Signals and Noise in Intelligence

by G. Murphy Donovan

Media pundits have reduced the complex problems of tactical and strategic Intelligence to a kind of running joke. Failure to “connect the dots” is the common taunt. Such mindless euphemisms, when applied to national security analysis, reduce the signal/noise dilemma to a child’s game. As a practical matter, conveying the correct signal to the correct receiver is the most difficult challenge in art, science, and especially, government. A signal is not singular. Indeed, signals are irrelevant without receivers. In similar veins; speakers require listeners, writers require readers, warnings require recognition, and analysis requires acceptance.

Many of the impediments to signals are internal to the Intelligence Community: this includes time honored vehicles like briefings and reports and less obvious barriers like structure, size, and politics. Intelligence collection and targeting systems operate efficiently today in real time. The strategic analysis process, however, does not provide a comparable return on investment.

Briefings

Rhetorical skills, in a briefing for example, might not convince any listener. The best facts, logic, and analysis often fall on deaf ears. Titans of industry and government are people with strong convictions. They know what they believe; and they believe what they know got them to where they are. There are no objective listeners any more than there are objective speakers. We all filter what we say and hear through the sieve of what we think we know. And too many of us think we know more than we do.

Truth is what we believe; unfortunately, what we believe is not necessarily true. Strongly held beliefs will always trump facts, logic, and analysis. Any speaker who seeks to change a paradigm needs to know what his audience already believes.

Testing some policymaker’s suite of beliefs, especially in any public way, is hazardous duty. Messengers get shot for less on a regular basis. Speaking truth to power is dangerous; and those who raise too many problems often become the problem. Inertia is often the most persuasive argument in the room.

Briefings slides are both inevitable and ubiquitous. This modern petroglyph is where the figurative dots are literally connected. The power point presentation (PPT) has become part of the national security culture, although it’s not clear that these tools have improved communications. Even the junior officers who prepare briefing slides, aka power point rangers, are skeptical. “Hypnotizing chickens” is a common euphemism for PPT sessions.
Reports

All of what might be said about the spoken signal is also true about the written word—and worse still. At first glance, a document might seem more concrete and credible than a briefing. This is an illusion.

With a briefing, there is at least a specific audience for the message; the written word provides no such assurances. All you can ever say about the written word is who received it, not who read it. The fact that any document was delivered to ‘such and such’ a policymaker’s office is often meaningless. Titans are buried in paper and electronic mail every day. There are few, if any, feedback mechanisms that allow us to know who read, understood, or might have agreed with a written report. Even legislators seldom read the laws to which they contribute and for which they vote.

An ‘after action’ report might be an exception, though not necessarily a good one. With these, the signal is clearly separated from the noise. Here specific actions are recommended to specific policymakers; and some up or down judgment usually follows—usually after the damage has been done. The 9/11 Commission Report (2004) is an example.

Yet the clarity of post facto deliberations is often undermined by hasty judgments, added complexity, and more ambient noise. The Homeland Security Act (2002) and the Intelligence Reform and Prevention of Terrorism Act (2004) are examples. The net result of these well intended fixes was the creation of three new stovepipes; the Department of Homeland Security (DHS), the Director of National Intelligence (DNI), and the National Counterterrorism Center (NCTC). How more layers in a 16 agency Intelligence Community (IC) reduce the signal to noise ratio remains a cipher to most observers. And burying the most economical military service, the Coast Guard, under a non-military bureaucracy (DHS) beggars any notions of operational prudence—offensive or defensive.

Special commissions and ad hoc committees may be inevitable and their recommendations may be significant. Unfortunately, their deliberations are not remotely connected to any known science.

When the diverse fail to converse, post facto commissions or study groups usually come to the same two conclusions; expand and reorganize. The ‘usual suspects’ seldom suggest that less might be more. Arguing for fewer boats is not the way sailors become admirals. Unfortunately, increasing size, complexity, and cost (or shuffling the deck chairs) does little to coordinate the uncoordinated or reduce the noise level in warning systems.

Warnings

The nexus of Intelligence is warning. All other national security functions might be irrelevant if warning fails. The attacks against the World Trade Center and the Pentagon were catastrophic warning failures. Four targets were selected by al Qaeda and four targets were destroyed. The Islamist offense was as efficient as our defense was deficient. Warning signals get lost or unrecognized in the noise of everyday bureaucratic traffic. After action reports often isolate those lost signals, yet those same reports (aka ‘shots from the grave’) seldom make serious recommendations about eliminating the noise.

Roberta Wohlstetter’s (1912-2007) military intelligence study, Pearl Harbor: Warning and Decision (1962), is required reading for most entry level Intelligence professionals, yet there
is little evidence that her cautionary classic has had a lasting impact on Intelligence praxis. The proliferation of Intelligence agencies since Mrs. Wohlstetter’s day may have increased the ambient noise within the IC by orders of magnitude. If spending is a measure of complexity, the Intelligence budget has trebled in less than a decade. The IC now employs nearly a quarter million souls at a cost of 75 billion dollars per annum. The Director on National Intelligence (DNI) claims that ten thousand analysts are working the terror problem alone. Indeed, terrorism has become a cash cow for academics, think tanks, and government agencies.

**Analyses**

Warning signals might be likened to tripwires, while formal analyses might be compared to the prepared defenses behind the wires. All the right signals might be detected, yet the message might still be undone by; existing analysis, the conventional wisdom, or expectations. Outdated analyses and estimates create ambient noises of their own and they often taint perceptions. Several recent studies suggest that “experts” too close to any subject often develop blind spots, an unwillingness or inability to see new or contradictory evidence. Believers do not suffer apostates gladly.

And with new analysis, bridging the gap between analysis and acceptance is a crucial step seldom taken. Few analysts make good salesmen; and managers of analytical processes are not inclined to rock the boat.

The space between analyst and process manager is often filled by “talking dogs.” The talking dog is usually an articulate soul who does justice to a suit or military uniform. A briefer may not have any relevant expertise, but they can usually be trusted to stay on message.

The 2002 National Intelligence Estimate (NIE) on Iraq might represent a case study of these phenomena. This assessment provided the ‘substance’ for Secretary of State Colin Powell’s presentation before the UN (6 February 2003) in the run up to the second Iraq war. Unfortunately, like many bureaucratic products, this estimate was a “wet finger;” an estimate that catered to expectations, not facts or reasonable analysis. Such reports are common to all bureaucracies, yet they are much more consequential in the national security arena. The fruit of that 2002 poisoned tree is yet to ripen. How the IC treats the genuine nuclear threat next door in Iran is a story yet to be told.

Beyond the inherent difficulties of oral, written, or analytical mediums; the noise problem in the IC is also structural and political. Technological band aids, additional personnel, and bigger budgets are unlikely remedies for these man-made, self inflicted ailments.

**Structural Noise**

The structural problem, simply stated, is size; 16 agencies, 18 layers if the penultimates are counted. The “stovepipe” problem is compounded by internal layering within each agency and complicated by the various agency specific; information systems, clearance levels, and classification types.

A “secret” world will always be at odds with the free flow of information. In this respect, Intelligence reports and studies labor under a unique handicap. The gauntlet that signals and analysis must run in such a maze is formidable.
Part of the problem is historical; Intelligence is a complex of institutions built by events not design. DHS is the latest example of Lincoln Log engineering. Much of what flourishes year to year in the IC is redundant, superfluous, and dangerously opaque. Signals attempting to navigate obdurate bureaucracies encounter obstacles at every level; and the ambient noise is deafening.

These vertical structures often become institutional cultures for all manner of human foibles. Each layer inevitably creates its own gatekeepers and apparatchiks; ‘not on my watch,’ ‘not invented here,’ ‘not my job,’ and ‘not without our chop’ are just some of the examples of attitudinal barricades. Such culture infests every large bureaucracy and the IC is no exception.

No doubt every agency is born of good intentions, but over time the institution often becomes the enemy of the idea. Tenure and survival too often become the dominant idioms of large enterprises, especially governmental departments. Intelligence has not defined the IC today so much as the IC has defined what passes for “intelligence.”

The modern enemy is nimble, mobile, decentralized, economical, lean, mean, and effective. For the moment, the national security community that seeks to track this quarry is none of these.

**Political Noise**

And all of what the IC does is colored by politics. To argue otherwise is dishonest or naïve. The question is not whether, but how much. It is no accident that every Intelligence agency falls under the Executive Branch. Intelligence is a traditional servant of policy.

In the wake of WW11, the father of modern national estimates, Sherman Kent (1903-1996), sought to sustain the integrity of analysis by keeping a discrete distance between policy and Intelligence. Situating CIA in the Virginia woods may have been part of that stratagem. Today there are few measures for how well the barrier between Intelligence and policy has been maintained.

We like to think that analyses or research is driven by scientific method; a rigorous consideration of facts, logic, and research – untainted by bias or subjectivity. Unfortunately, original research requires resources, special talents, and time. Policymakers, driven by events, rarely have the patience or time for rigor. As a consequence, most of what we call research or study, in or outside of government, is actually “derivative,” a polite euphemism for junk science. The “hot wash-up” is the rule, not the exception, in the worlds of Intelligence and politics.

And politics is the most persistent noise surrounding Intelligence analysis and reporting. Clearly, policymakers have bigger fish to fry than Intelligence, but no policy is well served by flaccid or cautious analysis. Fear is a very loud ambient noise. The blizzard of euphemisms coming from the policy community today looks a lot like fear.

Euphemisms usually have two purposes; masking a painful truth or attempting to change the subject. Rhetorical contortions are commonly used to avoid naming two combat fronts a “war.” This distortion is compounded by efforts to separate these wars and the world-wide anti-terror campaign from Islam and Islamists. Such mixed signals are sending cautionary ripples through the analytical community. Trying to speak or write about the struggle with Islamists without mentioning Islam or Muslims is a little like attempting to eradicate malaria by ignoring mosquitoes.
Obscuring the threat is not without opportunity costs. As the chief of USAF Intelligence put it, in an email, to an editor of *WIRED* Magazine on 9 December 2009:

The number one cause of civilian casualties in Afghanistan is the Taliban — not air power. Human Rights Watch has verified that the Taliban kills three to four times more civilians than ISAF air and ground forces combined. More often than not, these deaths are deliberate….It is curious that it appears there is more ink spent on casualties from air attacks than there is on the criminality and violation of the ethical tenets of ‘Islam’ (sic) that occurs daily as a result of Taliban actions.

Lt. Gen. Dave Deptula’s concerns were underscored by a more formal, but equally candid, report from Afghanistan written by Maj. Gen. Mike Flynn, chief of ISAF Intelligence, and published by The Center for a New American Security on 4 January 2010:

Our senior leaders - the Chairman of the Joint Chiefs of Staff, the Secretary of Defense, Congress, the President of the United States - are not getting the right information to make decisions with ... The media is driving the issues. We need to build a process from the sensor all the way to the political decision makers.

A casual reading of these two reports from senior Military Intelligence officers reveals two clear signals. Instead of defining the enemy; we are at risk of being defined by our opponents. The second signal is even more ominous; the Media, not good Intelligence, appears to be driving the policy process.

The differences between the generals in the field and the politicians became an open wound with the recent resignation of the ISAF commander in Afghanistan. What soldiers like Stanley McChrystal lack in tact is seldom redeemed by candor.

Nonetheless, these alarms are symptoms of a crisis of confidence, a growing sense among taxpayers that many very expensive public institutions simply do not work. The Intelligence Community is one of those institutions.

Great research is done in small batches; usually a small group of sharply focused world class experts. And great writing is usually done by a single hand; a hand unencumbered by layers of second guessers. Such requirements are seldom satisfied in the national estimative process. With Intelligence, peer review is too often confused with institutional consensus.

And even those ‘hot washups’ will always be surrounded by some level of ambient noise. But, introduced uncertainty is another matter. No decision is well served by ambiguity or doubt. Policy pronouncements masked in a veil of euphemisms may placate real or imagined foes, but such uncertainty tends to confuse the home team

**Epilogue**

Vacuums of ignorance are often filled by beliefs; beliefs that might not be true. The purpose of Intelligence is to warn, define the threat, and challenge false paradigms. If policymakers prefer wishful thinking, Intelligence must persist to undo these illusions. Indeed, Intelligence must take the final step – bridge that gap between analysis and acceptance. Trivial euphemisms like “connect the dots” undermine both the difficulties and seriousness of the problem. Words matter.
Reason and religion are unique tests for contemporary warning and analysis. The rational actor models that served us so well during the Cold War no longer apply. The threat spectrum is now dominated by theocratic irredentism, a mix of fanaticism driven by an unreasonable quest for political, religious, and cultural monoculture. The spectrum of mayhem now runs from lone wolves to totalitarian theocratic states, from suicide bombers to nuclear weapons. Citizens and soldiers must know what and who they are fighting.

National security analysis does not just support the policy process; it also sets the tone for the entire Intelligence Community. A “gold standard” collection and targeting system will be impotent if the analytical side of the equation can’t produce a clear picture of the threat. The national estimative process might benefit from better people, fewer people, and more independence. Over-coordination and consensus are often the most pernicious kinds of ambient noise.

Once the threat has been defined, clarity from the policy community would also be a deficit neutral improvement to the noise problem in the Intelligence Community. Citizens and soldiers must know what and who they are fighting. If the war of ideas is lost in the ambient noise of political correctness or politics, shooting wars may not matter.

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