Trapped by a Mindset:

The Iraq WMD Intelligence Failure

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George Tenet, Director of Central Intelligence (DCI) and his deputy John McLaughlin went to
the White House on Sunday, December 21, 2002 to brief the president, vice-president and the
national security advisor on the intelligence regarding Iraq’s nuclear, chemical, biological and
missile programs. The president was not impressed with the evidence. At the conclusion of
McLaughlin’s presentation, the president asked Tenet, “…is this best we’ve got?” Tenet replied
unequivocally “Don’t worry; it’s a slam dunk case!”

Yet as the world now knows, instead of a “slam dunk case” America’s intelligence on Iraq’s
Weapons of Mass Destruction (WMD) was flat-out wrong. The president’s Commission on the
Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction called
this profound intelligence failure “one of the most public—the most damaging—intelligence
failures in recent American history.” In a world where, according to the 2002 National Security
Strategy of the United States, the “gravest danger our Nation faces lies at the crossroads of
radicalism and technology,” this intelligence failure has troubling implications for the security of
the United States. Accordingly, the intelligence community must improve their ability to assess
the full range of state and non-state actor nuclear, biological and chemical weapons programs.

What was the nature of the analytical intelligence failure and what might intelligence community
analysts have done differently to produce a more accurate assessment of Iraq’s WMD program?
In short, how did the intelligence community analyze the incomplete information provided by
collectors and how could they, given the information available, have developed a more accurate
and useful intelligence product for policy makers?

There were three interrelated waypoints along the analytical pathway that led to this intelligence
failure. First, intelligence analysts failed to place their assessment of Iraq’s alleged WMD
program in a strategic and political context and try to understand the motivations, intentions and
interests of Iraq’s government. Second, and perhaps central to our intelligence failure,
intelligence community analysts assumed that Iraq was hiding WMD. Hence, trapped by this
mindset they narrowly pursued only one working hypothesis. Finally, analysts failed to convey
explicitly to policy makers the ambiguity of their evidence and the reality that their conclusions
were far from an analytical “slam dunk.”

All this being said, it is important to acknowledge the daunting challenge the intelligence
community faced in their quest to assess correctly Iraq’s WMD programs. Postmortems of
intelligence failures often confidently conclude with the clarity of hindsight that events or
adversary actions were clearly foreseeable or predictable. This hindsight bias distorts the difficult
challenge faced by analysts in developing credible assessments and estimates in a high stakes
atmosphere of ambiguity, uncertainty, deception and chance. Given Iraq’s past behavior, even if
the intelligence community had placed its assessment of Iraq’s WMD program in a strategic and political context and simultaneously pursued a number of plausible hypotheses, it is improbable that they would have unequivocally concluded that Iraq did not have WMD caches and programs. However, if the intelligence community’s analysts had taken the more wide-ranging approach, as suggested by this essay, to this difficult intelligence puzzle, it is likely that they would have produced a more accurate and informative intelligence product for policy makers.4

The Scope and Nature of the Failure

The intelligence community’s authoritative judgments regarding Iraqi WMD programs were contained in the October 2002 national intelligence estimate (NIE), Iraq’s Continuing Program for Weapons for Mass Destruction, as well as the white paper, Iraq’s Weapons of Mass Destruction Program. The October 2002 NIE’s overarching analytical judgment was “that Iraq has continued its weapons of mass destruction programs in defiance of UN resolutions and restrictions.”5 This judgment—mild caveats within the body of the estimate, and the Department of State’s Bureau of Intelligence and Research’s alternative view concerning Iraq’s nuclear program notwithstanding—left little room for doubt in the minds of most policy makers and the public who read in the compelling white paper that Iraq had fully reconstituted its nuclear, biological and chemical weapons program and was developing a range of delivery systems. The reality, however was this: In 1991, Saddam Hussein ordered the complete destruction of his WMD stockpiles and stopped development and research on new weapons in order get out from under the crippling United Nations sanctions.

The 2002 NIE stated that “Baghdad started reconstituting its nuclear weapons program about the time United Nations Special Commission (UNSCOM) inspectors departed—December 1998.” Underlying this rather unambiguous, but highly inaccurate judgment, were long standing assumptions concerning the Iraqi regime’s persistent desires to obtain nuclear weapons, lingering distress about the intelligence community’s failure to detect the breadth and scope of the Iraqi pre–1991 nuclear program, and most importantly the March 2001 report that Iraq was attempting to buy high-strength 7075 T6 aluminum alloy tubes. The intelligence community erroneously concluded that Iraq intended these aluminum tubes for the gas centrifuges required for uranium enrichment. Unfortunately, President Bush included this incorrect assessment prominently in his 2003 State of the Union speech when, as part of his public indictment of Saddam Hussein, he announced to the world, “Our intelligence sources tell us that he has attempted to purchase high-strength aluminum tubes suitable for nuclear weapons production.”6 It is now evident, as it should have been at the time, that Baghdad intended these tubes for use in Iraq’s Nasser 81-millimeter Multiple Rocket Launcher program and not gas centrifuges.7

More ominously, the 2002 NIE asserted that Iraq had a robust biological weapons (BW) program and “that all key aspects—R&D (research and development), production, and weaponization—of Iraq’s offensive BW program are active and that most elements are larger and more advanced than they were before the Gulf War.” The foundation of this sweeping intelligence judgment essentially rested on the information provided by one questionable source known ironically as Curveball, who unfortunately turned out to be an elaborate fabricator. Interviews with Curveball were conducted by another foreign service that never allowed the United States access, and the Defense Intelligence Agency (DIA) never tried to independently validate Curveball’s veracity;
nevertheless, the Curveball fabrications became not only the basis for the NIE’s sweeping BW assessments but were also included in the President’s 2003 State of the Union speech and the Secretary of State’s presentation to the United Nations Security Council.

Regarding Iraq’s chemical program, the intelligence community’s estimate determined that “Baghdad has renewed production of mustard, sarin, GF (cyclosarin) and VX” despite acknowledging that they had “little specific information on Iraq’s CW stockpile.” Consequently, their conclusion was wrong. Unlike their erroneous assessments concerning Iraq’s nuclear and biological programs, a single cause did not drive this inaccurate assessment, such as aluminum tubes or Curveball’s elaborate fabrications. Instead, as the WMD commission and Senate Select Committee on Intelligence report concluded, analysts relied on uncertain imagery intelligence products as well as imprecise extrapolation of thin signals intelligence and human intelligence information. Moreover, the accounting discrepancies reported by UNSCOM inspectors before they left Iraq in 1998 and Iraq’s past practice of denial and deception made it easier to conclude the worst.

The intelligence community got it a bit better on the subject of delivery systems. The 2002 NIE concluded that Iraq retained a “small missile force and several development programs, including for a UAV (Unmanned Aerial Vehicle) probably intended to deliver biological warfare agent,” not only in the region but also potentially into the United States. The intelligence community was essentially correct in their assessment that the Iraqis were developing a missile force that exceeded the UN’s 150-kilometer limit. This small success, however, did not compensate for the multiple assessment failures regarding Iraqi nuclear, biological and chemical programs particularly given that NIE was way off the mark regarding the UAV programs allegedly designed to deliver BW agents. These programs simply did not exist.

A Word on Politicization

One cannot write about the intelligence community’s failure to assess correctly the status of Iraq’s alleged WMD programs without at least some discussion regarding the churning controversy that politicization may have played in corrupting the WMD intelligence.

Paul R. Pillar, the former national intelligence officer for the Near East and South Asia, recently stirred the ongoing controversy with a Foreign Affairs essay “Intelligence, Policy and the War in Iraq” in which he described a dysfunctional and acrimonious relationship between the intelligence community and senior policy makers. A significant measure of his rather direct criticism concerned the so-called politicization of intelligence regarding the decision to attack Iraq.

Pillar acknowledged that while the administration cherry-picked raw intelligence for public dissemination used policy to drive intelligence and created an environment of hostility between analysts and policy makers, they did not engage in crude arm-twisting to change analytical assessments or judgments. Moreover, he too quickly absolves the intelligence community of its responsibility when he writes regarding the 2002 NIE, that although it “was flawed…it was not what led to the war.” While Pillar is correct that the NIE was not the proximate casus belli, he is incorrect to undervalue the potential influence of a more nuanced NIE on Congress, and
perhaps even the White House. A more accurate report would have reflected the uncertain nature of the evidence and the possibility that Iraq’s WMD programs were far less robust than many assumed.

The point here is to suggest that in a highly charged environment where the issues of war and peace are in the balance, intelligence tradecraft that questions assumptions and considers a full range of possibilities becomes even more crucial. As Richard Betts reminds us, “Assessments of facts on matters of much importance are always controversial” and therefore the intelligence community must accept this condition as an inherent part of their operating environment. The more intense the policy making environment, the more urgent the need for analytical rigor and excellent tradecraft that produces intelligence products that are timely and relevant but do not pander to policy interests or preferences. This is admittedly not a simple task, but given the stakes involved in assessing adversary WMD programs, it is absolutely essential.\textsuperscript{12}

**Strategic Context and Understanding Intentions**

The analytical twists and turns regarding aluminum tubes and Curveball’s elaborate fabrications notwithstanding, there was a deeper problem inherent in the intelligence community’s approach to the Iraq WMD puzzle. The 2002 NIE focused narrowly on technical issues and the ongoing pattern of Iraqi denial and deception, but as the WMD Commission report concluded, “took little account of Iraq’s political and social context.”\textsuperscript{13} In short, we failed to understand the mindset of our adversary and thus failed to provide an explanation of Iraqi behavior.

A mindset is “a set of expectations through which a human being sees the world.” Mindsets help us order and generalize reality, understand the casual relationship among a vast array of phenomena and anticipate future events, and are therefore the essential means with which we deal with a complex world. Developing “expectations based upon how past events have occurred; analysts and strategists each will draw general conclusions about the relationships among important international phenomena, about how states typically behave…or about the motivations of foreign leaders.”\textsuperscript{14} Although essential, mindsets can become a strategic trap for policy makers and analysts because they are quick to form, slow to change and tend to cause individuals to perceive what they expect to perceive.\textsuperscript{15}

The ancient Chinese philosopher Sun Tzu neatly captured the foundation of sound intelligence analysis with his well-known aphorism, “Know the enemy and know yourself.”\textsuperscript{16} Our enemies make strategic and operational assessments, measure their adversaries and weigh risks just as we do. Our adversaries develop mental mindsets just as we do. We need to understand our adversary’s mindsets as well as our own in order to develop sound analytical assessments.

Saddam Hussein’s mindset was the product of Iraq’s violent political culture and his experiences in securing and maintaining power, as well as his confrontations with other states and the international community.\textsuperscript{17} Hussein built his mindset around three fundamental assumptions. The first assumption was that the most significant threats his regime faced were opponents within Iraq. Second, he believed that the United States was weak and irresolute. Finally, he believed that his most dangerous external threats were his neighbors to the east and north, Iran and to a lesser degree Turkey. These assumptions shaped his interpretation of events as well as his
operational and strategic decisions as he extended his brutal vision of Iraqi politics—a vision that equated restraint with weakness—to his understanding of the actions of other states and his role in the international system.

Consequently, he interpreted his confrontations with the United States and his observations of American military operations as confirming his assumption that America was weak and irresolute. In Hussein’s brutal view, the United States had inordinate fear of ground casualties that would preclude conducting a war to destroy his regime. From Vietnam to Somalia to Kosovo and the 1998 air strikes on Iraq following the expulsion of United Nations weapons inspectors, he viewed American military operations as indicative of congenital weakness, characterized by a fear of ground casualties and an over-reliance on air power. Fascinatingly, he interpreted his 1991 Gulf War defeat as an Iraqi victory and another example of American weakness since the Republican Guard and his regime remained intact. In his view, the Americans, deterred by Iraqi chemical weapons and with no stomach for an extended ground war, failed to press their advantage and destroy the Baa’thist regime.

His reaction to the United States’ response to his 1994 movement of Iraqi military forces to the Kuwait border in preparation for a second invasion is highly instructive. Saddam’s reaction follows,

> It is really something, four nations, among them the greatest nations of the world: Russia and America. I mean, they have nuclear bombs, missiles and so on….and England and France. They came in and handed me a memo. They gave me a warning and timing. In case we would not abide by it, we would endanger our existence.  

Some might dismiss his rhetoric as vacuous bravado, however, it was a clear reflection of Saddam Hussein’s mindset—a mindset that interpreted actions that the United States would view as decisive and forceful as signs of weakness. In Hussein’s view, real men and states do not send memos—they eliminate their enemies in the same brutal manner that he dealt with his opponents within Iraq. Consequently, the fact that Hussein was still in power was ipso facto a sign of America’s inherent weakness. In a pre 9-11 world there was some twisted validity to Hussein’s interpretation of events and America’s actions. However, trapped by his own mindset he failed to understand that in the post 9-11 world America was prepared to take down his regime.

Unlike his confrontations with America, Hussein believed that he had fought a real war with Iran. The Iranians knew how to die in droves, which in Hussein’s view was the real measure of military effectiveness, and that along with their proximity, size and fanaticism made them a real threat—a threat that he needed to deter. As Michael Gordon and Bernard Trainor’s superb study of the invasion and occupation of Iraq concludes, this assessment had “enormous implications” for Iraq’s relations with Washington. Despite destroying their WMD stocks and stopping the development of new weapons in the quest to end the sanctions regime, Iraq “never dispelled the mystery of whether they might have a hidden cache of WMD” or clandestine programs. This was a deliberate strategy designed to “keep Iran in check” as well as intimidate the Shiites in the south and the Kurds in the north, while simultaneously working to undermine the sanctions regime. This strategy was later termed by the II Republican Guard Corps commander, General
Raad al-Hamdani, as “deterrence by doubt.” It almost worked. The final report of the Iraqi Survey Group concluded in 2004, “Iraq was within striking distance of a de facto end to the sanctions regime, both in terms of oil exports and the trade embargo by the end of 1999.”

Failing to understand the Iraqi leader’s mindset and the context of his decisions, the intelligence community assumed that Iraq’s ongoing denial and deception operations regarding his alleged WMD programs, despite periods of genuine cooperation were ipso facto confirmation that Iraq was hiding WMD caches and programs. The 2002 NIE stated this explicitly as one of its fundamental key judgments: “We judge that we are seeing only a portion of Iraq’s WMD program, owing to Baghdad’s vigorous denial and deception efforts.”

It appears that the intelligence community never seriously considered the possibility that Baghdad was conducting its denial and deception operations to hide weakness. As the late Michael Handel correctly observed, deception “magnifies the strength and power of the successful deceiver” and that there is often an “inverse relationship between strength and incentive to use deception.”

Sherman Kent, a pioneer in methods of intelligence analysis, wrote after the Cuban Missile Crisis, “No estimating process can be expected to divine exactly when the enemy is about to make a dramatically wrong decision.” This is an unsettling proposition. In short, if we accept it, then we cannot expect to understand enemies who do not act and think like us. Furthermore, it is crucial to remember that Khrushchev’s decision to place missiles in Cuba, as well as Hussein’s decision to pursue a policy of “deterrence by doubt,” were wrong decisions only in retrospect. Each strategic course of action had a reasonable chance of success. They were not irrational acts.

**Alternative Explanations?**

Testifying before the Senate Armed Services Committee in January 2004, David Kay, the departing leader of the Director of Central Intelligence’s Iraqi Survey Group, announced what many already suspected about the pre-war intelligence on Iraqi WMD: “We were almost all wrong.” He went on to recount his daily discussions with analysts in the field:

… I had innumerable analysts who came to me with an apology that the world that we were finding was not the world they had thought existed and they had estimated. Reality on the ground differed in advance.

And never—not in a single case—was the explanation, “I was pressured to do this.” The explanation was very often, “the limited data we had led one to reasonably conclude this. I now see that there’s another explanation for this.”

Regrettably, the intelligence community, trapped by a mindset that assumed Iraq was hiding WMD, did not visualize other possible explanations for Iraqi behavior since they adopted what Richards J. Heuer called the hypothesis development strategy of “satisficing.” In “satisficing”, analysts selected the most satisfactory hypothesis or explanation that the evidence seemed to support and failed to consider evidence that did not support their hypothesis.

A number of alternative analytical techniques exist within the intelligence community that would have assisted analysts in developing a more accurate estimate of Iraqi intentions and capabilities.
These alternative analytical techniques are designed to “reveal unconscious analytical assumptions or to challenge weak evidence or logic and to consider alternative hypotheses or outcomes even in the absence of convincing evidence.” This menu of alternative analytical techniques includes placing analysts in the role of an adversary, devil’s advocacy, brainstorming, “what-if” analysis, alternative futures analysis and analysis of competing hypotheses. However, some of these approaches are arcane, can cause friction in the analytical ranks and perhaps most importantly are resource intensive. As a result, the intelligence community cannot use these techniques for every intelligence question. Nevertheless, given that Iraq was one of the two possible major theaters of war that the Department of Defense planned for, that we had been conducting low-level combat operations there since 1991, and that Iraq’s WMD capability was an enduring matter of high concern, it is hard to argue that this intelligence problem did not merit resource intensive competitive analytical techniques.

All the techniques listed above offer distinct analytical advantages and disadvantages. However, analysis of competing hypotheses would have provided analysts the best alternative analytical technique for coping with the Iraqi WMD puzzle. Analysis of competing hypotheses is a structured eight-step process that starts with a full set of possibilities, measures evidence for its diagnostic value and seeks evidence not to confirm hypotheses but refute them. This time consuming but exceptionally thorough analytical procedure would have forced analysts to consider a full range of explanations, more closely evaluate the quality of the evidence and integrate considerations of the strategic mindset of the Iraqi leadership.

So, what might a full range of possible hypotheses or explanations have looked like? Here are five possible explanations that analysts could have used to shape their analytical efforts. Hypothesis one reflects the judgment of the 2002 NIE.

1) Iraq has fully reconstituted its WMD programs and maintains stockpiles of prohibited weapons.

2) Iraq has not reconstituted its WMD programs but maintains prohibited stockpiles of biological and chemical weapons.

3) Iraq has not reconstituted its WMD programs and does not maintain prohibited stockpiles of weapons.

4) Iraq has partially reconstituted its chemical and biological programs and maintains prohibited stockpiles of weapons.

5) Iraq has not reconstituted its WMD programs but inadvertently maintained some prohibited stockpiles of biological and chemical weapons.

With these hypotheses as an analytical starting point, analysts would then have captured all significant evidence for and against each hypothesis, considered the diagnostic value of the evidence, deleted evidence without diagnostic value, proceeded to try to disprove each hypothesis and finally, considered how sensitive the hypotheses were to a few critical bits of evidence. Then analysts would rank the relative likelihood of the remaining hypotheses. Finally,
analysts would have determined milestones for further information and evaluation. In other words, each hypothesis would have remained open until disproved. While this procedure would not have assured a correct assessment, it would have placed contentious evidence such as the now notorious aluminum tubes and questionable single sources such as Curveball under scrutiny and by simultaneously maintaining a number of plausible hypotheses, it might have introduced a realistic degree of ambiguity and uncertainty into the WMD intelligence assessment.\textsuperscript{26}

**Conveying Uncertainty and Ambiguity to Policy Makers**

The WMD Commission, as well as Senate Select Committee on Intelligence, correctly took the intelligence community to task for failing “to accurately or adequately explain to policy makers” the uncertainties behind the judgments in the October 2002 National Intelligence Estimate.\textsuperscript{27} Senator Bob Graham, a member of the Select Committee on Intelligence, later speculated in his book *Intelligence Matters* about how the DCI might have effectively communicated to President Bush a realistic degree of uncertainty and ambiguity.

> What a difference it might have made if Director Tenet had told President Bush in September of 2002, “Mr. President, I am, of course, going to give you our best assessment of the situation in Iraq….But I must tell you the limits of our knowledge. Most of what I will tell you, particularly on Iraq’s capability to utilize weapons of mass destruction…is predicated on historical information. We have no human penetration inside Iraq and, therefore, have no independent means for independent, current verification.”\textsuperscript{28}

Uncertainty is an inherent feature of estimates. If policy makers knew what they needed to know on a particular topic an intelligence estimate would be unnecessary. So while the 2002 NIE presented a level of certainty that was not consistent with the evidence, simply telling the policy makers that the evidence is uncertain, ambiguous and incomplete, as Senator Graham suggests, is not enough. Analysts must make judgments based on the evidence at hand. The problem was not that the 2002 NIE contained judgments—intelligence analysts are paid to make judgments—but it did not make clear the distinction between facts and reasonable analytical judgments. They conflated the two and created a sense of absolute certainty that was absolutely unwarranted. Analysts should have followed Colin Powell’s guidance to his intelligence staff: “Tell me what you know. Tell me what you don’t know. Tell me what you think.”\textsuperscript{29} The intelligence community in October 2002 did not make these critical distinctions.

**Conclusion**

The intelligence community, trapped by a mindset that assumed Iraq was hiding WMD, narrowly pursued only one working hypothesis devoid of political or cultural context, and consequently never considered other possible explanations for Iraqi behavior. However, as already noted at the outset of this essay, even if the intelligence community had placed its assessment of Iraq’s WMD program in a strategic and political context and simultaneously explored a number of plausible hypotheses, it is improbable that they would have unequivocally concluded with the clarity that hindsight provides that Iraq did not have WMD. Nevertheless, if the intelligence community had taken a comprehensive approach that included a consideration of the Iraqi leadership’s mindset
and a competitive analysis of a range of hypotheses, it is likely that they would have produced a
more accurate, nuanced and informative intelligence product for policy makers.

Notes

   247–249.

2. Laurence H. Silberman and Charles S. Robb, The Commission on the Intelligence
   Capabilities of the United States Regarding Weapons of Mass Destruction: Report to the

   2002), i.

4. This short discussion of hindsight bias is based on Richards J. Heuer’s writings in Psychology
   of Intelligence Analysis, (Washington, D.C.: Center for the Study of Intelligence, 1999), 161–71

5. National Intelligence Council, Iraq’s Continuing Program for Weapons of Mass Destruction:
   Key Judgments (from the October 2002 NIE),
   Robb, Report to the President, 147–156.

6. White House, President Delivers State of the Union Speech, January 28, 2003,

7. Silberman and Robb, Report to the President, 52–79. Select Committee on Intelligence,
   United States Senate, Report on the U.S. Intelligence Community’s Prewar Intelligence

8. Silberman and Robb, Report to the President, 80–112. Select Committee on Intelligence,
   Prewar Intelligence Assessments on Iraq, 143–187.

9. Silberman and Robb, Report to the President, 113–131. Select Committee on Intelligence,
   Prewar Intelligence Assessments on Iraq, 195–215.

10. Silberman and Robb, Report to the President, 132–147.

11. Paul Pillar, “Intelligence Policy and the War in Iraq,” Foreign Affairs 85, no. 2 (March/April

12. Richard K. Betts, “Politicization of Intelligence: Costs and Benefits,” in Paradoxes of
    Strategic Intelligence: Essays in Honor of Michael Handel, Richard K. Betts and Thomas G.


27. Select Committee on Intelligence, *Prewar Intelligence Assessments on Iraq*, 16.


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