



## Intelligence Analysis Guide to its Study

by Mark Lowenthal, PhD

*"It is very difficult to make predictions, especially about the future."*

—Lawrence Peter ("Yogi") Berra

The first intelligence analyst was probably the caveman from one cave who came back and gave an assessment of the strength of a neighboring cave: how many warriors, what weapons (rocks, clubs, spears) they had, how many women, and the nature of the intervening terrain. He was then asked for an assessment of either the success of an attack by his clan, or the likelihood of an attack by the other clan. The means of collection and the scope of the problem were limited but the question was life or death in nature.

Analysis is the most important aspect of intelligence: providing assessed judgments to policy makers that they can use to help them make decisions. Every other part of intelligence feeds into analysis, even operations. (The reverse flow, from analysis to operations, is also true but operations are less frequent than the daily output of analysis.) Wise policy makers understand that they cannot know all of the possible outcomes of the decisions they face. Intelligence analysis serves to bound their uncertainty, to give policy makers a better sense of what might or might not happen, based on known conditions, the actors involved, and the decisions made. It is important to understand that "bounding uncertainty" is not the same as telling someone what will happen. If one looked at a verbal scale of probability, the opposite ends would be "Always" and "Never." These two conditions are of no interest to intelligence analysts. After all, if we know with certainty that something will or will not happen, why do we need analysts? We do not. Analysts live and work further in from those two poles. As the National Intelligence Council explains it, the

boundaries are "Remote" and "Almost Certainly."<sup>1</sup>

Analysis is difficult for several reasons. First, it is about human beings who act and react for a variety of reasons, some of which may appear irrational (to the observer). Humans can always change direction as well. Second, every state seeks to keep secret some of what it does, what it has, what it lacks, and what it plans from other states. Secrets are the essence of intelligence: trying to discern these hidden factors. If we are lucky, good collection may reveal what we want to know. In many cases, however, collection is incomplete or inconclusive and analysts must work from fragments, some of which are contradictory, in order to assess what is going on or is likely to happen. It is important here to distinguish between secrets and mysteries. Secrets are known but hidden: someone somewhere knows what is happening at the Iran nuclear facility at Natanz. Our goal is to find that person. Mysteries may or may not be knowable: who built Stonehenge? Intelligence is in the business of discovering secrets, not solving mysteries.

Analysis is not about predictions, that is, something that can be foreseen. Intelligence is about estimates: a more tentative judgment based on varying degrees of intelligence, not all of which is equally reliable – indeed, the reliability of some of it may not be known at all. Conveying this to a policy maker can be very difficult because the language that is used is often conditional or hedged. Here a gulf develops: analysts write this way to convey the limits of what is known reliably but policy makers sometimes see this as analysts being pusillanimous. The best way to avoid this gulf is for analysts to explain to policy makers, preferably at the outset of their relationship, the nature of what they do and how they express themselves.

It is also important to understand that intelligence collection is an imperfect process and will rarely be able to provide analysts with everything they need to know. Therefore, analysts are trained to extrapolate what they do not know from what they do know, as the Duke of Wellington once put it.<sup>2</sup> This becomes another

1. This discussion of likelihood can now be found in every National Intelligence Estimate (NIE), each of which includes a page entitled, "What We Mean When We Say: An Explanation of Estimative Language." See, for example, "Prospects for Iraq's Stability: A Challenging Road Ahead," January 2007, p. 5, at [http://www.dni.gov/press\\_releases/20070202\\_release.pdf](http://www.dni.gov/press_releases/20070202_release.pdf).

2. Among the places where this quote is cited is the UK Ministry of Defence website (<http://www.mod.uk/DefenceInternet/AboutDefence/People/Speeches/MinAF/20110110TransformingDefence.htm>), in this case citing a speech by Nick Harvey, MP, Minister for the Armed Forces, January 10, 2011. The original citation is apparently in remarks made by the Duke of Wellington to John Croker and is quoted in *The Croker Papers: The Correspondence and*

reason for the imperfection of analysis.

Analysis is also an open-ended process in that most of the issues being addressed do not have closure. This is a major difference between intelligence analysis and scientific research or legal proceedings. Experiments have conclusions, they either work or they do not. Court cases have verdicts. But intelligence issues continue. They may morph – the Soviet Union collapses but then we worry about Russian stability – but they do not end. This makes it more difficult to judge how well analysis is doing because we may have indications on a short-term basis but we are less likely to see it on a strategic basis. The Soviet Union is a perfect example. From 1946 on, the United States was committed to the policy of “containment,” containing Soviet expansion until they either relented or collapsed. Intelligence analysis had both successes and failures against the Soviet Union but almost no way to judge whether the goals of containment were actually being met – until they collapsed.

A central issue in analysis is the question of how right, how often, on which issues. Clearly, analysis cannot be correct all of the time. Indeed, there is no number or batting average that can be given. Much depends on the nature of the question being asked. If it is a straightforward or fairly factual question (how many strategic missiles does Russia have, with what number of warheads) then analysis should be correct most of the time. But if it is a more complex, more far-reaching question (what is Kim Jong Il likely to do next), then the error rate will go up. Regrettably, in the aftermath of 9/11 and the Iraq weapons of mass destruction (WMD) estimate, there seems to be a growing expectation that intelligence can and should be correct most of the time – if they just work harder and share more, then the answer will be there. This is, from an analyst’s point of view, unrealistic and places an added burden on the analysts. Indeed, it may have the perverse effect of making analysts gun shy and hedging their analysis more than they normally would.

In pursuit of this goal of increased accuracy, we have seen both the Intelligence Community and Congress fiddle with various issues, primarily improved intelligence sharing and an emphasis on more alternative analyses. But they have not made any changes that are likely to improve substantially the Intelligence Community’s “batting average” because that goal is much more elusive and is probably not responsive to

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*Diaries of the Late Right Honourable John Wilson Croker, LL.Dm F.R.S., Secretary of the Admiralty from 1809 to 1830 (1884), edited by Louis J. Jennings, Vol.III, p. 276.*

reforms imposed from without, if it is responsive at all.

Nothing underscores this mindset of expectations more than the insidious and wholly inapt and demeaning phrase, “connecting the dots.” Nothing could be further from the reality of analysis. In “connect the dots” the child only gets the dots he needs – no extra dots, no missing dots. And they are numbered and there are drawings within the dots to help discern the overall picture. In reality, analysts are asked to make coherent patterns from constantly shifting pieces of information, a much more difficult task.

All sorts of interesting intellectual traps can creep into analysis and it is the job of the analysts and the supervisors to be alert to them and to weed them out mercilessly. Some of the more common ones are:

**Mirror-imaging:** assuming that the actor or state being analyzed reacts in the same way as the analyst or his state would. (“They’re just like us,” is a typical formulation.)

**Premature closure:** leaping on the first hypothesis as the correct answer and failing to probe for other hypotheses that might also be plausible.

**Groupthink:** everyone agreeing to conclusions for social reasons, not analytical ones.

**Mindsets:** fitting new intelligence into already formed conclusions.

Another recurring critique has been that intelligence analysis has showed a lack of imagination or is risk averse. The sub-text here is quite consistent with other critiques: if the analysts only think hard enough and long enough and inventively enough, they should come up with more accurate analysis.

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**To the men and women of the  
Clandestine Service, out there now as  
they have been for sixty years, on the  
ridge tops, in the back alleys, hunting the  
monsters that the world prefers to pretend  
do not exist.**

— Charles Faddis, in *Dedication of his  
new novel Codename Aphrodite.*

Certainly, we want analysts to be imaginative, to think of alternative outcomes. But we do not want them to give equal credence to every possible outcome or to create laundry lists of outcomes. After all, policy makers can do that for themselves. Indeed, what the policy makers look to the intelligence analysts to do is winnow down the laundry list of possible outcomes, to indicate which ones are more or less likely. Also, there is – or should be – a quid pro quo here as well: if we want analysts to be imaginative, to take risks in their analysis, then we have to give them the right to be wrong some of the time. We cannot ask the analysts to be imaginative and correct all of the time. Also, no amount of more imaginative analysis will eliminate all intelligence surprise. For example, there is no reason to expect that any analyst could have posited that the self-immolation of a Tunisian fruit seller would ignite revolts across the Arab world.

The intellectual model for U.S. intelligence analysis is “competitive analysis.” This means that we want to bring to bear many different analysts with many different skill sets and many different backgrounds on a given issue. The assumption is that this will foster a more rigorous debate about the intelligence and is more likely to reveal areas of disagreement – which can be crucial for the analysts and the policy makers. Competitive analysis also imposes certain costs. The most obvious one is that it requires a larger analytic cadre, many of whom may be writing about the same issues as analysts in other agencies. This can appear to an outsider to be redundancy but there is no other way to foster competitive analysis. Another cost is the possibility that, as analysts argue about differing views on an issue, there may be an occasional tendency to accept “lowest common denominator” analysis, that is, to find intellectual mid-points in arguments and settle on that rather than continue to fight it out. This is obviously unsatisfactory intellectually and in terms of the utility of the analysis itself. The fact that analysis is competitive also means that there are winners and losers in the analytic process. Some analysts’ careers prosper as their papers go forward and other’s careers do not because their views did not prevail.

One of the bedrock rules of intelligence in the United States (and among our Commonwealth partners) is that intelligence does not make policy. What this means is that intelligence will go through all of the plusses and minuses of a given situation or of a potential decision but they will not then offer which choice to make. This rule exists for two reasons. First, the government belongs to the policy makers –

elected officials and their appointees. Intelligence is a service. Second, this rule helps intelligence preserve its objectivity – a crucial attribute. If intelligence officers make policy recommendations, they may then be tempted to produce new analysis that supports the wisdom of their advice. Even though intelligence analysts may be concerned about the outcome, by eschewing an advisory role, they can maintain their professional objectivity.

This leads us to the issue of politicization, the cardinal sin for all analysts. Simply put, politicization is writing analysis to please the reader, regardless of the variance from sound analysis. Politicization can happen in one of two ways: policy makers can order it; or analysts will do it either wittingly or not simply to please or appease policy makers. Either way it is wrong. Intelligence analysts spend a great deal of time being alert for and worrying about politicization but it does not appear to occur that often.

It is crucial to remember that intelligence analysis is an intellectual process. We can establish rules and standards; we can try out new analytic tools and methodologies. But it all comes down to knowledgeable analysts thinking interesting thoughts that they can express clearly in writing. For example, at the behest of the Congress, the DNI’s office came up with a set of Standards of Analytic Tradecraft. The first seven are all reasonable standards but following each of them to the letter will not automatically lead the analyst to the eighth standard: “Accurate judgments; assessments.” Intelligence analysis is not a recipe or a construction manual that will produce the same result each time. We seem to have lost any appreciation for the sheer difficulty of coming up with correct analytic judgments on challenging issues on a consistent basis.

**It is of the highest importance  
in the art of detection  
to be able to recognize,  
out of a number of facts,  
which are incidental  
and which are vital.**

— Sherlock Holmes  
From A. Conan Doyle’s  
*The Reigate Squire*, June 1893  
(M. Hardwick, *The Complete Guide to Sherlock Holmes*, 1986,  
pp. 86-87)

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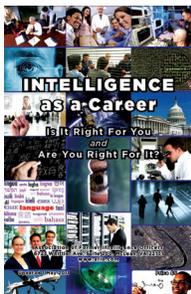
## READINGS FOR INSTRUCTORS

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What should one read to become more conversant with the key issues in intelligence analysis? The list of available books and articles is long and growing. Here are a few that I have found most useful. Roger George and James Bruce, two veteran analysts, edited *Analyzing Intelligence: Origins, Obstacles and Innovations* (2008, Georgetown University Press), which covers the entire range of analytical issues in articles written by seasoned intelligence and policy veterans. Richards Heuer's *The Psychology of Intelligence Analysis* (1999, Center for the Study of Intelligence, Central Intelligence Agency, available at <https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/index.html>) is a now classic treatment of the various intellectual traps and pitfalls that can bedevil analysts. An insight into how intelligence professional view some of their problems can be found in the CIA publication *A Tradecraft Primer: Structural Analytic Techniques for Improving Intelligence Analysis*, March 2009, at <https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/Tradecraft%20Primer-apr09.pdf>. Robert Jervis, an academic who was written extensively on analysis, has

written *Why Intelligence Fails* (2010, Cornell University Press), which looks at two key analytic cases: Iran's 1978 revolution and Iraqi WMD. Finally, my own *Intelligence: From Secrets to Policy* (2009, 4th edition, CQ Press) deals with a range of analytical issues and also devotes attention to the importance of the policy maker in the analytical process. 🐦

Dr. Mark Lowenthal is the President and CEO of the Intelligence & Security Academy and has served as the Assistant Director of Central Intelligence for Analysis and Production; Vice Chairman for Evaluation on the National Intelligence Council; staff director of the House Permanent Select Committee on Intelligence; office director and as a Deputy Assistant Secretary of State in the State Department's Bureau of Intelligence and Research (INR); and Senior Specialist in U.S. Foreign Policy at the Congressional Research Service, Library of Congress. He has written five books and over 90 articles or studies on intelligence and national security issues. Dr. Lowenthal received his B.A. from Brooklyn College and his Ph.D. in history from Harvard University. He is an Adjunct Professor at the Johns Hopkins University; he was an adjunct at Columbia University from 1993-2007. In 2005, Dr. Lowenthal was awarded the National Intelligence Distinguished Service Medal. In 1988, he was the Grand Champion on Jeopardy!, the television quiz show.



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To address this, AFIO has published a booklet, entitled *Intelligence as a Career: Is It Right For You and Are You Right For It?* Aimed at high-school and college students who might be considering a career in the intelligence or security fields, the booklet discusses the broad differences between analysts and collectors, and how these differences vary throughout the IC. It answers questions about prerequisites and the optimum skill mix for candidates; it compares the pros and cons of private industry versus government occupations; and it contains some frequently asked questions about careers in intelligence.

The booklet lists all 16 members of the IC, with a short description of each one and an overview of the application process. It lists websites for each. Finally, it contains an updated section on institutions that offer courses in intelligence and security, starting with the DNI's Centers of Academic Excellence.

The booklet is available free online as an easily downloaded PDF or as a webpage. Both digital versions are located at [www.afio.com](http://www.afio.com) — at the top of the main webpage, or click on Careers. It is also available in hard copy. For university professors teaching in this field, it is available in quantity at no charge.

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