet the requirement?
- Processing and Exploitation: transforming the collected intelligence into something that can be used by analysts.
- Analysis: what does it all mean?
- Dissemination: choosing the appropriate intelligence product or vehicle to get the right amount of intelligence to the various policymakers who need it, when they need it.
- Consumption: the policymaker taking in the intelligence.
- Feedback: that rare moment when policymakers tell you what they thought of what you gave them—for good or for ill.

One can certainly create any number of ways to define and prioritize requirements. The current system, the National Intelligence Priorities Framework (NIPF), was promulgated under President George W. Bush in 2003 and, quite surprisingly, survived into the Obama administration. The NIPF is not the only system imaginable, although it seems to have a certain durability at this point.

Collection is a question of access. We are always thinking of new ways to give us access to the secrets we need, just as our adversaries constantly seek new ways either to deny us that access or to deceive us. There have been technological breakthroughs that have been "transformative," such as imagery from space-based platforms, but it is highly likely that this is not what most people have meant when they talk about transformation. Processing and exploitation are technical means to plow through as much collected intelligence as possible. Again, breakthroughs have come and likely will come again, but these are not transformative.

This brings us to analysis, which is the central part of the process: creating intelligence products to put before policymakers. Can it be transformed? The problem here is in the nature of analysis. Analysis is an intellectual process – it is about (one hopes) knowledgeable people thinking through problems, coming up with plausible explanations, and writing it up clearly – both in the expository sense and in terms of any nuances, gaps, uncertainties, etc., that need to be emphasized.

Here, again, we have room to make some improvements. The Intelligence Community and many contractors who support them spend a great deal of time looking at new analytic methodologies to see if they are of use. This can, unfortunately, turn into an "ice cream parlor" exercise, as everyone gravitates to the tool that is the new "flavor of the month," whether or not it is applicable to their problem. And here also, we must note, the Intelligence Community still has not come up with a systematic means of testing tools with the people who matter—the analysts—and not the tool makers who invented the tools.

Analysts can be taught different ways to think about problems, about analytical traps, about dangerous mindsets. Indeed, this is necessary, but not transformative. Finally, analysts can and should be taught how to write—as so many analytical managers decry the steady decline of writing skills among people who have finished their college education. But these are all necessary skills, not transformative approaches.

ANALYTIC TRANSFORMATION

In September 2008, then-Deputy DNI for Analysis Thomas Fingar issued his paper, "Analytic Transformation: Unleashing the Potential of a Community of Analysts."[5] The paper listed twelve different initiatives, at least two of which—the NIPF and the Analytic Resources Catalog (ARC)—dated to pre-DNI days, having been put in place during the tenure of DCI George Tenet. There is no value to giving a detailed analysis and critique of each initiative, but it is worthwhile to see what areas they emphasized to get a better view of what the ODNI meant by analytic transformation.

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At the outset the report says the goal is to move toward greater collaboration, a word that had become chic in the Intelligence Community in the 1990s, another "flavor of the month," if you will. Many people had different definitions – information sharing, working in teams, etc. But there was also a sub-text here, to use a good analytic term. One of the guiding principles of U.S. intelligence analysis has been competitive analysis: different analysts in different agencies, with different backgrounds and skills all working on the same issue. The assumption was that in such an effort important differences as well as areas of agreement would come out and the subsequent analysis would not be "single-threaded" and would be more likely to come to accurate judgments. Competitive analysis obviously requires a fairly large analytic cadre if we are going to have many analysts across the Community all working on the same issues. But in the 1990s, the intelligence budget cratered as the Intelligence Community—and not the Defense Department—paid for the long awaited post-Cold War peace dividend. The net result was a severe loss of funds and positions. Tenet often said that the Intelligence Community lost the equivalent of 23,000 positions in the 1990s. Thus, competitive analysis became more difficult and was reserved for those highest-value issues, assuming there were sufficient analysts left to do it on a competitive basis. Elsewhere, the emphasis was now on "collaboration" – let's all share because there are fewer of us. It was intellectual triage. So, even before the DNI was created, the Intelligence Community was emphasizing collaboration—but it seemed to mean the antithesis of competitive analysis.[6]

By the time Fingar published his report, the Intelligence Community was awash in new analysts, and operators. The net result now was a decrease in overall expertise. As Fingar noted at the time, over half of the analysts across the Intelligence Community had less than three years experience.[7]

The twelve initiatives grouped into three areas: (1) more integrated analytic operations, which emphasized better means of sharing intelligence and finished work, as well as the now popular communities of interest; (2) better analytic management at the Community level, which included the

Tenet-era NIPF and the ARC, as well as a series of cross-agency activities; and (3) efforts to enhance the quality of analysis, including better tradecraft training, more analytic tools, greater outreach beyond the Community, and the promulgation of analytic standards. Again, few would argue with the goals of these three areas, but were they transformative? I think not – not because Fingar had made an error, but because the real issues did not call for transformation.

One of the issues that did reveal itself as Fingar unveiled his plans was a generational rift. The new analysts were overwhelmingly positive about the proposed innovations. Many of the older analysts, myself included, were skeptical. At a conference in Chicago in September 2007, this generational rift came out in public. Michael Wertheimer, who was then the Assistant DDNI for Analytic Transformation and Technology, laid out the case for transformation and explained how the various initiatives supported this goal. Toward the end of the conference, I asked the same questions I have posed here: what are we transforming, for what reasons, and how will we know if and when we have succeeded? Wertheimer, a superb intelligence officer, admitted that most of the results to date were anecdotal.[8]

My goal here is not to get the last word in this debate. Indeed, Tom Fingar, Mike Wertheimer, and I had many exchanges in the aftermath of the Chicago meeting and found that we had common ground on several goals, such as the need to provide better training for analysts, and to do so on a Community-wide basis. But the overall interest in "transformation" continues to hang like a chimera over the Intelligence Community.

WHERE ARE WE NOW, AND WHERE ARE WE GOING?

We are now two DNIs past the Analytic Transformation paper, in only three years, and some of these initiatives have fallen by the wayside, the inevitable fate of many government programs and ideas.

Despite the passage of time, we remain stuck emotionally and intellectually on the events of 9/11, the Iraq WMD estimate, and their legacy. There remains this strong belief that flaws in the overall analytic process are real, discoverable, and can be remedied either by executive fiat or by legislation. There is also an underlying belief that, with the right tools and the right intelligence and the right working methods, everything that we want to know can be known and that every attempted terrorist attack can be thwarted or disrupted long before it gets to the United States. These views were in evidence as recently as August 2009, during the confirmation hearings for Lieutenant General James Clapper (USAF, Ret) to be the fourth DNI. In an exchange with one of the members, General Clapper sought to disabuse the committee of the notion that intelligence could be right all of the time.[9] Still, the goal – or, rather, the wish – persists.

One of the more recent manifestations of this type of thinking can be seen in a report issued by the National Research Council (NRC).[10] This study was sponsored by the ODNI to see if there was "evidence" from the behavioral and social sciences "relevant to analytic methods and their potential application for the U.S. intelligence community." As could be expected, these two groups of scholars answered in the affirmative. Although the study group evidently reached out to many Intelligence Community veterans, and included one highly regarded former analyst/senior analytical manager among its members, the conclusions and recommendations still seemed odd to many intelligence analysts who read them.[11] Not surprisingly, the first recommendation is for the DNI to apply the "principles, evidentiary standards, and findings" of behavioral and social sciences to virtually all aspects of intelligence analysis. In other words, if you were more like us, it would go better. Second, the DNI should adopt "scientifically validated analytical methods and subject all methods to performance evaluation." Moreover, "Analyses *must* [emphasis added] include quantitative judgments of the probability and uncertainty of the events they forecast." Evidence-based methods should also be used for workforce recruitment and training. Collaboration should be subjected to "systematic empirical evaluations." Scientific, evidence-based protocols should be used to ensure that "analysts and customers understand one another."

We rarely have evidence, i.e., intelligence that is so irrefutable that it can lead to only one conclusion.

Should one weep, shout, or sigh? First, most of this has all been said before. Some of it has even been tried and found wanting. But the most glaring problem is the woeful misunderstanding of what it is that the Intelligence Community does.

- We rarely have evidence, i.e., intelligence that is so irrefutable that it can lead to only one conclusion.
- The amount of methodology in intelligence analysis that is provable is open to question. Very little in intelligence "closes," that is, comes to a conclusion. Intelligence analysis deals mostly with open-ended issues that may change

and alter but rarely conclude. The Soviet Union ends but then the future of Russia becomes an issue. Therefore, it becomes difficult to judge the efficacy of any given methodology as the issue remains open. You probably can make some judgments about different methodologies but these will be based on more limited and therefore more questionable examples.

- The issue of putting quantitative or probability judgments in intelligence analysis is an old one. Those of us who oppose the concept cite the following arguments:

  - First, it suggests a rigor and a precision that is probably false. Why is some event 70 percent certain as opposed to 65 percent? Or 72 percent? How does one make a firm call? It might be possible to create ranges, which would be better, but even these are arbitrary. For example, during the heyday of strategic arms control in the 1970s and 1980s, the Intelligence Community had ranges of confidence regarding its ability to monitor various treaty provisions. The original set was rather stark: High (90-100 percent); Moderate (50-90 percent); and Low (less than 50 percent). But the Carter administration did not like this hierarchy because the SALT II treaty that it was negotiating had too many provisions that fell into the Moderate or Low category. So, they ordered a revision of the confidence ranges. The result was High (90-100 percent); High Moderate (75-90 percent); Moderate (50-75 percent); Low Moderate (25-50 percent); and Low (less than 25 percent). This manipulation made the monitoring calls more politically palatable. It had no effect on Intelligence Community capabilities. "Lies, damned lies, and statistics," as Mark Twain noted.

  - Second, this approach totally fails to take into account the likely effect on a policymaker. If you tell a policymaker that a judgment has 70 percent certainty, he or she is taking that one to the bank. After all, 70 percent is high. What he or she fails to understand, and what those writing the judgment likely will not convey, is that there is also a 30 percent chance (or just under 1 in 3) that the judgment is wrong.

- Communicating certainty and uncertainty to policymakers remains difficult. In the aftermath of the Iraq WMD NIE, I asked then-NIO for Strategic Programs Robert Walpole to come up with a way to convey estimative judgments to policymakers. The result was the page *"What We Mean When We Say,"* that appears at the beginning of each NIE. The page takes the reader through the use of estimative language and confidence levels. These remain, admittedly, somewhat vague at points, but I think they are less dangerous than somewhat arbitrarily assigned numerical values. Of course, the key question is: do any policymakers ever read this page, even once?

- On the issue of workforce recruitment, the Intelligence Community has figured out how to match needs against applicants, although this became much more systematic after the creation of the ARC. But the Intelligence Community is at the mercy of whoever applies. If not enough Chinese linguists or bio-chemical engineers apply, there is nothing the Community can do about that. As for training, this is one area where the Intelligence Community can learn a lot from the military, especially from the Army. We can and should do better at making training throughout one's career an integral part of every employee's career plan. But to do that we would have to have (1) a better idea as to what analysts' careers look like over time; (2) a more systematic way of describing the skills expected at each level; and (3) courses that help analysts acquire and test those skills.

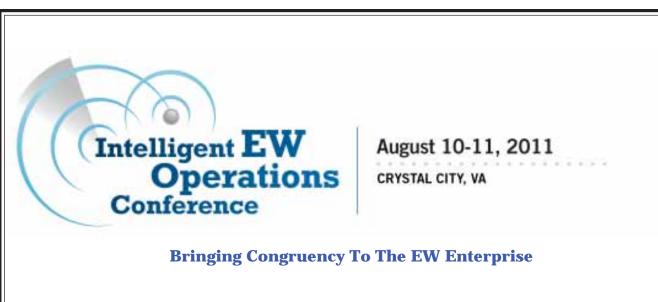*It really does come down to one desideratum: intelligence that is more accurate more often.*

Consequently, we seem to be where we started, struggling to determine what it is we are transforming for what purpose. It really does come down to one desideratum: intelligence that is more accurate more often. Or, put another way, no more 9/11's and no more Iraq WMD NIEs. Taken in reverse order, we can be assured that there will be no more flawed analyses like the Iraq WMD NIE. Instead, there will be other ones, different ones, on different issues that will be flawed for different reasons. Will there be

another 9/11? That is not knowable, but most intelligence officers concede that at some point there is likely to be a successful attack of some sort, perhaps on a lesser scale but still successful. We seem to have lost sight of the fact that this is a war, that the enemy has a will of his own, and that he will try to operate on our soil. We cannot dictate the theater of engagement any more than we can expect perfection in discovering every planned attempt.

There are several things that we can easily accomplish that would, I believe, have a transformative effect on intelligence analysis:

- As I have written elsewhere,[12] having a serious conversation among intelligence professionals, their policy customers, Congress, and even the press on what can reasonably be expected of intelligence, both overall and against specific issues, would be extremely useful. A set of probably general standards but shared expectations would be transformative for intelligence and extremely liberating. Instead of worrying about each new round of "gotcha," analysts might be willing to take risks, to push their analyses further, knowing that omniscience and perfection were not the standards.

- Getting back to basics. We have to get back to the "knowledge building" business. We were very good at this during the Cold War but seem to have lost the capacity. Too much of what we do is esoteric. This was one of the basic critiques of Major General Michael Flynn's January 2010 paper, "Fixing Intel."[13]
- It is true not only about Afghanistan but across the board in intelligence analysis.
- Closely tied to the previous point, putting more emphasis on expertise and depth among analysts. This runs counter to how many of the new analysts hope to manage their careers but we need experts, not analysts who flit from subject to subject.
- Recognizing that many of the new analysts lack the writing and organizational skills (preparing an outline) that we once took for granted. As frustrating as it may seem, we need to spend more time on these skills with the analysts at the very outset of their careers.
- Training the way we fight, as the military puts it. If we want analysts to work collaboratively across the Intelligence Community, then we have to train them in Community-wide courses, again from the outset of their careers.

- Getting the National Intelligence University (NIU) up and running as the center of Community-wide education and training, creating standards and course requirements, and thinking about what analysts' careers look like and what sort of training they will need across their careers.

"[Get] the National Intelligence University (NIU) up and running as the center of Community-wide education and training."

It is less about analytic tools and nifty new technologies, or gratuitous advice from people who have no appreciation of what we do. Getting back to basics in a serious, Community-wide way would be truly transformative.

Notes

[1] Apologies to Jane Austen, *Pride and Prejudice*,1813.
[2] Sec. 104A(d)(4) of the National Security Act (50 USC 403-4a).
[3] Mark M. Lowenthal, "The Real Intelligence Failure? Spineless Spies," *The Washington Post*, May 25, 2008. Available at <http://www.washingtonpost.com/wp-dyn/content/article/2008/05/22/AR2008052202961.html>.
[4] *The National Intelligence Strategy of the United States of America*, October 2005. Available at <http://dni.gov/publications/NISOctober2005.pdf>.
[5] This paper is available at <http://www.dni.gov/content/AT_Digital%2020080923.pdf>.
[6] When I became the Assistant DCI for Analysis and Production in 2002, I found that my new staff included a collaborative analysis group whose viewpoint was exactly as described above—the antithesis of competitive analysis, sharing for sharing's sake. I disbanded the office immediately and moved all of the officers to other, more useful, assignments, where they flourished.
[7] Conversations with Thomas Fingar, 2008. As of April 2011, the figure is that half of the analysts have less than five years of experience—better, but still alarming.
[8] Wertheimer's explanation of analytic transformation, as well as the exchange between us, can be found in Shane Harris, "Intelligence veteran aims to motivate young analysts," *National Journal*, September 24, 2007, at <http://www.govexec.com/dailyfed/0907/092407nj1.htm>.
[9] Conversation with one of the hearing participants, April 9, 2011.
[10] "Intelligence Analysis for Tomorrow," The National Research Council, Washington, DC, 2011.
[11] My evidence here is clearly anecdotal but uniform among many of my colleagues with decades of intelligence analysis experience.
[12] Mark M. Lowenthal, "Toward a Reasonable Standard for Analysis: How Right, How Often on Which Issues?" *Intelligence and National Security*, Vol. 23, No. 2, June 2008, 303-315.

[13] Major General Michael T. Flynn, Captain Matt Pottinger, and Paul D. Batchelor. "Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan," Center for a New American Security, January 2010. Available at <http://www.cnas.org/files/documents/publications/AfghanIntel_Flynn_Jan2010_code507_voices.pdf>.

Mark M. Lowenthal is President and CEO of the Intelligence & Security Academy. He has served as ADCI for Analysis and Production and Vice Chairman for Evaluation on the National Intelligence Council. He was staff director of the HPSCI in the 104th Congress (1995-97) and directed the committee's study on the future of the IC, IC21: The Intelligence Community in the 21st Century. *He served in the State Department's Bureau of Intelligence and Research as both an office director and a Deputy Assistant Secretary of State. He was the Senior Specialist in U.S. Foreign Policy at the Congressional Research Service/Library of Congress. Dr. Lowenthal has written extensively on intelligence and national security issues. His most recent book,* Intelligence: From Secrets to Policy *(Sage/CQ Press, 4th ed., 2009), has become the standard college and graduate school textbook on the subject. The author received his BA degree from Brooklyn College and his PhD in history from Harvard University. He is an Adjunct Professor at Johns Hopkins University and he was an adjunct at Columbia University from 1993 to 2007. In 2005 he was awarded the National Intelligence Distinguished Service Medal. In 1988 he was the Grand Champion on the television quiz show* Jeopardy!