
Intelligence Analysis Today and Tomorrow¹

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The failure to fully anticipate or prevent the 11 September 2001 (9/11) terrorist attacks and the failure to come close to correctly assessing the true state of Iraq's Weapons of Mass Destruction (WMD) programmes both had catastrophic consequences. As a result, intelligence analysts have found their tradecraft subjected to the kind of public scrutiny previously reserved for the operational side of intelligence. In this environment a number of possible lessons have been suggested. This article discusses several of these and cautions that some are more apparent than real and that almost all proposed reforms contain within them the seeds of dilemmas that will need to be addressed if the reforms are to have optimum impact.

Analysis lies at the heart of intelligence. While technological tools can assist enormously, analysis remains an intellectual process based on the application of human thought and judgement. It is an art assisted by science rather than a science in itself. This means that many of the lessons, challenges and dilemmas that arise from the 11 September 2001 (9/11) and Iraq cases are, at one level, simply contemporary examples of problems that arise, at least in part, from the limitations inherent in human cognition. As intelligence analysis has moved from being a profession towards becoming a discipline, and the body of shared knowledge underpinning it has grown, so awareness of the dimensions of these problems and of possible remedies has spread.² Of central importance in this respect has been the work of Richards J. Heuer Jr. on the psychology of intelligence failure, outlining the

¹ This is a revised version of a paper given at the *Australia's Strategic Futures* Conference held in Adelaide Town Hall, October 2008 and organised by the Flinders International Asia Pacific Institute and the Defence Science and Technology Organisation. I would like to thank Dr Andrew O'Neil for the invitation to speak at the conference, and an anonymous reviewer from *Security Challenges* for helpful comments on the earlier version.

² On the profession's moves towards becoming a discipline, see, Rebecca Fisher and Rob Johnston, 'Is Intelligence Analysis a Discipline?', in Roger Z. George and James B. Bruce (eds.), *Analyzing Intelligence: Origins, Obstacles, and Innovations* (Washington, DC: Georgetown University Press, 2008), pp. 55-68. They define a discipline as: "a type of profession, but one in which specialized knowledge and rigorous preparation are operationalized by the introduction of formal or informal governing bodies that are responsible for developing rules of a mandatory or voluntary nature that serve to guide, inform, and ensure the highest possible quality professional conduct and activity. Disciplines are professions that retain the collective wisdom of practitioners and establish standards for archiving and accessing that knowledge. Disciplines distinguish themselves by externally and internally derived licensing and credentialing practices, ethical standards, and continuing education requirements." See pp. 55-6. See also, Stephen P. Marrin and Jonathan D. Clemente, 'Modeling an Intelligence Analysis Profession on Medicine', *International Journal of Intelligence and Counterintelligence* vol. 19, no. 4 (2006), pp. 642-65.

various types of cognitive bias and suggesting ways in which these might be reduced or even eliminated.³ However, awareness of the risk of cognitive bias, and of other psychological roots of intelligence failures, have not of themselves been sufficient to eliminate their occurrence. Hence, the question of the psychology of intelligence failure pervades much of the discussion that follows.

Post-9/11 'war on terror' intelligence faces not just these contemporary variants of familiar challenges, but a further set of challenges that arise from the nature of the target itself. Today, analysts work in a much-changed global security environment characterised by the diffuse, evolving and often ambiguous nature of threats. The fluid nature of the terrorism confronting states and the impact of globalisation on the terrorist enterprise mean that the contemporary threat from terrorism does not share any of the helpful 'bounded' characteristics of earlier state-based threats.

In a 1994 article Joseph Nye Jr. distinguished between 'secrets' and 'mysteries'. For Nye: "A secret is something that can be stolen by a spy or discerned by a technical sensor ... A mystery is an abstract puzzle to which no one can be sure of the answer."⁴ Whereas the Cold War generated more 'secrets' than 'mysteries', the current international security environment is characterised by the number of significant mysteries that confront intelligence analysts. Moreover, 'mysteries' are things that "are contingent on and depend in part on our actions."⁵ Hence, the nature of contemporary 'mysteries' is made more complex still because, for example, the actions of Western military and security forces in Iraq and Afghanistan are creating a highly dynamic environment in response to which mysteries are constantly mutating.

Collection techniques that worked well in a Cold War context are not easily transferred to this context. Recruiting agents within al-Qaeda is highly problematic for a number of reasons, attempting to infiltrate it an even more daunting task for Western agencies. As a former CIA operative explained with regard to infiltrating Islamic fundamentalist groups:

The CIA probably doesn't have a single truly qualified Arabic-speaking officer of Middle Eastern background who can play a believable Muslim fundamentalist who would volunteer to spend years of his life with shitty food and no women in the mountains of Afghanistan. For Christ's sake,

³ Richards J. Heuer Jr., *Psychology of Intelligence Analysis* (Washington, DC: CIA, Center for the Study of Intelligence, 1999). Available at <<https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/psychology-of-intelligence-analysis/index.html>> [Accessed 2 February 2009].

⁴ Joseph S. Nye, Jr., 'Peering into the Future', *Foreign Affairs*, vol. 73, no. 4 (1994), pp. 82-93. Quote at p. 88.

⁵ Gregory F. Treverton and C. Bryan Gabbard, *Assessing the Tradecraft of Intelligence Analysis* (Santa Monica: RAND Corporation, 2008), p. 4.

most case officers live in the suburbs of Virginia. We don't do that kind of thing.⁶

While in the past the CIA has attempted to overcome these limitations (by, for example, planting fake rocks packed with listening devices in the Pakistani desert to compensate for the relative absence of Human Intelligence—HUMINT⁷), it has had to rely to too great a degree on satellites—useful during the Cold War for penetrating secrets, but not designed to unravel ‘mysteries’. As former Director of Central Intelligence (DCI) Richard Helms reflected:

This idea that photographic satellites, satellites that pick up electronic emissions, satellites that provide communications, and all the rest of it—all those technical things—they're Jim-dandy when it comes to photographing missile installations, listening to missile firings, checking on telemetry, looking at the number of tanks being produced in certain factories—in other words, bean-counting mostly. Great. But once you eliminate the issue of bean-counting, what good do those pictures do you?⁸

Neither can satellites and signals intelligence (SIGINT) necessarily compensate for the absence of HUMINT by unlocking every kind of ‘secret’. Hence, al-Qaeda's key figures, Osama bin Laden and Ayman al-Zawahiri remain at large despite the most intelligence-intensive manhunt in the history of the world.

This state of affairs contributes to another problem. Not only do analysts not have decades of ‘intelligence learning’ on their adversary to draw on, as came to be the case by the latter stages of the Cold War, in addition different experts are unable to agree on key issues regarding the evolution of al-Qaeda to this point. Given this, it should be no surprise to learn that questions concerning al-Qaeda's future trajectory, the level of threat it will pose in the future, whether the rate of radicalisation and susceptibility to al-Qaeda's message on the part of young Muslim men will rise or decline, whether the organisation has already peaked, whether it is an organisation at all, how far ‘jihad’ is leaderless, and so on, can be nothing other than

⁶ Ronald Kessler, *The CIA at War: Inside the Secret Campaign Against Terror* (New York: St Martin's Press, 2003), p. 140. There was little improvement in the years that followed. As former Chairman of the Senate Select Committee on Intelligence Bob Graham reflected in 2008: “We have too few individuals within our intelligence operations who speak languages, understand cultures, and are able to contextualize what we're seeing and hearing. On its sixtieth anniversary in 2007, the CIA released information indicating that less than 4 percent of its current case officers could speak with proficiency any of the languages of the Middle East and Central Asia. Only 8 percent of new hires have the ethnic background and language skills demanded by counterterrorism work.” Bob Graham, *Intelligence Matters: The CIA, the FBI, Saudi Arabia, and the Failure of America's War on Terror* (Lawrence: University of Kansas Press, 2008), p. xvii.

⁷ Adrian Levy and Catherine Scott-Clark, *Deception, Pakistan, the United States and the Global Nuclear Weapons Conspiracy* (London: Atlantic Books, 2008), pp. 92-3.

⁸ Loch K. Johnson, ‘Spymaster Richard Helms: An Interview with the Former US Director of Central Intelligence’, *Intelligence and National Security*, vol. 18, no. 3 (2003), p. 32.

'mysteries'.⁹ The Australian Flood Report captures well the difficulties facing analysts in this environment in describing al-Qaeda as; "adaptive and amorphous, characterised by loosely linked groups within which cells operate semi-autonomously, and is without settled structure, methodology or territory."¹⁰

Lessons, Challenges and Dilemmas for Intelligence Analysis

Given this more challenging environment, it is essential that the appropriate lessons are learned from the experiences of 9/11 and the Iraqi WMD failure. Both the 9/11 Commission in the United States and national inquiries into the case of Iraqi WMD in the United States, United Kingdom and Australia made recommendations and/or drew lessons from these experiences. At the same time as re-emphasising best practice in tradecraft, these inquiries also served to highlight a number of already existing dilemmas confronting intelligence analysts. So many possible lessons, some more apparent than real, arise out of these cases that the space available here precludes consideration of all of them. Instead, several of the most significant lessons and dilemmas are discussed below.

"CONNECTING THE DOTS"

This was the clarion call of the 9/11 Commission's *Final Report*. On three separate occasions it used the "connecting the dots" metaphor to explain failures to share information within the US intelligence 'community' and analytical failures in anticipating terrorist intent.¹¹

However, the 'dots' metaphor has given rise to more heat than light. It assumes that all the dots in a given puzzle are present and the task facing the analyst is simply to join them in order to solve the puzzle. In reality, the intelligence analyst is more likely to be confronted by a picture that is unclear precisely because it contains too few dots. The job of the analyst is to make sense of the picture that sight of the missing dots would bring—i.e. reveal the 'full picture'. If the full picture was readily available, constructing it would not require the expertise of the analyst or heavy investment in collection systems—it would be readily available through open source intelligence (OSINT).

⁹ A good illustration of such fundamental disagreement can be found in Bruce Hoffman's review of Marc Sageman's *Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia, PA: University of Pennsylvania Press, 2008) in *Foreign Affairs*, vol. 87, no. 3 (2008), pp. 133-8, and the subsequent exchange between Sageman and Hoffman in *Foreign Affairs*, vol. 87, no. 4 (2008), pp. 163-6.

¹⁰ Philip Flood, *Report of the Inquiry into Australian Intelligence Agencies* (Canberra: Department of the Prime Minister and Cabinet, 2004), <http://www.dpmc.gov.au/publications/intelligence_inquiry/docs/intelligence_report.pdf> [Accessed 2 February 2009], p. 11.

¹¹ National Commission on Terrorist Attacks, *The 9/11 Commission Report: The Full Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: W. W. Norton & Co., 2004), pp. 400, 408, 416-17.

If any good has come of the 'connecting the dots' metaphor it has been to help focus attention on the importance of the analyst-collector relationship and the question of the extent to which analysts should have an input into targeting of collection.¹² One key lesson of the recent past is that analysts cannot analyse that which is not there. A more prominent role for independent or competitive analysis (discussed below) will require a closer working relationship between collectors and analysts. The metaphor also focuses attention on the importance in finished intelligence of indicating the degree to which analysis relies on assumptions based on gaps in knowledge and understanding, and how far on judgements rooted in existing dots. To conclude discussion of the dots metaphor, the problem with analysis over Iraqi WMD was that the original picture contained few dots. In response analysts filled in the gaps with too many of their own dots. These did not exist in the actual, but largely concealed, picture, and so the picture analysts constructed was inaccurate. They constructed a parallel reality on the basis of their own assumptions without making adequately clear the extent to which they did so.¹³

IMAGINATION: A TWO-EDGED SWORD

As a consequence of this failure to "connect the dots" the 9/11 Commission called for, "a way of routinizing, even bureaucratizing, the exercise of imagination."¹⁴ However, the answer to the question of how far pre-9/11 intelligence on the terrorist threat to the United States suffered from a lack of imagination is an open one. After all, as the 9/11 Commission reported, as far back as July 1995 a National Intelligence Estimate (NIE) predicted future terrorist attacks against the United States, including within the United States, and warned that the danger of this happening would increase. It even

specified as particular points of vulnerability the White House, the Capitol, symbols of capitalism such as Wall Street, critical infrastructure such as power grids, areas where people congregate such as sports arenas, and civil aviation generally.¹⁵

However, it failed from this point to ask the right questions about the gaps in its knowledge. This meant that on the eve of the 9/11 attacks:

There were no complete portraits of [bin Laden's] strategy or of the extent of his organization's involvement in past terrorist attacks. Nor had the intelligence community provided an authoritative depiction of his

¹² See, James B. Bruce, 'The Missing Link: The Analyst-Collector Relationship', in George and Bruce (eds.), *Analyzing Intelligence*, pp. 191-210.

¹³ On this, see also Mark M. Lowenthal, 'Towards a Reasonable Standard for Analysis: How Right, How Often on Which Issues?', *Intelligence and National Security*, vol. 23, no. 3 (2008), pp. 303-15.

¹⁴ 9/11 Commission, *Final Report*, p. 344.

¹⁵ *Ibid.*, p. 341.

organization's relationships with other governments, or the scale of the threat his organization posed to the United States.¹⁶

Hence, it is possible to identify analytical short-comings here, but these seem secondary to failures of structure, management and information-sharing in explaining the failure to prevent the attacks. Should it have been possible to anticipate (or imagine) that terrorists would seek to fly passenger aircraft into high-profile buildings? Analysts did have the precedent of the Christmas Eve 1994 hijacking of Air France flight 8969 at Houari Boumediene Airport in Algiers to work from. From here the Algerian Armed Islamic Group (GIA) hijackers had intended to either explode the aircraft over Paris or fly it into the Eiffel Tower. At the same time, in academic journals, terrorism experts had begun to warn about the confluence of religious terrorism and the 'amateurisation' of terrorism and its implications.¹⁷ Moreover, and perhaps more famously, the 1994 Tom Clancy novel, *Debt of Honor*, featured a Boeing 747 passenger aircraft being flown into the capitol building. Should analysts have been expected to piece together such fragments and through doing so anticipate the 9/11 attacks with greater specificity than the July 1995 NIE was capable of? We need to bear in mind Roberta Wohlstetter's observation in relation to her study of the apparent failure to anticipate the Japanese attack on Pearl Harbor, that: "After the event ... a signal is always crystal clear; we can now see what disaster it was signalling since the disaster has occurred. But before the event it is obscure and pregnant with conflicting meanings."¹⁸

At the same time, 'imagination' is a two-edged sword, and can lead analysts up blind alleys more often than result in the foiling of major terrorist plots. To take one recent example, at the end of 2003 the US Department of Homeland Security issued a terror alert which raised the US national threat level to high ('orange'), resulting in long flight delays and cancellations of flights into the United States from the United Kingdom, France and Mexico. The intelligence underpinning this decision was based on a rise in the level of intelligence 'chatter' picked up electronically, which is itself used as a gauge of terrorist activity. In addition, the Christmas holiday period was already considered a high-risk time because it was when 'shoe bomber' Richard Reid had attempted to ignite his shoes—during a Paris-Miami flight on 22 December 2001. However, the alert was also attributable to CIA analysts' belief that al-Qaeda was sending secret messages via Arabic

¹⁶ *Ibid.*, p. 342.

¹⁷ Bruce Hoffman, 'Intelligence and Terrorism: Emerging Threats and New Security Challenges in the Post-Cold War Era', *Intelligence and National Security*, vol. 11, no. 2 (1996), pp. 207-23. Having said this, experts in academia also failed to anticipate 9/11—those working in the fields of international relations and international security tending, like the Bush Administration prior to 9/11, to focus on the potential threat posed by the rise of China. See, Monica Czwarno, 'Misjudging Islamic Terrorism: The Academic Community's Failure to Predict 9/11', *Studies in Conflict and Terrorism*, vol. 29 (2006), pp. 657-78.

¹⁸ Roberta Wohlstetter, *Pearl Harbor: Warning and Decision* (Stanford, CA: Stanford University Press, 1962), p. 387.

satellite television channel al-Jazeera which gave details of specific flights to be hijacked and targets into which they would be flown.¹⁹ This belief arose from their use of steganography, a process used to divine messages hidden in television images. Head of Homeland Security, Tom Ridge, later conceded that this approach to intelligence was, “bizarre, unique, unorthodox, unprecedented”, adding that, “speaking for myself I’ve got to admit to wondering whether or not it was credible.”²⁰

THE NEED TO INSTITUTIONALISE INDEPENDENT OR COMPETITIVE ANALYSIS

One clear way in which imagination can be routinised is through the incorporation of alternative or competitive analysis within the analytic process. This emerged as a recommendation of the 2005 report, *The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction* (the Silberman-Robb report), and was also a feature of post-Butler report reforms to the UK intelligence structure. In the context of Iraq, this was a necessary step. Dissenting opinions over Iraq were not welcomed by intelligence managers in either the United States or United Kingdom during 2002-03. One of the most important lessons of the Iraq failure is that dissenting opinions need to be positively fostered so as to ensure that at each stage of the analytical process alternative hypotheses have been carefully considered before being discarded and that prevailing orthodoxy does not fill gaps in knowledge without being subjected to rigorous scrutiny.

As the Silberman-Robb report recognised, there are dangers if this becomes ritualistic and analysts come to wearily accept the input of the ‘departmental devil’s advocate’. It recommended that; “the Intelligence Community should not rely upon specialized ‘red team offices’, or even individual ‘red team exercises’ to ensure there is sufficient independent analysis. Rather, such independent analysis must become a habitual analytic practice for *all* analysts.”²¹

The Iraqi WMD case in the United Kingdom and United States represented the antithesis of an environment that welcomed alternative analysis. In the United States, for example, the CIA tended to deny information to more specialist agencies that could have provided input that challenged existing

¹⁹ Sara Kehaulani Goo, ‘List of Foiled Plots Puzzling to Some’, *Washington Post*, 23 October 2005.

²⁰ Gary Younge and Vikram Dodd, ‘CIA Blunder on al-Jazeera “Terror Messages”’, *The Guardian*, 29 June 2005.

²¹ The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, 31 March 2005, [Silberman-Robb, *Report*] <http://www.wmd.gov/report/wmd_report.pdf> [Accessed 11 February 2009], p. 407.

assumptions.²² Known dissenting views from other parts of the Intelligence Community were not always included in assessments where they could have been expected to challenge the dominant assumption.²³ In some cases, assessments that conformed to the dominant assumption bypassed specialist agencies that were in a position to challenge them. In short, this was precisely the kind of case where alternative analysis was most sorely needed. As Jack Davis has pointed out: “As a rule, the more important the intelligence issue and the greater the uncertainty and information gaps, the greater need for incorporating alternative explanations and projections into the text of an assessment.”²⁴

However, the institutionalisation of competitive or alternative analysis does pose dilemmas to which there are no easy answers. How should it be incorporated as a natural part of the analytic process without immobilising the analytical effort? If specialised ‘red teams’ are problematic, then so too is the idea that reliance can be placed on all analysts performing a form of individualised competitive analysis—not all possess equal degrees of expertise in all dimensions of a given question and they cannot be guaranteed to overcome the cognitive biases that can contribute to failure.

INFORMED CONTEXT IS VITAL

The intelligence failure over Iraq was in part a consequence of a tendency to view the question of Iraqi WMD in excessively technical, ‘bean-counting’, terms without considering wider questions of strategic environment, leadership style and psychology that might have generated an alternative hypothesis to the dominant assumption. This is a shortcoming to which the Butler Report in the United Kingdom and the Australian Flood Report drew attention.²⁵

This reflected a lack of expertise which arose from the environment created by the sanctions regime of the 1990s and the withdrawal of the United Nations Special Commission (UNSCOM) in 1998, resulting in a paucity of reliable HUMINT coming out of Iraq. In this sense, then, the analytical failure over Iraq went beyond WMD and extended to an understanding of the Iraqi

²² US Senate Select Committee on Intelligence [SSCI], *Report on the US Intelligence Community's Prewar Intelligence Assessments on Iraq* (Washington, DC: Government Printing Office, 2004), pp. 27-8.

²³ *Ibid.*, pp. 128-9.

²⁴ Jack Davis, ‘Why Bad Things Happen to Good Analysts’, in George and Bruce (eds.), *Analyzing Intelligence*, pp. 157-70. Quote at p. 168.

²⁵ Flood, *Report of the Inquiry into Australian Intelligence Agencies*, p. 26. Review of Intelligence on Weapons of Mass Destruction, 14 July 2004, [Butler, *Report*] <<http://www.archive2.official-documents.co.uk/document/deps/hc/hc898/898.pdf>> [Accessed February 2009], para. 459. In under-stated style, this noted that: “The JIC [Joint Intelligence Committee] may, in some assessments, also have misread the nature of Iraqi governmental and social structures. The absence of intelligence in this area may also have hampered planning for the post-war phase”.

leadership's strategic thinking and of broader Iraqi culture(s).²⁶ It is surprising that, pre-war, no one seems to have offered as a hypothesis the explanation for Iraq's behaviour in the context of the 'missing WMDs' that emerges from the post-war Iraq Survey Group Report.²⁷ This found that Saddam's WMD bluff was primarily motivated by fear of Iran, borne out of the manner of the ending of the 1980-88 Iran-Iraq War and the far greater strategic depth that Iran enjoyed over Iraq. Such behaviour would have been understood as being rational by many International Relations theorists, and should have emerged as a possibility in the analysis prepared by regional specialists. The fact that Iraq existed in a rough neighbourhood with potentially powerful enemies (Iran and Israel) and, after 1990, few real friends, was no secret. That the WMD bluff was not seriously suggested as an option represents a failure on the part of the analytic community. But it is also symptomatic of a wider failure. Where were the academic experts suggesting this possibility? In short, there seems to have been an inadequate understanding of the world as seen from the perspective of the Iraqi leadership.²⁸

The Silberman-Robb report recognised that there had been gaps in country-specific and regional expertise, gaps that could not be filled by Imagery Intelligence (IMINT) or SIGINT. These offered no substitute for informed and nuanced strategic analysis from regional or country experts. Hence, it recommended that in future, analysts' opportunities to live and travel overseas should be expanded, warning that:

Failure to think creatively about how to develop an analytic cadre with a deep understanding of cultures very different from our own will seriously undermine the Community's ability to respond to the new and different intelligence challenges of the 21st century.²⁹

STRATEGIC VS. TACTICAL INTELLIGENCE

This leads us to the endemic tension between the ongoing demands of policymakers for tactical intelligence and the need for analysts to have the space in which to undertake more long-term strategic analysis. This is a dilemma that was implicitly recognised by the Flood Inquiry in Australia and explicitly by the Silberman-Robb Commission in the United States, which advised that the, "constant pressure to write makes it hard for analysts to find time to do the research—and thinking—necessary to build the real

²⁶ This is, in effect, the argument of Jonathan Steele's *Defeat: Why They Lost Iraq* (London: I. B. Tauris, 2008).

²⁷ *Comprehensive Report of the Special Advisor to the DCI on Iraq's WMD*, October 2004, <https://www.cia.gov/library/reports/general-reports-1/iraq_wmd_2004/index.html> [Accessed 2 February 2009].

²⁸ Opponents of the war did, of course, suggest this possibility, but their views were discounted precisely because they opposed the war. This begs a wider question, discussed below, of how the opinions of outsiders can, and how far they should, be factored into the intelligence process.

²⁹ Silberman-Robb, *Report*, p. 398.

expertise that underlies effective analysis.”³⁰ However, it is a problem that appears to be quite resistant to resolution. The nature of intelligence requirements in the context of the commitment of US, UK and Australian forces in Iraq and Afghanistan has served to reinforce what has been termed the “tyranny of the immediate” which militates against developing strategic analyses that contribute to a deeper understanding of key issues.³¹ For many analysts, the ‘question-answering’ tactical analysis that policymakers have asked of them is less their *raison d’être* than strategic analysis. A recent study of the US analytic community has revealed a sense of disquiet on the part of analysts that what they are being asked to undertake is merely ‘reporting’ rather than analysis.³² To return to the distinction between ‘secrets’ and ‘mysteries’, unravelling mysteries largely depends on the detailed knowledge that is generated via strategic rather than tactical analysis. This is the essence of the ‘value-added’ that an intelligence community sees itself as existing to provide.

This points to another important consideration in assessing the nature of analytic failures in intelligence: the analytic process is inseparable from the organisational environment in which it occurs. As William Odom reminds us:

Even the best analysts must work within organizations locked in preconceptions and strong normative biases. Inevitably they will absorb many of those biases, just as historians inexorably interpret the past through the prisms of contemporary problems, ideologies, political and social beliefs, and personal preferences about how the world ‘out to be’.³³

DRAW MORE FREELY ON OUTSIDE EXPERTISE AND OPEN SOURCES

This tension may also point to another lesson of the recent past, the utility of drawing more freely and regularly on outside expertise and open sources. This was recognised by Joseph Nye in the mid-1990s as being one constructive response to the rise in the ratio of ‘mysteries’ to ‘secrets’ that he noticed even then. He wrote that:

In a sense, intelligence analysts are like people assembling a jigsaw puzzle who have some nifty nuggets inside a box but need to see the picture on the cover to understand how they fit. Those pictures are drawn by outsiders in universities, think tanks, businesses, nongovernmental organizations and the press. National estimates on many subjects today greatly benefit from the insights of outside analysts. It is important for intelligence analysts to keep up with open literature. Managers should also look to outside training and use consultants and conferences. And in estimates, it helps to describe the range of academic views so that policymakers can calibrate where the

³⁰ *Ibid.*, p. 403.

³¹ Trevorton and Gabbard, *Assessing the Tradecraft of Intelligence Analysis*, p. xi.

³² *Ibid.*, pp. 9, 11-12.

³³ William E. Odom, ‘Intelligence Analysis’, *Intelligence and National Security*, vol. 23, no. 3 (2008), p. 327.

intelligence community stands. In some cases, outside experts may even answer key estimative questions or produce parallel estimates.³⁴

Besides providing a much more apt metaphor than ‘connecting the dots’, Nye’s suggestion seems like a common-sense one for the contemporary security environment. It was echoed in the 2005 Silberman-Robb Report,³⁵ and was also a suggestion to arise out of a 2008 RAND Corporation study on the state of analytical tradecraft in the US intelligence ‘community’. Its authors suggested that:

As the Intelligence Community is increasingly expected to focus on near-term crisis or “hot-button” issues such as terrorism, its breadth and depth in other areas, perhaps even those of immediate interest, will suffer. In times of tight budgets, it is unlikely that the Intelligence Community will be able to grow enough and develop or maintain the skills to do everything—to deal with short-term critical problems while covering the rest of the world and its various problems in depth. One way to deal with that problem is for the Intelligence Community to evolve into a much larger but distributed and “virtual community”—one that includes a much broader range of topical experts ... Another is for the intelligence community to accept a more supporting role, focusing on collecting secret information on selected problems that matter and leaving the synthesis and more extensive analysis of the world to others. Here, the Intelligence Community would become more of a “systems engineer” for a sophisticated set of knowledge and perspectives pertinent to an issue or a threat.³⁶

However, such suggestions run into the problem of intelligence community opposition to out-sourcing analysis which, as bureaucracies, they can be expected to resist. Instead, they are more likely to see suggestions such as these arising from bodies like RAND as simply self-serving. Nevertheless, further debate about how outside expertise can inform insider analysis is overdue. As the foregoing discussion suggests, such a development is no guarantee of success, but it will constitute an invaluable source of competitive analysis.

THE NATURE OF THE ANALYST-POLICYMAKER RELATIONSHIP

The intelligence-policymaker interface has long been viewed as the most frequent location of intelligence failure.³⁷ In this context, the case of Iraqi WMD has also revived the long-standing debate about the correct distance between analysts and customers, and whether the two should be separated by a ‘wall’. On one side of the debate stand those who emphasise that the purpose of intelligence organisations is to serve the policymaker and that the

³⁴ Nye, ‘Peering Into the Future’, p. 91.

³⁵ Silberman-Robb, *Report*, p. 396.

³⁶ Treverton and Gabbard, *Assessing the Tradecraft of Intelligence Analysis*, p. 17.

³⁷ The classic statement is Richard K. Betts, ‘Analysis, War, and Decision: Why Intelligence Failures Are Inevitable’, *World Politics*, vol. 31, no. 1 (1978), pp. 61-89, reprinted in Peter Gill, Stephen Marrin and Mark Phythian (eds.), *Intelligence Theory: Key Questions and Debates* (London, Routledge, 2008). See also, Richard K. Betts, *Enemies of Intelligence: Knowledge & Power in American National Security* (New York: Columbia University Press, 2007), esp. Ch. 2.

relationship should be close,³⁸ on the other stand those who see proximity as potentially compromising objectivity, thereby heightening the risk of politicisation.³⁹

Like failure, politicisation is both multifaceted and inevitable.⁴⁰ Hence, the risk of politicisation is omnipresent. Policy-makers naturally form their own policy preferences on the basis of ideology in advance of receiving intelligence analysis on an issue. They then seek supporting evidence for these preferences from the intelligence community, but also from multiple sources beyond it, and can be resistant to any intelligence that points to a different policy direction. There are many sources of information and analysis in the contemporary world and intelligence agencies do not have a monopoly on either. And, as Gregory Treverton has pointed out, policy-makers don't necessarily restrict themselves to cherry-picking. As the case of Iraq shows, they are also capable of growing their own cherries.⁴¹

Nevertheless, one way of reducing the risk of politicisation might be for analysts to consciously seek to 'know the customer'; their background, areas of interest and areas where they believe they have special expertise. If, as Richard Neustadt and Ernest May have argued, policy-makers base their decisions on formative experiences and decisions they took that served them well,⁴² awareness of these in the presentation of analysis could prove useful.

For example, formative experiences in UK Prime Minister Tony Blair's premiership included joining the Clinton Administration in the 1998 Operation Desert Fox air strikes on Iraq, and the military interventions in Kosovo and Sierra Leone in 1999. These clearly were a factor in his judgements over Iraq during 2002-03. Had they been asked to assess the likelihood of a successful and relatively bloodless occupation of Iraq (a key qualifier given that none was requested), intelligence analysts could have framed their analysis so as to emphasise the differences between Iraq and the cases of Kosovo and Sierra Leone. This begs the question of how far the analytic community should be on the 'front foot' in not only offering answers to the questions asked by customers, but to the questions they should have, but did not, ask. Whatever the answer, in an increasingly complex world, it makes little sense to erect false walls between policy-makers and analysts. Rather, in recognition of the risk of politicisation, analysts and managers

³⁸ For example, Michael Herman, *Intelligence Power in Peace and War* (Cambridge: Cambridge University Press, 1996).

³⁹ For example, Sherman Kent, *Strategic Intelligence for American World Policy* (Princeton: Princeton University Press, 1949), esp. pp. 195-201.

⁴⁰ Gregory F. Treverton has identified several variants in 'Intelligence Analysis: Between "Politicization" and Irrelevance', in George and Bruce (eds.), *Analyzing Intelligence*, pp. 91-104.

⁴¹ *Ibid.*, p. 95.

⁴² Richard E. Neustadt and Ernest R. May, *Thinking In Time: The Uses of History for Decision Makers* (New York: Free Press, 1988).

must ensure that the degree of uncertainty that underpins any judgement is clearly understood by policy-makers, and that they are as fully educated as their time and interest allow into the limitations of intelligence and proper role of estimative analysis.

AWARENESS OF THE RISK OF OVER-COMPENSATION FOR PAST FAILURES

There is no doubting the highly-charged political environment in which analytic judgements on Iraqi WMD were being made. In the United States, the analytic community worked in an environment where key Bush administration officials were making the case for war (i.e. that Saddam was a threat, he did possess WMD, and even that he had played a role in the 9/11 attacks) in public, in often apocalyptic terms. However, it should also be borne in mind that for the analytic community the failure had dimensions beyond the 'political'. In part, the majority belief of the analytic community, bordering on insistence, in Iraq's possession of WMD was a response to past 'failures'. As the Butler review in the United Kingdom concluded, the failure to accurately assess the state of Iraq's WMD programs at the time of the first Gulf War in 1991 could have been significant.⁴³ Moreover, in the United States, the 'failure' to 'join the dots' over 9/11 haunted the Intelligence Community. In other words, analysts were (consciously or not) over-compensating for previous failures, and in so doing were requiring proof that Iraq *did not* have WMD, rather than requiring conclusive proof that it did.⁴⁴

This could well help explain the tenacity with which the majority of the US intelligence community stuck to its belief in the existence of Iraqi WMD despite the emergence of evidence to the contrary. Emerging evidence that conflicted with the dominant assumption was dismissed as part of a sophisticated Iraqi denial and deception programme. Worse still, the Silberman-Robb Commission found that, in classic 'wilderness of mirrors' fashion: "in some instances, analysts went even further, interpreting information that contradicted the prevailing analytical line as intentional deception, and therefore as *support* for the prevailing analytical view."⁴⁵

Consideration of this tendency may also be useful in understanding the November 2007 NIE on *Iran: Nuclear Intentions and Capabilities*. This represented a reversal of previous analyses to the effect that Iran was working flat out to develop nuclear weapons by judging, "with high confidence that in fall 2003, Tehran halted its nuclear weapons program". How far was this a response to the 'failure' of the October 2002 Iraqi WMD NIE? The answer is unknowable to outsiders at the present time. However, the fact remains that the NIE appeared at a time when it seemed that the Bush Administration might well be considering a military strike to halt the

⁴³ Butler, *Report*, para. 112.

⁴⁴ See Silberman-Robb, *Report*, pp. 168-9.

⁴⁵ *Ibid.*, p. 73.

Iranian programme, and had the effect of undercutting the Administration—further weakening support amongst US allies for a harsh line on Iran and in effect ruling out the military option. However, it did not affect the stance of key Bush Administration officials. Vice-President Cheney continued to argue in public that that Iran was, “heavily involved in trying to develop nuclear weapons enrichment, the enrichment of uranium to weapons-grade levels”. Moreover, CIA Director Michael Hayden distanced himself from the report, issued in his name, when he stated on NBC’s *Meet the Press* that he believed Iran was still trying to develop a nuclear weapon.⁴⁶

ENSURING THAT ANALYTICAL TOOLS SERVE ANALYSIS AND DO NOT BECOME THE MASTER OF THE ANALYST

Finally, it is worth reflecting briefly on the potential benefits that the more extensive use of information technologies will bring to intelligence analysis in the future. Their increased use is a response to the glut of information that agencies today collect for analysis, an attempt to avoid overloading the analytical community. Anyone who has searched for a term on the internet and received thousands of largely irrelevant links in response will appreciate the importance of machine ordering and filtering of information. The Silberman-Robb Report highlighted two linked areas, machine translation of foreign languages and tools able to prioritise documents in their native language, where information technologies would continue to assist the analytical process as they advanced. The need for these is a response to the plain fact that it is difficult for agencies to recruit, train and retain sufficient linguists to satisfy their requirements (and that any attempt to compensate for a deficit in language specialists by rapid recruitment may have security implications). In addition, for the United States, with its global reach, it is not possible to predict with total confidence the language expertise that it will most need to draw on in the future, although this remains less of an issue for middle powers. In addition, Silberman-Robb pointed to the potential of:

software that uses mathematical operations, statistical computations, and relational analyses to cluster documents and other data by subject, emphasis, and association in order to identify documents that are similar even when the documents do not use the same key words. Other types of software algorithms can discern concepts within a text; some can depict relationships between ideas or between factual statements based on an understanding of the word’s meaning rather than merely searching for a word verbatim.⁴⁷

The potential that these technologies offer is obvious, but they are not a panacea. Perhaps tellingly, a 2008 RAND Corporation study of the analytical community in the United States reveals just as much concern that such tools are inadequate or limiting as that they will enhance the analytical

⁴⁶ Greg Miller, ‘CIA Chief says Iran Still Pursuing Nuclear Bomb’, *Los Angeles Times*, 31 March 2008.

⁴⁷ Silberman-Robb, *Report*, p. 397.

efforts of the future.⁴⁸ At one level this could well be a response to the analysts' loss of the monopoly on expertise that will result from the impact that new analytic tools will have on the way in which analysts work and, most importantly, the way in which they will bring about a shift in the location of institutional memory from the heads of analysts to a database accessible to all analysts—assuming, of course, that the compartmentalisation and reluctance to share information that was a hallmark of the 9/11 and Iraqi WMD cases will, in their wake, be overcome.

Conclusions

There are a number of lessons here, but also dilemmas. Almost every suggested reform contains within it the seeds of a dilemma that will need to be resolved if that reform is to have its optimum impact. Still, governments have paid close attention to the analytic process in the wake of national inquiries into the Iraq WMD failure. In the United Kingdom a new post of Professional Head of Intelligence Analysis was created, to work on the training of analysts, dissemination of best practice and on career management. The response to the 9/11 attacks and the Iraq failure in the United States has, of course, been more far-reaching. As well as replacing the DCI with a Director of National Intelligence (DNI) (a need the 9/11 Commission convinced itself of early in its inquiry), the post of Assistant Deputy DNI for Analytic Integrity and Standards was created. This led to the re-stating of 'IC Analytic Standards' and, largely reflecting the observations and recommendations of the Silberman-Robb Commission, stipulated "Proper Standards of Analytic Tradecraft". Analysis that met the necessary standard was that which:

1. Properly describes quality and reliability of underlying sources.
2. Properly caveats and expresses uncertainties or confidence in analytic judgments.
3. Properly distinguishes between underlying intelligence and analysts' assumptions and judgments.
4. Incorporates alternative analysis where appropriate.
5. Demonstrates relevance to US national security.
6. Uses logical argumentation.
7. Exhibits consistency of analysis over time, or highlights changes and explains rationale.
8. Makes accurate judgments and assessments.⁴⁹

⁴⁸ Treverton and Gabbard, *Assessing the Tradecraft of Intelligence Analysis*, pp. 11-12.

⁴⁹ Intelligence Community Directive Number 203: Analytic Standards, 21 June 2007, <<http://www.fas.org/irp/dni/icd/icd-203.pdf>> [Accessed 11 February 2009].

Ideally, closely following standards 1-7 will produce outcome 8. But, as Mark Lowenthal has noted, "an analyst could accomplish the first seven with a grade of 'Excellent' and still not achieve the eighth".⁵⁰

If the US and UK analytic communities had followed the guidance offered by Joseph Nye in the mid-1990s, the outcome of their analysis over Iraqi WMD may well have been very different. (Whether this would have prevented the 2003 war is a separate question, but at least analysts would have had the satisfaction of having got it right.) Nye cautioned that:

Estimators are not fortune-tellers; they are educators. Rather than trying to predict the future, estimators should deal with heightened uncertainty by presenting alternative scenarios. To be useful, estimates must describe not only the nature and probability of the most likely future paths, but they must also investigate significant excursions off those paths and identify the signposts that would tell us we are entering such territory.⁵¹

Having said this, despite the lessons of the recent past and despite the generation of multiple suggestions aimed at preventing a recurrence of 9/11 and the Iraqi WMD failure, given the current global climate, future failure is inevitable. In large part this is a consequence of the manner in which 'mysteries' are now more prevalent than 'secrets', a reverse of the situation that prevailed for most of the Cold War period and hence the one that intelligence agencies were best equipped to respond to. It is a consequence of the unfortunate fact that an understanding of the bases of past intelligence failure offers no guarantee that a future failure can be avoided. In part, it is also a consequence of how 'failure' has come to be defined and of the implications of the global nature of the 'war on terror'. In the past one source of US intelligence failures has been the simple fact of the agencies' breadth of coverage. As Loch Johnson has observed:

Consider the intelligence focus of the United States compared to New Zealand, or even Israel in its hostile setting. America's intelligence failures have been extensive in recent years, including (most painfully) the terrorist attacks on the World Trade Center and the Pentagon in 2001, the mistaken targeting of the Chinese embassy in Belgrade in 1999, and the inability to find the Iraqi leader Saddam Hussein in 1991, the Somali warlord Mohamed Farah Aidid in 1993, or the Al Qaeda leader Osama Bin Laden in 2001-2002. While New Zealand may falter from time to time in its efforts to track illegal Japanese fishing for albacore tuna in its seas, and Israel may suffer the more hurtful inability to anticipate the next suicide bombing, the tasks of the intelligence services in these smaller nations are much more focused and manageable.⁵²

In short, in seeking global coverage, US policymakers have at times expected too much from intelligence. The incidence of US intelligence

⁵⁰ Lowenthal, 'Towards a Reasonable Standard for Analysis', p. 308.

⁵¹ Nye, 'Peering Into the Future', p. 93.

⁵² Loch K. Johnson, 'Bricks and Mortar for a Theory of Intelligence', *Comparative Strategy*, vol. 22, no. 1 (2003), pp. 1-28. Quote at p. 3.

failure would be reduced if coverage were adjusted. However, the post-9/11 international security environment means that this is unlikely to happen. Moreover, this environment has created a dynamic in which it is difficult for middle-level powers to resist the pull of attempting a more global coverage—Johnson's point that smaller nations have more focused intelligence requirements is less true today for those middle-powers such as Australia which are frontline 'war on terror' partners. Although, whilst leader of the opposition, Kevin Rudd criticised the Howard government for focusing on the global 'war on terror' at the expense of the more pressing 'arc of instability' to Australia's immediate north, in government Rudd too has had to address and balance global and regional security considerations, as evidenced in his decision to deepen the Australian military commitment in Afghanistan.⁵³ All of which suggests a challenging future for analysts as they seek to balance a growing number of competing demands and deliver timely analysis within limited budgets and with limited time. This suggests possible sources of future failure, but also what needs to be done to help facilitate analytic 'success'.

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⁵³ See, Robert Ayson, 'The "Arc of Instability" and Australia's Strategic Policy', *Australian Journal of International Affairs*, vol. 61, no. 2 (2007), pp. 215-31.