Chronicle of a Correction Foretold:
The Push and Pull of Nuclear Intelligence Detection
Cullen Nutt
June 2015
I. Introduction and Theory

In 2007, U.S. Secretary of Defense Robert Gates momentarily lost faith in the U.S. intelligence community. Senior Israeli officials arrived in Washington with shocking news: Syria was building a nuclear reactor. At the highest levels of government, the United States knew nothing of this.

Gates was in disbelief. “Syria for years had been a high-priority intelligence target for the United States,” he writes in his memoir. “This was a significant failure on the part of the U.S. intelligence agencies, and I asked the President, ‘How can we have any confidence at all in the estimates of the scope of the North Korean, Iranian, or other possible programs given this failure?’”¹

Gates, himself a 26-year veteran of the CIA, is hardly the only one mystified. The United States spends about $70 billion a year on collecting information about friends and foes alike. Whether it reaps a return on this massive investment remains up for debate. At the very least, as the evenhanded critic Richard Betts puts it, “We can see that some degree of improvement in effectiveness is possible.”²

Why did Israel, which spends far less on intelligence and possesses fewer capabilities than the United States, detect the Syrian activities before the United States did?

Lest it seem that the United States has a blind spot in the Middle East or that Israel possesses superior nuclear detection capabilities in its region, the roles were precisely reversed a few years before. In 2004, an Israeli parliamentary commission denounced Israel’s intelligence community for failing to detect the reactivation of Libya’s nuclear program in the

¹ Robert M. Gates, Duty: Memoirs of a Secretary at War (Knopf, 2014), 171.
early 2000s. The United States had successfully detected Tripoli’s external efforts to restart its program and penetrated its foreign supplier network. Israel smarted from the realization that the Americans had left them out in the cold—and that the Israelis had failed to notice.

U.S. and Israeli intelligence performance in these cases begs the question: What explains intelligence efficacy? Specifically, what explains variation in detection of nuclear weapons programs? I highlight past intelligence failures and policymaker interest as keys to this puzzle. Past failures influence how intelligence organizations operate, from collection, to analysis, to how assessments are presented to policymakers. False positive intelligence failures tend to produce skepticism in subsequent cases, while false negative intelligence failures prompt hypersensitivity. This, in turn, affects detection.

On the other hand, if top policymakers evince persistent interest in a specific potential proliferator—that is, they repeatedly seek to know more about suspected proliferation—then detection is more likely. Persistence stands in contrast to resistance, in which policymakers actively discourage intelligence on a proliferator. This also affects detection.

Existing explanations of intelligence performance fail to highlight these factors, and they falter in important ways in Libya and Syria. I show that as a result of the trauma of the Iraq War, the CIA underwent organizational changes in order to guard against another false positive. This delayed the detection of the Syrian nuclear reactor. It also had an effect on policy during the Bush administration’s deliberations over what to do about that reactor once Israel brought it to the President’s attention. Israel, as a result of its own failure in Libya, increased its detection efforts in order to avoid another false negative.

---

Persistent policymaker interest, meanwhile, contributed to the success of the U.S.-U.K. detection of the rejuvenated Libyan program. After 9/11, policymakers showed grave concern about the A. Q. Khan network. And the intelligence community itself sought to head off another false negative failure. It was these concerns, and the high-risk intelligence operations in response to them, that accelerated the detection of Libya’s external procurement activities.

Explaining variation in these cases has broader implications. First, my investigation bears on global nonproliferation. In what some have characterized as a “second nuclear age,” U.S. presidents consistently list the prevention of the spread of nuclear weapons at or near the top of the national security agenda. Israel maintains that any nuclear proliferation in the greater Middle East is simply unacceptable. For these parties, the performance of intelligence agencies in recent cases of attempted proliferation surely merits examination.

My study also functions as an audit of intelligence performance beyond nuclear issues. Do reforms pay dividends? Or is there greater danger in overcompensation? Ironically, I find evidence to suggest that the answer is yes to both questions.

To preview the paper, I begin by laying out methodological caveats and presentational notes. I then survey how previous scholarship on intelligence neglects the effects of intelligence failures, as opposed to their causes. Next, I define my dependent variable of “detection” and present my theory. I then examine the Libya and Syria cases from the U.S. and Israeli perspectives in turn. I conclude by considering the broader implications of my findings.

---

Elusive Data

The close alliance between Israel and the United States functions as the most basic threat to inference in my cases. Tel Aviv and Washington maintain broad intelligence ties, although cooperation levels vary episodically. In both the Libya and Syria cases, though, the United States and Israel communicated with each other about intelligence matters, including about the particular proliferator. In other words, the detectors did not operate independently of one another. In each case, I attempt to identify the occasions when major intelligence on the proliferator changed hands and therefore gave one of the detectors an advantage that otherwise would have been denied to them.

Empirically, secondary source accounts and primary source interviews with experts and policymakers form the basis of my analysis. I use accounts that are widely considered to be reliable but that ultimately cannot be verified. The accounts themselves, moreover, sometimes conflict. To be transparent, I often cite my sources by name within the text and compare versions of events across sources. In particular, the Syria case remains shrouded in secrecy and mystery. I theorize about the case with the knowledge that the details of what actually happened could differ, potentially in significant ways.

I conducted on-the-record interviews with William Tobey, General (ret.) Shlomo Brom, and Rolf Mowatt-Larssen. Tobey served on the National Security Council for three presidents, most recently as director of counterproliferation strategy under George W. Bush from 2002 until 2006, through the height of the Libya proliferation case. Tobey then served as deputy administrator for nonproliferation at the Nuclear Security Administration until 2008. Brom retired as a brigadier general in the Israeli Defense Forces (IDF) after a career in intelligence and strategic planning. Mowatt-Larssen is a 23-year veteran of the CIA, where he
served as an intelligence officer in Europe and Russia and then oversaw WMD counterproliferation efforts after 9/11. He later headed the U.S. Department of Energy’s Office of Intelligence. In addition to these interviews, my investigation of the Syria case included a telephone interview with an anonymous government analyst with 30 years of experience in nuclear intelligence. The analyst was directly involved in monitoring Syria’s nuclear efforts. For ease of reference, I call him “R.”

These sources only tell us so much. Intelligence agencies are loath to admit mistakes. This informs what they divulge to the public and when. I do not believe that these tendencies threaten my argument, though I remain mindful of them.

The Impact of Failure

The best work by political scientists on intelligence has focused on surprises and intelligence failures. Richard Betts maintains that intelligence surprises are inevitable, owing in large part to the unwillingness of policymakers to take note of mixed signals from intelligence analysts.

Few scholars have examined the consequences of intelligence failures, rather than their causes. Realists who conceive of states as mostly unitary rational actors would say that failures should not matter in an enduring way. Analysts who draw on unit-level attributes to explain state behavior likewise see such attributes as static over time. Graham Allison’s

---

5 I thank Scott Kemp for helping to facilitate this interview.
6 Confidential telephone interview with U.S. government analyst, December 3, 2014.
analysis of bureaucratic behavior during the Cuban missile crisis does not focus on how organizations and individuals evolve or respond to failures.\(^8\)

We might nonetheless expect organizational behavior to vary with previous feedback. John Steinbruner’s theory of cybernetic decision making offers insight here. According to Steinbruner, individual decision makers—and organizations—are incapable of rational analytic calculations of outcomes.\(^9\) Individuals and organizations cope by reducing complexity and uncertainty and instead focusing on a few critical variables.

Scholars have applied this concept of feedback loops to contexts similar to intelligence. In his work on misperception in international politics, Robert Jervis points to how prior episodes affect the way individuals interpret present ones. Defeated or frustrated statesmen and militaries tend toward doing the opposite the next time around, if only because they falsely analogize yesterday’s defeat with today’s crisis.\(^10\)

A few scholars have pointed to these dynamics specifically in the realm of intelligence and its relationship with policymakers. Michael Handel maintains that intelligence failures may be beneficial, insofar as they condition policymakers to the notion that intelligence is imperfect. “Failure or defeat,” Handel writes, “are catalysts for improvement.”\(^11\) Handel also implies that successes tend to stagnate intelligence practices. My theory considers failures to be more important than successes, which tend to garner less attention from policymakers. Both inside and outside intelligence agencies, moreover, the benefits of success cannot easily be estimated. Policymakers take note of them only briefly, if at all. The costs of failure are

---


both easier to calculate and more enduring in the minds of policymakers and intelligence officers themselves.

Commentators within the intelligence community and beyond it have highlighted feedback loops in the context of recent U.S. failures. Former CIA analyst Richard Russell sees intelligence on Iraq in 2003 as “in some measure an analytic overcompensation for the gross underestimation of the scope and progress of Iraq’s nuclear weapons program in the run-up to the 1991 Gulf war.”12 In his post-mortem a year later, Jervis made the same point,13 as did Thomas Mahnken.14

Despite the consensus about this one case, scholars have not examined the effects of previous failures in a systematic way. Nor have they juxtaposed the reactions and performance of intelligence agencies in two countries while controlling for the specific proliferator in question, as I do.

Moreover, scholars’ discussions do not specify the causal mechanisms at work. For Jervis, feedback loops operate primarily at the individual psychological level. Steinbruner and others have it operating at both the individual and organizational levels. In the theory that I articulate below, feedback from previous failures manifests itself at the organizational level, which in turn affects future detection. Before setting out that theory, I define the dependent variable in the next section.

---

Detection

I define intelligence detection in terms of accuracy, visibility, and certainty. Detection means 1) The intelligence correctly identifies a covert nuclear weapons program (accuracy), 2) This intelligence appears in products or briefings for senior policymakers (visibility) and 3) The intelligence community conveys its conclusions with enough confidence that policymakers cannot dismiss it on the grounds of uncertainty or ambiguity (certainty).

Whether policymakers listen and take action is outside the scope of this definition. However, detection does imply that the information subsequently proves to be accurate. Accuracy is, of course, difficult to pin down. If we fail to include it as a criterion, we will be explaining a perceptual dependent variable, rather than an empirical one.

This still leaves open the question: Detection of what? Is the United States or Israel to be assessed for its ability to detect Saddam Hussein’s mental decision to accelerate his nuclear weapons program after the Israeli strike on Osirak in 1981? Surely, this is too high a bar. However, Saddam did subsequently undertake “an intense, high-priority, billion-dollar quest for the bomb.” The U.S. intelligence community before the Gulf War could only tell policymakers that Iraq might attain nuclear weapons in as little as six months or as long as a decade.15 We can classify this as a detection failure. This is because Iraq’s pursuit of nuclear weapons existed at the national level—Saddam Hussein personally championed it—and featured major investments in human and material capital. The program was theoretically detectable once such investments were made. The U.S. intelligence community’s assessment was a detection failure, moreover, because it was couched in uncertainties and caveats (i.e. it failed the certainty criterion).

---

Using this definition of detection, I set the parameters of when detection could have occurred and when it did occur in the Libya and Syria cases below.

<table>
<thead>
<tr>
<th>Year Detectable</th>
<th>Year Detected (By)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>2002 (deal concluded with North Korea around 2000; construction begins at Al Kibar in 2002)</td>
</tr>
<tr>
<td>Libya</td>
<td>2000 (P-2 centrifuge prototype delivered and tested; two cylinders of uranium hexafluoride delivered; Libya orders 10,000 P-2s and 20 tons of UF6)(^\text{16})</td>
</tr>
</tbody>
</table>

In both of these cases, I set the detectability date based on the definition laid out above. As noted, we cannot expect detection to occur until major investments in human and material capital and the kind of physical progress that emits an intelligence signature. Qaddafi is said to have reached a decision to renew his nuclear efforts in 1995. His negotiations with Khan commenced in 1997 and included the delivery of 20 P-1 centrifuges as a sort of down payment. But those centrifuges were never tested, mostly because Libya needed far more in the way of assistance. In 2000, however, Tripoli struck a deal for a turnkey program and took delivery of and tested P-2 centrifuges and uranium hexafluoride. These developments should be detectable. In Syria, Pyongyang and Damascus struck their deal as early as the late 1990s. The major effort did not begin until 2002, when construction began at Al Kibar and therefore when we can fairly expect detection to have been possible.

My unit of analysis is the detector-proliferator dyad. I define variation in detection with respect to other units. Early detection means being first. By examining how one state detects a program more quickly than another, we control for the characteristics of the proliferator’s program. This allows us to rule out all manner of other causes, such as whether some nuclear technologies are more detectable than others or some proliferators are more effective at concealment than others.

The cost of this design is that variation is quite circumscribed. One could point to a previous failure or instances of policymaker interest that successfully explains differing detection patterns relative to other detectors while remaining indeterminate in terms of overall timing. Can it fairly be said that Israeli intelligence achieved “early” detection years after construction on the Syrian reactor began because it arrived at its conclusions before the United States did? As long as we qualify the distinction as early relative to the other detector, this is valid. Relative detection timing is important, moreover, particularly between Washington and Tel Aviv. The early detector wields decisive influence over who to inform, what to tell them, and how to respond.

**Alternative Explanations**

Existing structural theories of international politics provide few specific predictions in the realm of intelligence. In a realist world, intelligence agencies act as rational component parts of unitary states seeking survival. Intelligence priorities should vary with changes in the distribution of capabilities. Unit-level variables should not affect intelligence matters; ultimately states respond to their external security environments. For our purposes, this means that the more threatened state should detect nuclear programs first. In the Syria context, Israel should catch Syria before the United States, as it did.

The problem is that realists would predict, on the basis of proximity and balance of capabilities, that Israel was the more likely early detector in Libya, as well. In reality, it was not. In light of this discrepancy, realism might advance an alternative explanation. Both the United States and Israel, as befits rational security maximizers, might opt to economize their intelligence gathering duties by delegating the Libya and Syria missions to one another. This “division of labor” explanation would thus account for what we observe empirically.
Alternatively, could it be the case that the plutonium reactor and uranium enrichment paths to the bomb play to Israeli and American intelligence strengths, respectively? For Israel, plutonium reactors emit a large intelligence signature and require a sizable contingent of operating personnel and scientists, which opens the door to human intelligence infiltration. Such infiltration operations suit Israel well. They tend to frustrate the United States. On the other hand, though uranium enrichment emits a smaller intelligence footprint, it usually involves commercial transactions overseas of the sort that only the United States can monitor on such a massive scale. This would explain why the United States successfully detected the A.Q. Khan network and its uranium enrichment dealings with Libya. It would also account for Israeli detection of the plutonium reactor in Syria. Iran stands as a discrepant case for such an explanation, however. The available evidence suggests that Israeli intelligence proved more capable of tracking Iran’s covert centrifuge enrichment program than the United States did.

We can also identify a more specific, path-dependent alternative explanation. In essence, the United States detected earlier when Khan was involved (Libya), simply because the CIA had been tracking Khan’s dealings elsewhere, particularly in North Korea.17 Israel took less notice, possibly because its nearest enemy, Syria, spurned Khan’s offer in the mid-1990s. Therefore Israel missed Libya but detected Syria in the 2000s before the United States did.

I provide additional details below showing how the alternative explanations do not adequately comport with key qualitative evidence in the cases. My theory, which I now articulate, offers unique explanatory leverage.

The Theory

I identify two explanatory variables: previous failure and policymaker interest. The two can operate additively or in opposition to one another. My cases—and the difficulties of studying intelligence generally—render it difficult to adjudicate the relative strength between the causes. However, suggestive evidence indicates that organizational inclinations set in motion by previous failure may overpower all but the most persistent (or resistant) policymakers.

Previous Failure

Intelligence failures are incidents in which the intelligence community visibly errs in the eyes of policymakers and themselves. These can be failures of commission or omission; purported facts prove untrue or gathering threats go unseen. The magnitude of failures can of course vary. Some slip by relatively unnoticed. In other instances, failures are catastrophic. Memories of the Japanese attack on Pearl Harbor and Hitler’s surprise invasion of the Soviet Union imprinted themselves on the minds of American and Soviet intelligence analysts for decades after. In Israel, the Yom Kippur attack of 1973 left a similar impression.

I argue that there are two types of intelligence failures. Pearl Harbor and Yom Kippur are false negatives. Intelligence communities failed to discover secret enemy plans or developments and bring them to the attention of policymakers. All else equal, false negative intelligence failures are likely to make intelligence agencies more sensitive to new threats and consequently more diligent in detecting such threats. This is especially true of surprise attacks on a strategic scale, which entail high costs to the defender. False negative failures that entail lower costs will have a less dramatic effect.
False positive intelligence failures work in a similar fashion but in the opposite direction. They occur when intelligence agencies make assertions or issue warnings that prove to be unfounded. To some degree, intelligence agencies commit this error routinely. When it comes to threats or the potential for surprise, intelligence would rather err on the side of predicting too many disasters than predicting too few. This applies so long as they also avoid the corresponding problem of “crying wolf” too frequently.

Returning to Steinbruner’s conception of feedback loops, we can identify two critical variables affecting how intelligence agencies respond to failures. The first is the satisfaction of agencies’ political overseers. When failures occur, intelligence organizations will hear about it from policymakers, usually in the form of congressional or parliamentary inquiries. Agencies and individuals will work to prevent a recurrence, lest their organizational power come under threat.

Another critical feedback variable is the intelligence organization’s own sense of pride and prestige. When intelligence agencies fail, they should seek to take corrective steps to improve performance. Out of national duty and for the sake of their own senses of pride and prestige, intelligence agencies do not relish being wrong.

As a result of these feedback dynamics, false positive and false negative intelligence failures should have distinct effects on the way intelligence agencies approach future challenges. In the case of false positives, intelligence agencies will be wary of again “crying wolf” prematurely. Major costs incurred as a result of false positives should magnify the effect of the failure variable on subsequent detection. Costs thus operate as an interaction term in the arrow diagram below.
In response to costly false positives, organizations should implement bureaucratic checks on estimates and mandate additional training for analysts. This should result in fewer high-confidence estimates for policymakers and reduced visibility to policymakers overall. Additionally, we should expect organizations to take extraordinary measures to ensure accuracy in future judgments that, if inaccurate, could result in another false positive failure. These checks take time. All these changes should increase the probability of delayed detection.

<table>
<thead>
<tr>
<th>False Positive</th>
<th>Lower intelligence sensitivity</th>
<th>Late detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conversely—and intuitively—false negative intelligence failures should raise the probability of early detection in future cases. Intelligence agencies redouble their detection efforts. They should increase collection to maximize accuracy. To jumpstart reform, they should make leadership and personnel changes.

<table>
<thead>
<tr>
<th>False Negative</th>
<th>Higher intelligence sensitivity</th>
<th>Early detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The previous failure feedback process involves policymakers only insofar as they spur reform and initiate leadership changes. If intelligence agencies recognize failures as such, then intelligence agencies should prove willing to go along with such reforms. Thus, the feedback loop primarily operates at the organizational level, which is where I expect to observe evidence of it in operation.

**Policymaker Interest**

I define policymaker interest as a policymaker’s level of interest in knowing whether a state or entity is engaging in nuclear weapons proliferation. I define two values for this
variable: *resistance* and *persistence*. In both Israel and the United States, the *baseline level* of policymaker interest in proliferation issues is high. In the absence of explicit signals from policymakers, intelligence agencies take it to be given that policymakers will show a high interest in knowing whether any country is engaging in proliferation. In the tables below, I use “baseline interest” to describe this posture.

*Resistance* occurs when policymakers explicitly signal to intelligence agencies that they do not wish to know whether a state or entity is engaged in proliferation. This goes beyond apathy. Policymakers wish to be blissfully ignorant, lest intelligence agencies force their hand and cause a rupture in relations with some important state or distract from another issue. All else being equal (i.e. controlling for previous failure), this increases the probability of later detection. In the United States and Israel, such rank politicization should be rare. Policymakers may find it inconvenient to hear about proliferation, but they will rarely lean so heavily on intelligence agencies as to diminish collection and discourage intelligence from being reported. On the U.S. side, the most widely cited instance of what I would call resistance occurred in the 1980s with regard to Pakistan’s nuclear program. To protect Pakistan as a conduit for funneling arms to Afghanistan, the Reagan administration discouraged the intelligence community’s efforts to detect Pakistan’s activities.18

| Policymaker resistance | Diminished collection / reluctance to report | Late Detection |

Policymaker *persistence* occurs when a head of state shows a keen and ongoing personal interest in knowing from his or her intelligence agencies whether a state is proliferating. Persistence implies that policymakers seek greater breadth, depth, or confidence in current reporting. In response, the intelligence community is apt to redouble its collection

---

18 See Corera, 30-31. See also Adrian Levy and Catherine Scott-Clark, *Deception: Pakistan, the United States, and the Secret Trade in Nuclear Weapons* (Bloomsbury Publishing USA, 2010), 93-94.
and analysis efforts on this target. All else equal, this would increase the probability of earlier detection. In 2005, for example, President Bush pointedly asked top intelligence officials why it was so difficult for the United States to determine what was happening inside Iran, particularly regarding its nuclear program. In response, the CIA initiated a host of efforts, including opening a new station in Los Angeles to cultivate sources in the Iranian diaspora.¹⁹

| Policymaker persistence | Increased collection | Early Detection |

II. The Cases

In the table below, I summarize the dyads derived from my two cases on which I test my theory, with a summary of the outcome variable and how my predictions fare. As I explain below, the United States successfully detected Libya’s efforts to develop a nuclear weapon capability. Israel failed. In addition, I also include dyads between the detectors and A. Q. Khan.

On Syria, I note evidence that Israel received an intelligence tip from the United States around 2005 regarding cooperation between Damascus and Pyongyang. However, I argue that this does not confound my argument. The tip did not point specifically to nuclear cooperation, at least not conclusively. And it apparently narrowed attention only to a potential cooperative project in the vast desert region of Dayr Az Zvar. While the CIA eventually concentrated its attention on the Kibar site, it never found the kind of physical evidence that would have allowed it to issue a report with sufficient certainty and prominence to amount to detection. When Israeli suspicions grew, perhaps starting from the same base of knowledge as the United States, the CIA reportedly dismissed Israel’s theory about a major nuclear project until the Israelis produced ironclad evidence. The U.S. intelligence community showed the kind of

skepticism to evidence following a false positive that my theory would predict. Israeli behavior also comports with my theory.

<table>
<thead>
<tr>
<th>Detector : Proliferator/Provider</th>
<th>Previous Failure</th>
<th>Policymaker interest</th>
<th>Detection</th>
<th>Theoretical Prediction</th>
</tr>
</thead>
<tbody>
<tr>
<td>US: Khan</td>
<td>Yes: false negative (primarily 9/11; also Iraq 1991 and India 1998)</td>
<td>Persistent</td>
<td>Early</td>
<td>Correct</td>
</tr>
<tr>
<td>Israel: Khan</td>
<td>No</td>
<td>Baseline Interest</td>
<td>Late</td>
<td>Agnostic (no previous failure and Baseline Interest policymakers)</td>
</tr>
<tr>
<td>Israel: Libya</td>
<td>No</td>
<td>Baseline Interest</td>
<td>Late</td>
<td>Agnostic (no previous failure and Baseline Interest policymakers)</td>
</tr>
</tbody>
</table>

I begin the next portion of the paper with brief accounts of the U.S. and Israeli intelligence communities. Then I describe how the United States came to detect the proliferation activities of A. Q. Khan. I explain why Israel failed to take notice. Understanding these events provides crucial context for the Libya case. Then I reconstruct U.S. detection of Libya’s external efforts, which flowed in part from its knowledge of the Khan network. I argue that persistent policymaker interest after 9/11 played a role in accelerating the U.S. detection of Khan’s network and Libya. Additionally, the false negative intelligence failure of 9/11, combined with two false negative failures of the 1990s, also contributed to detection in Libya. Next I turn to Israel and examine its failure to detect
Libya’s efforts. Note that my theory is agnostic about the specific causes of the Libya failure for Israel. Tel Aviv had not suffered a major intelligence debacle that warranted parliamentary investigation for several decades. Israeli policymaker interest in Libyan WMD remained fairly high. I nonetheless dissect the possible causes of what Israel would later deem a failure in order to adjudicate between the alternative explanations.

**U.S. and Israeli Intelligence**

In 2014, Israel spent $17 billion on defense, of which a classified amount went to intelligence. This amounts to about six percent of total Israeli GDP.\(^{20}\) In contrast, the United States spent about $445 billion on defense in 2014, of which more than ten percent went to intelligence.\(^{21}\) Total defense spending roughly accounts for 3.5 percent of America’s GDP.

Thus, while Israel spends more on defense proportionally, the United States naturally dwarfs Israel in real terms. Israel nonetheless benefits from vast U.S. aid, technology, and equipment. Moreover, its geographic concerns are more circumscribed than those of the United States. When it comes to intelligence issues in the Middle East, U.S. aid and a narrower set of strategic interests largely offset Israeli disadvantages vis-à-vis the United States. In the context of Libya and Syria, which fall within Israel’s geographic area of concern, we can fairly compare the performance of the two states on nuclear intelligence detection.

We should be mindful of Israeli resource limitations, particularly in the Libyan case. However, the Mossad has shown an ability to launch intelligence operations there before, as has the IDF. Conversely, Syria’s direct geographic proximity to Israel constitutes an additional confounder to the U.S.-Israel comparison.

---

\(^{20}\) See “Israel military no longer bullet-proof in defense budget battle,” *Reuters*, June 1, 2014.

The United States enjoys unique advantages on the intelligence front compared to the rest of the world. Washington’s “intelligence community” is comprised of 16 agencies and 107,000 employees. The CIA towers over the rest of the community. Langley employs about 22,000 people and in 2013 consumed about $15 billion of the $52 billion spent on “national intelligence” by the United States. Combining this with the military intelligence budget, which totaled $19.2 billion in 2013, the country spends more than $70 billion annually on intelligence. The big-ticket items in the overall intelligence budget go toward technical collection. In addition to the CIA’s large investment in technical intelligence, the National Security Agency and the National Reconnaissance Office spend another $10 billion each. Continuing a pattern set during the Cold War, the United States today relies in large part on technology of one sort or another to gather information abroad.\(^\text{22}\)

The three big players in Israeli foreign intelligence are Israeli Defense Intelligence (abbreviated as Aman in Hebrew), the innocuously named Central Institute for Intelligence and Special Tasks (the Mossad), and Unit 8200, the arm of Aman responsible for signals intelligence.\(^\text{23}\) Aman, while military in name, functions as an Israeli equivalent to the CIA. It is the largest organization in the Israeli intelligence community and its head, an active-duty IDF officer, is seen as the top intelligence adviser to the Israeli prime minister and his or her cabinet. Aman focuses most of its intelligence collection on Arab states and Muslim-majority nations.

The Mossad, established in 1951, handles covert action, foreign intelligence (along with Aman), counterterrorism, and counterproliferation in the Middle East. Its head is under

---


the direct authority of the Israeli prime minister. While Aman holds sway over evaluation and assessment, Mossad is the premier arm for human intelligence and clandestine operations.

**The Khan Operation**

How did the United States come by its information on Libya’s nuclear efforts? To a large degree, Washington owed what it knew to a joint U.S.-UK intelligence operation against the Pakistani nuclear scientist and salesman A. Q. Khan.

The timing of the decision to launch a full-fledged Anglo-American intelligence operation against Khan remains opaque, as does the point at which Libya was initially identified as a customer. Both events probably occurred around 2000 or 2001. I argue that detection, by my definition, did not occur until late 2002 or early 2003.

The United States and United Kingdom had been eying the activities of the Pakistani nuclear scientist since his work in the Netherlands in the 1970s. In 1996, an unspecified piece of intelligence renewed concerns about his activities. In 1997, at a hotel in Casablanca, Morocco, Khan met with Libyan officials to discuss their nuclear needs. An MI6 agent reportedly managed to plant a microphone on Urs Tinner, a Swiss machinist who worked with Khan and participated in the Libyan negotiations. A transcript of the meeting, which MI6 shared with the CIA, revealed the extent of Libya’s ambitions and Khan’s willingness to satisfy them—for the right price. Tinner went to work for Khan in Dubai in the late 1990s. At a glitzy beachfront bar in Dubai, a CIA officer recruited Tinner as an asset. The Agency, in cooperation with MI6, eventually recruited Tinner’s father and brother, as well. The Swiss family business had supplied Khan with sensitive dual-use equipment for decades.

---

25 On the Tinners and the story of how Khan’s network was infiltrated, see Albright and Catherine Collins, *Fallout* (Free Press, 2011). See also Corera, *Shopping for Bombs*. 
In the late 1990s, though, the notion that Khan would moonlight as a nuclear salesman seemed farfetched. U.S. intelligence instead focused on state-to-state cooperation, specifically between Pakistan and North Korea. In 1998, the Clinton administration pulled together an interagency group to monitor Islamabad’s links to Pyongyang.

The intelligence community’s information on Khan alarmed the Clinton administration sufficiently to organize a White House meeting in 2000 on the subject attended by top CIA and nonproliferation officials. A debate ensued about how to respond. The CIA “successfully argued for patience,” according to Albright. “Their inside sources could reveal the whole picture if given time.”

**Missing Khan**

Where was Israeli intelligence as this occurred? Tel Aviv apparently tracked Khan’s movements in the Middle East, but failed to appreciate the significance of his activities. Shabtai Shavit, head of Mossad from 1989 to 1996, recalled Khan with regret: “We knew about this movements, but the larger picture escaped us […] So we didn’t attach too much importance to him.” As every rueful Israeli spy must, Shavit added: “I regret that we didn’t assassinate him.”

To the extent that Israeli intelligence was paying attention in the 1990s, they discounted Libya as a potential recipient of Pakistani aid. In the context of Khan’s dealings, Tel Aviv’s focus was on Iran. According to one source, Israeli intelligence tracked Khan to a meeting in Beirut in 1995 with a Syrian official. “What we determined was that although Khan was intent on selling to Damascus, he was also keen to use Syria as a conduit to deliver

---

26 Albright, 208.
nuclear assistance to Iran,” Moshe Ya’alon, former head of the IDF, told two British journalists. “Nobody was looking at Syria in those days from a nuclear perspective.”

In the next section, we turn from Israel’s intelligence on Khan to the connected issue of Israeli monitoring of Libya. While Tripoli attracted Israeli attention, Tel Aviv failed to detect its nuclear efforts in connection with Khan.

Libya, as Seen by Israel

In December 2003, Muammar Qaddafi came in from the cold. Following months of secret negotiations with representatives from the CIA and Britain’s Secret Intelligence Service (MI6), Qaddafi agreed to dismantle his nuclear program. In exchange, the United States removed Libya from its list of state sponsors of terrorism and promoted investment in Libya.

In its report on the intelligence failures of Iraq, an Israeli parliamentary committee condemned the intelligence community for its ignorance of these developments.

Israel was surprised to discover that Libya, under Muammar Qaddafi, has been intensively engaged in the development of a military nuclear capability [. . . ]

The intelligence services of the USA (and of Britain) did not share with their colleagues in Israel in real time their recent and significant exposures of the Libyan nuclear program, and even concealed from the State of Israel the steps taken vis-a-vis the Libyan regime in the apparently successful attempt to bring about the liquidation of its nuclear industry.29

We should note that the Knesset committee probably overestimated Qaddafi’s progress in the nuclear realm. Though Qaddafi had obtained some of the requisite components for a program, his scientists were hardly on the fast track to building a bomb. In some cases, the centrifuges and other components that Libya had purchased on the black market from Khan were in storage.

---

28 Levy and Scott-Clark, 256.
29 See Knesset report.
Whatever the state of the program, the Knesset committee alleged that Israel missed it entirely. Despite denials from Israeli leaders and parts of the intelligence community, the available evidence suggests that Libya was, in fact, a false negative intelligence failure.

Libya had been on Israel’s intelligence radar. Qaddafi’s efforts to acquire weapons of mass destruction in the 1980s led Aman to classify the country as a top intelligence collection priority, according to the Israeli journalist Yossi Melman. Libya’s importance in the eyes of Aman receded somewhat in the mid-1990s. Aman dropped the country from the list of top-priority targets, apparently in part for budgetary reasons. From then on, Melman claims, the Israelis “remained almost completely ‘blind’ to developments [in Libya] and had to rely on cooperation and exchange of intelligence information with the United States and other Western intelligence organizations.” In a co-authored book with Dan Raviv, Melman restates this claim. As a result, the scope of Libya’s activities “took Israeli intelligence completely by surprise.”

While Raviv and Melman’s allegation of Libya’s removal from the list of “top” targets may be true, Qaddafi nonetheless continued to attract the attention of Israeli intelligence through the late 1990s and early 2000s. In 1997, Aman leaked its concerns about Libyan chemical weapons development to the press, for example. Israeli intelligence sources made specific estimates about a chemical facility at Tarhunah. Strategists spoke of the importance of Iraq, Iran, and Libya as an “outer circle” of Israeli enemies that were seeking weapons of mass destruction.

---

Sometime in mid-2002, the United States passed Israel intelligence about Libya’s nuclear progress. The specificity of that intelligence remains unclear. At the time, the CIA and MI6 had only an incomplete intelligence picture of the Libyan program. Whatever Israel was told—or Israel had learned independently—their leaders decided to go public about it.

In September 2002, Prime Minister Ariel Sharon told an Israeli television interviewer: “Libya may be the first [Arab] country with weapons of mass destruction.” Sharon further said in the interview that Israel was gathering intelligence on Libya in response to this threat.35

Sharon’s statements apparently caused consternation in Washington, because the United States had shared the intelligence in confidence, according to Haaretz’s Ze’ev Schiff.36 The Sharon interview prompted an “American decision to ‘compartmentalize’ Israel in retaliation for the talkativeness of its leaders,” Melman writes.37 An IDF officer told Schiff the same thing.38 Citing unnamed sources, Israeli radio also gave this version of events.39

The Knesset report makes an opaque reference to the problem of leaks. “Israel could be marked among fellow intelligence services as a partner that cannot be relied upon to deal responsibly with the keeping of secrets,” it worries. “The Libya episode well demonstrates the meaning of this and it is by way of a painful lesson.”40 This is almost certainly a reference to Sharon’s actions.

In a radio interview a week after the committee report, Sharon himself responded to the accusations of failure. “It is naive to maintain that Israel did not suspect what Libya was

37 Melman, “Spy Vs Spy.”
38 “Slip of the Tongue.”
40 Knesset report, 53.
“Doing.” However, he added what amounted to a subtle qualifier: “Perhaps it was unaware of the scope, but [Israel] knew that there is such a thing.”[^41]

The weight of the evidence suggests that Israel considered Libya to be an intelligence target of interest in the early 2000s. On the strength of what the United States told them, Israeli leaders occasionally sounded the alarm about Libya publicly. But the central facts eluded them. They missed Khan completely. Thus, we can say that Israel failed to detect Qaddafi’s activities. In a telephone interview, Shlomo Brom, the retired IDF general who spent his career in intelligence, dismissed Sharon’s excuses. “It was certainly an intelligence failure,” he said. “Israel didn’t have [any] idea about this nuclear program.”[^42]

When Libya declared its intention to disarm, and details of its Khan dealings emerged, Israeli intelligence found the experience jarring. I emphasize this because it will have an impact on how Israel approached Syria later. “Our lack of knowledge is embarrassing,” an intelligence official told Melman. “Libya is not *terra incognita* for us.” “[W]e knew nothing about it,” an unnamed official commented to a Jewish-American publication after the Knesset report.[^43] Ronen Bergman, an Israeli journalist, writes of the U.S.-U.K. announcement in 2003:

> This was one of Mossad’s most difficult moments, not having known anything about Libya’s nuclear efforts, although it was considered a prime intelligence target [...]. The first time the director of the Mossad heard of it was from a newspaper.”[^44]

In the next section, I detail what Israel missed.

[^42]: Telephone interview with Shlomo Brom, February 19, 2015.
Libya, as seen by the United States

At the end of 1999, the U.S. intelligence community reported to Congress that Libya’s “rudimentary” nuclear program remained far away from a workable weapon.\(^45\) That assessment persisted in 2000 and 2001. In 2002, the CIA’s report to Congress signaled elevated suspicion of “Libya’s continued interest” in nuclear weapons.\(^46\)

The intelligence community suspected more than what it let on publicly. In classified intelligence analysis beginning in late 2001, the CIA revised its assessment of the Libyan program in light of newly available clandestine intelligence. A still-classified 1999 National Intelligence Estimate (NIE) had set 2015 as the earliest threshold by which Libya might be capable of building a bomb.\(^47\) In December 2001, the CIA moved the date up dramatically, warning that Libya could “produce enough weapons grade uranium for a nuclear warhead as early as 2007.”\(^48\) The 2001 NIE apparently premised this assessment on the assumption that Libya would receive unspecified foreign assistance. A February 2002 classified CIA report maintained the 2007 projection, while noting that Libya would “face significant technical challenges” that could delay matters.\(^49\) These secret reports, apparently conveyed to Israel, probably prompted Sharon’s comments about Libya.

With the help of their informants, the CIA and MI6 gained critical insight into Khan’s activities in Dubai and Malaysia in 2001 and 2002, where the Pakistani was arranging for the production of equipment to be delivered to Tripoli. Then, in early 2003, George W. Bush and Prime Minister Tony Blair convened at Camp David to discuss the upcoming war in Iraq.


\(^{48}\) Ibid., 253-254.

\(^{49}\) “WMD Report,” 264.
Tenet and his British intelligence counterpart briefed the two leaders on the activities of Khan and Libya. Detection occurred at this point. Bush and Blair “quickly agreed that Khan’s network had to be stopped,” according to Albright. They also agreed to open secret negotiations with Libya, prompted by Qaddafi’s son, about Tripoli’s WMD program. Eventually, the two subplots came together. In October 2003, the CIA and MI6 intercepted a ship carrying centrifuges to Tripoli. Intelligence officials who were negotiating with Libya at the time used the seizure to indicate the depth of the West’s knowledge of Libya’s WMD program. Qaddafi grew more candid about the program in the aftermath of these revelations, and Tripoli agreed to give up its program entirely as part of the deal with the West in December 2003.

**U.S. and Israel Compared**

Why did Israel miss the Libya developments while the United States did not? Part of the explanation derives from earlier U.S. intelligence efforts against Khan and Pakistan. By 2000, U.S. and British intelligence evinced more concern about Khan than Israeli intelligence did. North Korea’s activities initially drew the Americans’ attention. We can surmise that it was only a matter of time before the joint U.S.-UK intelligence operation successfully detected Qaddafi’s efforts to buy arms from Khan.

Previous intelligence failure and policymaker interest nonetheless gain some traction here. Numerous sources indicate persistent interest on the part of President Bush in Khan. During the Clinton administration, the CIA and Tenet had successfully argued for patience. We find evidence of policymakers indicating that would no longer do, particularly after

---

50 Albright, 209.
September 11 raised fears of a nexus between weapons of mass destruction and terrorists. September 11 “gave a lot more urgency to the Khan case,” recounts William Tobey.

Reflecting persistent interest from policymakers, we see signs of renewed CIA collection efforts. Organizationally, CIA’s Counterproliferation Division saw a windfall in resources. “In the post-9/11 world,” Valerie Wilson, a veteran officer, explains, “real money started to pour into CPD and the division suddenly became popular.”51 According to Wilson, some of the most “cunning” aspects of the operation against Khan followed 9/11, after which the Agency showed a new willingness to sink major resources and take major risks to get to the bottom of the Khan network. President Bush and Prime Minister Blair reportedly took “a personal interest in the Khan network.”52

Such interest from the Oval Office put Langley on notice. Policymakers sought a clearer picture of the network and its customers. Tenet committed to providing the goods to roll the network up in due course. The CIA’s reputation was on the line. Tenet arranged for officers personally involved in infiltrating the network to brief President Bush.53 The 2003 meeting at Camp David confirms that the issue remained a high priority to policymakers.54

What about previous failure? Did the false negative intelligence failure of 9/11 affect the intelligence community itself? The CIA’s alarmist NIE about Libya in late 2001, coming just months after 9/11, signaled a new willingness to err on the side of pessimism. The revised date of potential Libyan acquisition from 2015 to 2007 no doubt reflected revelations from the Khan network. It also suggests an attempt to avoid another false negative.

---

52 Corera, 159.
53 Collins and Frantz, 75.
In fact, in a chapter on Libya, the U.S. congressional WMD commission of 2004 blamed the intelligence community for overestimating Libya’s progress. According to the report, the CIA proved much more capable of tracking Libya’s external purchases and activities than of discerning nuclear activities inside the country. Analysts, in turn, made inferences about the potential progress of a nuclear program merely on the basis of what Libya acquired. Naïve to Libya’s internal constraints, analysts believed that Qaddafi was closer to the bomb than he really was.\(^{55}\) The commission called the 2001 NIE a “worst case” analysis. The CIA’s behavior in this regard comports with my theory’s prediction of hypersensitivity in the aftermath of a false negative.

The table below summarizes U.S. and Israeli intelligence performance in the Libya case.

**Detection of Libya and Khan: Israel and the United States / United Kingdom Compared**

<table>
<thead>
<tr>
<th>Year</th>
<th>Israel</th>
<th>United States / United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990s</td>
<td>Israel spots Khan meeting with Syrian officials, but fails to appreciate his importance or his activities elsewhere.</td>
<td>CIA/MI6 take renewed interest in Khan and his network. Focus is on state-to-state nuclear cooperation, however.</td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td>CIA estimates Libya incapable of producing a nuclear weapon until at least 2015. Libya not yet identified as a Khan customer.</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td>U.S. intelligence uncovers information “that reveal[s] shipments of centrifuge technology from the Khan network were destined for Libya.”</td>
</tr>
<tr>
<td>2001</td>
<td></td>
<td><strong>September 11, 2001 false negative failure.</strong> U.S. intelligence community moves to avoid another false negative. Counterproliferation division at CIA takes an aggressive approach to improving intelligence on Khan.</td>
</tr>
<tr>
<td>Late 2001</td>
<td></td>
<td>December 2001 NIE revises 2015</td>
</tr>
</tbody>
</table>

---

\(^{55}\) “WMD Report,” 261.
and 2002 & projection to 2007 for date of a Libyan bomb.

<table>
<thead>
<tr>
<th>Mid-2002: United States alerts Israeli officials of Libyan nuclear activities. Specificity of the U.S. message is unknown.</th>
<th>U.S. and UK intelligence communities improve their overall picture of the Khan network. They correctly conclude that Khan is providing Libya with both uranium enrichment technology and information on designing a weapon.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2002: Sharon publicly warns of Libya as first Arab state to obtain nuclear weapons. Alleges Iraqi-Libyan cooperation. No mention of cooperation with Pakistan or A. Q. Khan.</td>
<td>Detection Occurs. U.S. and UK intelligence agencies provide their respective political leaders with prominent, high-confidence, and accurate briefings on the Khan network and its extensive ties to Libya.</td>
</tr>
</tbody>
</table>

The trauma of 9/11 magnified the effects of earlier false negative failures in the 1990s. First, in 1991, as noted, the CIA came under fire for underestimating Saddam Hussein’s progress toward a nuclear weapon in the late 1980s. This led to the establishment of CPD and a centralization of intelligence assets directed toward counterproliferation. Then, in 1998, India conducted a nuclear weapons test that came as a complete surprise to Langley. Recriminations from Congress and the Clinton administration ensued.⁵⁶

Seemingly in response, the CIA in early 2000 dramatically shifted its reporting about Iran’s nuclear weapons program. The Agency told President Clinton that it could no longer rule out the possibility that Iran had obtained a nuclear weapon. This left Clinton administration officials perplexed. They wondered whether analysts were retreating into a

---

⁵⁶ Richelson, 442.
protective shell because “the agency has been singed by criticism after previous intelligence failures” on India in 1998 and Iraq in 1991.57

Why did Israel miss Libya? Tel Aviv’s failure begins with their inability to recognize Khan’s significance. Though they tracked at least some of his meetings in the Middle East, they missed both his evolution into a proliferator unto himself and his connection to Libya. In part this derives from fairly prosaic factors, such as resource constraints and prior history. Israel’s intelligence coverage of Pakistan is ineffective, by its own admission. Tel Aviv has no current or historic diaspora ties there. Nor did it possess the kind of logistical wherewithal at the time to blanket Pakistan with satellite imagery coverage. The United States, on the other hand, has a long history of intelligence presence in Pakistan and of a liaison relationship with the Pakistani ISI. It is impossible to know, meanwhile, whether Sharon’s statements in 2002 did indeed prompt the Anglo-Americans to compartmentalize Tel Aviv. But it is at least plausible, and Israel may not have realized what was happening at the time.

All that said, neither Israeli leaders nor the Israeli intelligence community experienced 9/11 directly. Nor had the intelligence community felt so stung by a string of false negative failures in the 1990s. Where those events galvanized the U.S. intelligence community, and to a lesser extent their British colleagues, Israeli intelligence largely continued as it had before, perhaps believing that Washington would keep them apprised. But that changed after the shock of Libya, which affected how Israel approached Syria. We now turn to that case.

**Syria, as Seen by the United States**

In the 1990s, Alawite strongman Hafez al-Assad slashed his military’s conventional weapons budget and shifted priority to missiles and chemical weapons. The United States and

---

Israel warily took note. In 1995, the U.S. intelligence community ranked Syria as having one of the most aggressive WMD programs, particularly in chemical weapons.\textsuperscript{58} On the atomic front, though, CIA reports through the late 1990s concluded that Syria was not pursuing nuclear weapons.\textsuperscript{59}

In 2000, Hafez’s son Bashar took the reins. Sometime around this time, and possibly even before Hafez’s death, Syria inked a nuclear deal with North Korea. In 2001, as part of a routine series of unclassified reports to Congress, the intelligence community reported no evidence of such activities. The tone shifted slightly in 2003, although North Korea is still not mentioned: “[W]e are monitoring Syrian nuclear intentions with concern.”\textsuperscript{60} Six months later, the CIA said it was watching “Syrian nuclear intentions with growing concern.”\textsuperscript{61}

In 2004, additional details about A. Q. Khan’s proliferation network came to light. In that year’s report to Congress, the CIA worried “that expertise or technology could have been transferred [to Syria by Khan].”\textsuperscript{62} In reality, Khan appears to have approached the Syrians about a deal in 1995, but Damascus demurred.\textsuperscript{63} The same basic assessment, based on suspicion but nothing more, continued in 2006 and again in 2007.

The intelligence community’s tone changes completely in 2008. Syria, it reports, has been engaged for more than a decade in a covert nuclear program with North Korean assistance. The program involved construction of a nuclear reactor [. . .]. The reactor was destroyed in September 2007 [. . .] and Syria has gone to great lengths to try to eradicate evidence of its existence.\textsuperscript{64}

Clearly, Syria’s program for years had eluded the U.S. intelligence community.

\textsuperscript{59} CIA, “The Threat of Nuclear Diversion,” March 20, 1996, DNSA.
\textsuperscript{60} CIA, “721 Report,” July 2003.
The CIA had its suspicions about Syrian activities before 2007. This does not amount to detection, however, because the intelligence community refused to send medium- or high-confidence reports of the activities to high-level officials. Other than Dick Cheney and John Bolton, senior policymakers showed only sporadic interest in a possible Syrian nuclear program. Cheney and Bolton had apparently seen classified intelligence reports in the early 2000s pointing to suspicious activities in Syria. When they showed an interest, the CIA warned the two men that the evidence was flimsy.

In 2005, for example, as Congress considered George W. Bush’s nomination of John Bolton to be U.S. ambassador to the United Nations, former intelligence officials claimed that Bolton had repeatedly attempted to exaggerate the threat posed by Syria in 2002 and 2003. Amid the acrimony surrounding intelligence failures in Iraq, Senate Democrats hailed these accusations as evidence of Bolton’s tendency to inflate threats. Bolton had sought to mention Syrian attempts at acquiring nuclear weapons in a 2002 speech to be delivered at the Heritage Foundation, the right-leaning Beltway think-tank. During the speech drafting process, the intelligence community flagged the nuclear claim as “a stretch.” Ultimately Bolton dropped the reference. It did not diminish the thrust of the speech, aptly titled “Beyond the Axis of Evil.” Bolton claimed that Libya, Syria, and Cuba were bent on acquiring weapons of mass destruction.

The intelligence community possessed little confidence in whatever information it was collecting about a Syrian nuclear program. The early 2000s reports to Congress, as well as the community’s position that Bolton’s claim was a “stretch,” indicate as much.

In April 2008, a year after the Israeli raid on the reactor, the CIA finally released evidence of the Syrian program, including satellite imagery and pictures inside the complex.

In 2011, after years of Syrian foot-dragging, the IAEA gathered enough evidence on the ground to conclude that the site was “very likely” a nuclear reactor.\(^{66}\)

Only in hindsight did the United States intelligence community appreciate all this. But it did, as noted above, harbor long-running suspicions. R, who was involved in the Syria case, cautioned: “Don’t necessarily believe in the public narrative” of the Israelis approaching Americans with pictures and evidence that the United States was seeing for the first time. “Things rarely come out of nowhere,” R added.\(^{67}\)

Pulling together an array of sources, which I discuss in greater depth below, we can reconstruct the following provisional timeline of U.S. detection.

**U.S. Detection of Syria**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>United States acquires unspecified intelligence about activities in Syria pertaining to a nuclear program.</td>
</tr>
<tr>
<td>2002</td>
<td>John Bolton seeks to accuse Syria of seeking to acquire nuclear weapons in a speech. The CIA overrules him, calling the claim “a stretch.”</td>
</tr>
<tr>
<td>2003</td>
<td>U.S. obtains additional information, though it lacks any geographic specificity. In report to Congress, U.S. intelligence professes “growing concern” about Syrian nuclear programs. <strong>Iraq WMD false positive intelligence failure.</strong></td>
</tr>
<tr>
<td>2004</td>
<td>In hindsight, multiple sources report that U.S. intelligence analysts “puzzled” over a mysterious site in the Syrian desert over a multi-year period before 2007. These suspicions do not appear to move very far up the chain of command.</td>
</tr>
<tr>
<td>2005</td>
<td>NSA picks up call traffic between North Korea and the eastern Syria desert. Tip passed to Israel and investigated by U.S. intelligence.</td>
</tr>
<tr>
<td>2006</td>
<td>Israel approaches Western intelligence agencies with suspicions of Syrian activities. U.S. intelligence apparently fails to offer corroborating evidence. At some point before 2007, possibly several years earlier, Stephen Hadley asks the intelligence community to report on any possible North Korean nuclear proliferation activities in the Middle East. U.S. intelligence can only provide “ambiguous evidence.”</td>
</tr>
</tbody>
</table>


\(^{67}\) Telephone interview with U.S. government analyst, December 5, 2014.
Comments made by unidentified U.S. intelligence officials in April 2008 at the briefing on the Syrian reactor bolster R.’s claim about prior suspicions. The briefers explained that in hindsight, tidbits of intelligence about Syria suddenly all made sense.

[W]hen you learn something, it doesn’t just illuminate the future; it illuminates the past. And when we acquired information in 2001 and then were able to look backward on information that had been collected but not quite understood.68

In the early 2000s, analysts lacked the confidence to reach any hard conclusions. More information apparently surfaced a couple years later. This only added to the mystery, the officials said.

[W]e had no details on the nature or location of the cooperative projects [between North Korea and Syria]. We assessed the cooperation involved work at sites probably within Syria. [. . .] So we had this body of evidence, kind of almost like a cloud of, ‘Boy, there’s something going on here but we can’t get a whole lot of precision about it.’

The CIA probably inserted its “growing concern” wording about Syria in its 2003 report to Congress in order to reflect this suspicion.

The officials at the briefing said more clues arrived a couple years later, but once more they lacked specificity. “We received indications in ’05 that the Syrians and North Koreans were involved in a project in the Dayr az Zawr region of eastern Syria, but again, no specific information on the nature or the exact location of the work.” The officials did not specify how they acquired these “indications.” According to several reports, the NSA picked up heavy call

68 “Background Briefing with Senior U.S. Officials on Syria’s Covert Nuclear Reactor and North Korea’s Involvement,” April 24, 2008, transcript available at cfr.org.
traffic between eastern Syria and North Korea. The briefing officials said this prompted further action. “Imagery searches of the region revealed a large unidentified building under construction in a remote area near the Euphrates River near a point that we call Al Kibar.” At this point, the briefers showed reporters satellite photographs of the site. They go on: “[I]t’s hard to figure out looking at that building what its purpose is. And it certainly didn’t have any observable, externally observable characteristics that would say, ‘Oh, yeah, you got yourself a nuclear reactor here.’”

Speculation in U.S. intelligence—probably at a low level—about that specific building stretched back before 2005, according to New York Times correspondent David Sanger.

American spy satellites had watched the mysterious building rise in the desert and analysts had spun out theories about what it could be—everything from a covert nuclear facility to a water treatment plant. The Syrians had disguised its purpose by building it in plain view with no barbed wire, no military guards. Around 2002, they even erected a benign looking, square industrial wall and roof over the entire site to hide the telltale shape of a reactor.70

It is impossible to know from Sanger’s account how much the United States knew or suspected during this period. The other accounts I cite attest to suspicions. But the evidence suggests no awareness beyond that.

Indeed, U.S. intelligence analysts continued to puzzle over the clues until 2007. That spring, photographs and additional unspecified evidence arrived with the Israeli officials that changed the American assessment. The site “was indeed a covert nuclear reactor,” the officials at the 2008 briefing said. Until the Israeli intelligence arrived in Washington, the CIA lacked the confidence to do any more than cast a suspicious eye on the unidentified building.

---

70 David E. Sanger, The Inheritance: The World Obama Confronts and the Challenges to American Power (Three Rivers Press, 2010), 270.
In spite of the ambiguity before 2007, some members of the Bush administration thirsted for more information. In his memoir, Vice President Dick Cheney says he saw signs of Syrian nuclear ambitions and feared the worst. Reflecting on the alarming Israeli news in 2007, Cheney writes:

Over the last several years I had seen intelligence reports of officials with ties to North Korea’s nuclear program making repeated visits to Damascus, and I had asked questions. Are the North Koreans and the Syrians cooperating on nuclear technology? We know the North Koreans are assisting the Syrians in the area of ballistic missile technology. How do we know that they aren’t also providing nuclear assistance? The answers I got back were inconclusive. I kept hearing that there was “no evidence” of nuclear cooperation.\textsuperscript{71}

Cheney’s account suggests that U.S. intelligence had uncovered at least circumstantial evidence of nuclear rumblings in Syria. Sanger’s account, the retrospective claims of the background briefers in 2008, and R’s comments to me fit with this interpretation. For a figure such as Cheney, suspicious visits to Damascus by North Korean officials tied to their nuclear program constituted evidence enough.

It is incorrect to conclude from this that the intelligence community harbored anything more than suspicions. Sometime before 2007, Stephen Hadley, then the deputy national security adviser, “secretly ordered a study of whether the North Koreans could be supplying Iran or others with nuclear technology,” according to Sanger. But “the answers that came back amounted to nothing more than scores of pages of ambiguous evidence.”\textsuperscript{72}

For the intelligence community, one of the inferential problems involved distinguishing between North Korean sales of missiles—of which “Syria, Iran, and Pakistan had been eager buyers,” according to Sanger—and illicit nuclear proliferation.\textsuperscript{73}

\textsuperscript{72} Sanger, 275.
\textsuperscript{73} Sanger, 275.
intelligence agencies observing North Korean dealings in Syria routinely attributed them to missile deals.

Why did the CIA fail to confirm Cheney and Bolton’s suspicions before 2007? Here we see the influence of previous intelligence failure. Morale at the Agency plummeted after the 2003 Iraq War intelligence debacle. Before Israel approached the United States, intelligence community analysts were reluctant to reach any solid conclusions. Iraq “had an influence at the intelligence level,” R acknowledges. “The implicit if not explicit question was: Are you sure?”

Rolf Mowatt-Larssen, the CIA veteran and head of intelligence at the Department of Energy, agrees. He indicates that Iraq caused bureaucratic changes in how the intelligence community handled Syria. “There was a great deal of vetting,” he notes. After Iraq, moreover, he says government officials grew wary “as soon as you put WMD in a sentence.”

R’s statements, along with those of Mowatt-Larssen, are important pieces of evidence in support of my theory. The Iraq failure induced reform and increased skepticism at the organizational level, delaying detection. Detection in such an environment was practically destined to be late. Inferences that might once have been acceptable—even obvious—were now insufficient. As my theory predicts, the organization took extraordinary measures before reaching any conclusions. “It had an impact on the degree to which we made sure,” R says. Without hard evidence, few analysts were likely to have been willing to go out on a limb about the Syria developments.

The influence of the Iraq War on what the intelligence community was willing to say and not say continued to manifest itself at the background briefing in 2008. The Bush White

---

House and the CIA organized the briefing to address persisting doubts about Israeli actions and in light of vociferous Syrian denials.

Yet the two intelligence officials at the briefing in 2008 refused to endorse in any definitive way the conclusion that Syria was pursuing a weapons program. They believed that Syria’s intentions had indeed been malicious. Yet they could not make this “assessment” without qualifying it. As an official put it in response to a confused reporter: “[O]ur confidence level that it’s weapons is low at this point. We believe it, but it’s low based on the physical evidence.” In other words, inference without evidence must be carefully qualified.

One assumes that before the Israeli detection in 2007, the U.S. intelligence community employed similar qualifications when it came to reporting on the curious Syria case. And they continued to do so afterward.

These verbal gymnastics are a direct result of intelligence reforms after the Iraq War. In NIEs, the intelligence community now includes a careful explanation of its “confidence” system. In essence, the intelligence community cannot attach “high confidence” to any judgment unless intelligence agencies possess concrete evidence or sourcing to back it up.

At the briefing, the reporters were baffled. A revealing exchange ensued:

Q: [. . .] I think it’s interesting that you have a low-confidence level that they [sought a weapons program].

Official 1: But be very specific [. . .]—if you are going to make a clinical judgment that the evidence supports all the way through, you have to have the clinical evidence in hand.

Q: Did you tell the Israelis you have low confidence it was for weapons?

Official 2: No, you need to understand. I’m sorry to dwell on the point. This is very, very important.

Official 1: This is very important.
Official 2: We told our President four things [in spring 2007, after Israel approached the United States with its evidence]: This is a reactor; the North Koreans and the Syrians are cooperating on nuclear activities; the North Koreans and Syrians are cooperating on the construction of this reactor; and this reactor—its purpose—is to create fuel for a nuclear weapons program. Those are the things we concluded.

The first three conclusions had evidence to support them and therefore merited the endorsement “high confidence.” The absence of solid evidence of a reprocessing facility and efforts to design and produce warheads meant that the intelligence community had “low confidence” in the weapons program judgment. This is despite the fact that, in the absence of a connection to the electrical grid and because of the excessive secrecy surrounding the project, the reactor probably constituted part of a nuclear weapons program, albeit potentially a slow-moving one. The officials even claimed at the briefing that during deliberations in 2007 they had told the President explicitly that they “could think of no other explanation for the reactor.”

Hawkish observers of the intelligence community quickly called attention to this muddle. Tobey, who was out of government by 2008, called the briefing a “huge go-around.” In an op-ed, Leonard Spector and Avner Cohen said the CIA stumbled with its “astonishing awkwardness in making clear what’s a fact and what’s an inference.”

During U.S. deliberations in 2007, after the Israelis brought the reactor to the White House’s attention, the intelligence community’s new system also made an impact. The opponents of vigorous military action by the United States leveraged the CIA’s opaque verbiage to make their case for diplomacy, while hawks did the opposite.

The two sides stake their claims in post-administration memoirs. Secretary of State Condoleezza Rice argued against military action. Recounting the debate within the

---

75 Interview with William Tobey, February 24, 2015, Cambridge, MA.
administration, Rice characterizes a strike “in the face of uncertain intelligence” as “reckless.” She says ultimately this is what made the difference for Bush. “When Mike Hayden, the CIA director, told us that he couldn’t certify with anything other than low confidence that the reactor was part of a nuclear weapons program, the President decided against a strike.”

In his own account of the episode, Bush agrees: “Mike’s report clarified my decision.”

Through it all, Dick Cheney professed to be mystified. After Israeli officials briefed him with their intelligence, he mused in his memoir, “I realized that not only was there evidence, but it was actually very solid.” While Bush and Rice, both opponents of a strike, quote Mike Hayden’s assessment, Cheney draws on reputed statements by DNI Mike McConnell to bolster his claims. When asked about the quality of intelligence, McConnell responded: “It’s about as good as it gets.” Cheney writes further of McConnell: “He noted the intelligence community had ‘high confidence’ this was a nuclear reactor.”

Clearly, Cheney’s is a selective retelling. That the site was a nuclear reactor, the intelligence community indeed had “high confidence.” But the statement about the reactor is just one of the four judgments relayed to the President. Cheney omits the “low confidence” judgment about a weapons program that Rice and Bush found persuasive.

Ironically, Bush concludes his discussion of the Syria episode by appearing to blame the U.S. intelligence community, if only mildly. “While I was told that our analysts had only low confidence that the facility was part of a nuclear weapons program, surveillance after the bombing showed Syrian officials meticulously covering up the remains of the building,” Bush writes. He even pokes fun at the new CIA terminology. “If the facility was really just an

---

79 Cheney, 467.
80 Cheney, 471.
innocent research lab, Syrian President Assad would have been screaming at the Israelis on the floor of the United Nations. That was one judgment I could make with high confidence.”

Syria, as Seen by Israel

Amid the welter of suspicions and varying confidence assessments in the United States, how had Israel detected the reactor? As with events in the United States, accounts differ somewhat. A collective narrative emerges in which Israel sensed something amiss in mid-2004. Probably not coincidentally, this is also when the magnitude of Israel’s false negative failure on Libya came to light in the Knesset report.

The sequence of events in the initial years remains murky. According to journalists Katz and Hendel, Israeli intelligence noted the presence of North Korean officials accompanying Bashar al-Assad at his father’s funeral in 2000. Syria had for years been working with North Korea to improve its ballistic missile and chemical weapons arsenal, so intelligence analysts attributed the guests from Pyongyang to such dealings.82

Then, around 2005, the U.S. NSA passed on the tip to its equivalent in Israel, Unit 8200, about high call traffic with Pyongyang.83 The year before, the Israeli Knesset issued its report. Where previous failure, in the form of a false positive, had inhibited the U.S. intelligence community, Libya had the opposite effect on Israel. To the extent that we can observe the behavior of Israeli intelligence during this period, it fits with my theoretical expectations.

Meir Dagan, who had taken over as head of the Mossad two years earlier, and his top deputies were apparently so alarmed by the Libyan oversight that they redoubled their focus.

---

81 Bush, 422.
83 Ibid.
on nuclear proliferation, according to Raviv and Melman. The Israelis started to uncover records from earlier in the 2000s suggesting “clandestine contacts with North Korea that were difficult to explain.”

Even at the beginning of Dagan’s tenure at the Mossad in 2002, we see Libya’s impact. At that point, the United States had apparently only notified Israel of the contents of the alarming 2001 NIE about Qaddafi’s nuclear efforts. Ariel Sharon replaced the former Mossad head, Ephraim Halevy, in part because of this news and of increasing suspicions about Iran’s nuclear program. In an address to colleagues, Dagan accused his predecessor of “ignoring the nascent Libyan nuclear weapons program.”

Dagan apparently called for a full-scale intelligence offensive to get to the bottom of the Syrian mystery, particularly in light of what had happened in Libya. Israeli intelligence reoriented its spy satellites in order to maximize the frequency of coverage over Syria. Human intelligence targeted the Syrian leadership. Dagan sought additional funding for these operations, and apparently found Prime Minister Ehud Olmert to be supportive.

Sometime in 2006, through satellite imagery and other methods, the Israelis identified a building in northeastern Syria that they suspected might relate to a nuclear program. As noted above, the United States was also aware of this building, though it is unclear how much scrutiny it received.

It is telling that at this stage the United States and Israel probably possessed similar information on the situation in Syria. They also probably harbored similar doubts. How could

---

84 Ibid., 315.
86 Katz and Hendel, 66.
87 Raviv and Melman, 315.
Assad be so obtuse? Yet Israel pressed ahead, while U.S. intelligence told hawks inside the administration and Israeli intelligence that they lacked evidence of Syrian mischief.

Ultimately, the intelligence break came for the Israelis in early 2007. Accounts agree that a “Syrian official”—sometimes named as nuclear scientists Ibrahim Othman—traveled to Europe and apparently failed to secure his laptop where he was staying. The New Yorker has the action taking place in Vienna: “In less than an hour, the Mossad operatives swept in, extracted top-secret information from Othman’s computer, and left without a trace.” Ronen Bergman puts the scene at a posh hotel in London. Der Spiegel also says the action took place London. 88 Other sources corroborate these accounts. 89

The information on the laptop proved to be a showstopper. The Israelis recovered pictures taken within the reactor itself and of a senior North Korean scientist posing with Syrian nuclear scientists inside the complex. More conclusively than they could with satellite images, photographic analysts identified the scene as a plutonium reactor. Once the Israelis had an airtight case—or what they thought was one—they went to the Americans.

In the table below, I review Israeli detection efforts.

### Israeli Detection of Syria

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Israeli intelligence notes presence of North Korean officials at Hafez al-Assad’s funeral.</td>
</tr>
<tr>
<td>2004</td>
<td><strong>Libya false negative intelligence debacle.</strong> Israeli intelligence reexamines past intelligence on Syrian nuclear activities.</td>
</tr>
<tr>
<td>2005</td>
<td>Israel receives tip from the United States and continues investigation.</td>
</tr>
<tr>
<td>2006</td>
<td>Rising Israeli intelligence suspicion about Syrian nuclear activities.</td>
</tr>
<tr>
<td>March 2007</td>
<td><strong>Detection occurs.</strong> Mossad operatives obtain pictures and other data on the Kibar site and North Korean cooperation with Damascus.</td>
</tr>
</tbody>
</table>

---

88 “Operation Orchard.”
89 Raviv and Melman, 315; Katz and Hendel, 63.
What explains Israeli success? As Shlomo Brom, the retired IDF general, recounted in an interview with me, the Libya case made a major difference in Israel.

I think that what we learned from the Libyan episode is that we have to be prepared for surprises and look for the possibility of nuclear programs in states even when the general intelligence assessment is that it doesn’t make sense that they would have nuclear programs. That explains why Israel was more successful in the Syrian case. Brom’s statement is another key piece of evidence in support of my theory.

Other accounts of Israeli intelligence during this period are trickling out—and they tend to support my argument. Ari Shavit, a respected Ha’aretz correspondent, includes a brief description of the Syria episode in his acclaimed 2014 book My Promised Land. As with the others, Shavit seems to stylize details. Contradicting other versions of the story, Shavit claims that in 2006 Dagan “argued that there was no sense in investing intelligence resources in Syria, for it was a dead horse that not threaten Israel.” Instead of Dagan, Shavit portrays Amos Yadlin, the head of Aman, as the perspicacious Cassandra. Shavit writes:

Yadlin begged to differ [with Dagan about diverting resources away from Syria]. He remembered that three years earlier, Israel had failed to detect the Libyan nuclear project, and he asked his lieutenants to scan all possible sources to see if any surprises were hidden anywhere. In the late summer of 2006, one of his men raised the possibility that the enormous structure in Deir ez Zor concealed a North Korean plutonium reactor. By autumn there was some evidence supporting this seemingly wild hypothesis. According, to non-Israeli sources, Yadlin shared his concern with the prime minister, Ehud Olmert, and an American intelligence chief, who dismissed him. Both were under the influence of Dagan, who insisted that there was no Syrian reactor.

The temptation is to throw up one’s hands in the face of such conflicting accounts. We need not do so. Whether Mossad or Aman—or Dagan or Yadlin—deserve credit is

---

90 Interview with Shlomo Brom.
91 We should note that Brom has been out of uniform and working at the most prominent Israeli national security think tank since 1998. However, he worked as an outside expert on the Knesset WMD intelligence report, and, on the strength of the intelligence sources in his publications, maintains close ties with the intelligence establishment.
92 Ari Shavit, My Promised Land (Random House Publishing Group, 2013), 370.
immaterial. Likewise, the specifics of how Israel came by the new information in 2007 should not unduly concern us. Whatever the method, Israeli intelligence appears to have invested great resources to obtain the information that it did. The Libya failure played a role in convincing the intelligence agencies to do so.

**United States and Israel Compared**

As I have shown, previous intelligence failure appears to exert a major influence on events in Syria. The side-by-side comparison in the table below summarizes what each side knew or suspected and when.

**Detection of Syria: Israel and the United States Compared**

<table>
<thead>
<tr>
<th>Year</th>
<th>Israel</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>U.S. receives unspecified information on Syrian nuclear activities.</td>
<td>John Bolton seeks to accuse Syria of seeking to acquire nuclear weapons in a speech. The CIA overrules him.</td>
</tr>
<tr>
<td>2003</td>
<td>Israel receives tip from the United States and continues investigation.</td>
<td><strong>Libya false negative intelligence debacle.</strong> Israeli intelligence reexamines Syrian nuclear activities.</td>
</tr>
<tr>
<td>2004</td>
<td>Rising Israeli intelligence suspicion about Syrian nuclear activities.</td>
<td>NSA picks up call traffic between North Korea and the eastern Syria desert. Tip passed to Israel and investigated by U.S. intelligence.</td>
</tr>
<tr>
<td>2005</td>
<td>Israel approaches Western intelligence agencies with suspicions of Syrian activities. U.S. intelligence dismisses Israeli suspicions. Study ordered by Hadley sometime before 2007 returns “ambiguous evidence.”</td>
<td><strong>Iraq WMD false positive intelligence failure.</strong></td>
</tr>
<tr>
<td>March</td>
<td><strong>Detection occurs.</strong> Israel obtains</td>
<td></td>
</tr>
</tbody>
</table>
Policymaker interest also factored. I do not find explicit evidence of policymaker resistance, perhaps because it has yet to emerge. But U.S. policymakers were in no mood to find a nuclear reactor in the Syrian desert built with the help of North Koreans. John Bolton and Dick Cheney were alone in the Bush administration when it came to their theories about North Korean-Syrian cooperation. There were plenty of reasons for this, not least the ongoing wars in Iraq and Afghanistan. In the first half of 2007, moreover, the United States was engaged in intensive six-party talks with North Korea over its nuclear weapons program. Condoleezza Rice and Bush himself were eager to reach a deal with Pyongyang.

Even if they did not consciously hold this view, it is possible that the Bush administration—other than Bolton and Cheney—exuded a distinct lack of enthusiasm when the intelligence community raised suspicions of the Syrian program before 2007. Deliberations after April 2007 constitute a separate matter, by then Israel had achieved early detection. However, the impact of policymakers may have persisted. Bush and Rice sought an out from the Syria conundrum. Mike Hayden’s “Low-confidence” assessment gave them one. Even better, it let the intelligence community off the hook as well. After the intelligence investigation, Bush called Prime Minister Ehud Olmert and stated, “I cannot justify an attack on a sovereign nation unless my intelligence agencies stand up and say it’s a weapons program.” Israel took matters into its own hands and bombed the reactor a few months later.

---

93 Bush, *Decision Points.*
The Israeli intelligence and policy community exhibited the opposite of the U.S. tendencies. If the CIA feared another Iraq, Israel feared another Libya.\textsuperscript{94} The Knesset report had prompted renewed urgency in the Mossad and Aman.

### III. Conclusion

The risk in a paper focusing on detection is losing sight of what, exactly, is being detected, and by whom. Muammar Qaddafi was probably at least a decade away from producing a deliverable nuclear weapon. Despite the handwringing, Israel’s ignorance of developments in Libya did not bring great peril. “There was no immediate danger to my knowledge to Israel,” William Tobey said. “And we had every intention of stopping it.”

For Israel, that would not do. Whether it posed a danger or not, Qaddafi apparently did things that Tel Aviv did not see. That runs an intolerable risk for a state as sensitive to threats as Israel.

In a radio interview after the Knesset report, Ariel Sharon tried to downplay the findings. “Look, people in Israel are extremely fond of failures,” he said. “Failure is often the media’s wet dream.”\textsuperscript{95} Writing in 2004, Shlomo Brom expanded on Sharon’s point. He attributed the obsession with failure as a product of “excessive intelligence anxiety” dating back to 1973. “The intelligence failure on the eve of the Yom Kippur War resulted in the warning pendulum swinging to the opposite extreme: complete and uncritical adoption of the worst possible scenario,” Brom wrote. He went on:

Three decades have passed since then, and the pendulum still has not swung back to a balanced position. A culture evolved in Israel of assigning culpability and punishing those responsible as a primary purpose in assessing events, and this culture may play a role in the continuing prevalence of uncritically adopting the most dire predictions.

---


\textsuperscript{95} “Israeli Premier on Syria, Intelligence ‘Failure’, Yasin Killing Aftermath.”
The Israeli media is a central player and an enthusiastic partner in encouraging this culture.\footnote{Shlomo Brom, “Israeli Intelligence on Iraq: An Intelligence Failure?” \textit{Strategic Assessment}, November 2003.}

In such an atmosphere, whatever the actual state of the Libyan program, it stands to reason that Israeli intelligence reacted to the failure as it did.

Such is Israel’s allergy to suffering a false negative, moreover, that its false positive on Iraq hardly mattered. In an interview, Brom called Iraq a costless failure. “Nothing happened to Israel because of this mistake,” he said. For the United States, on the other hand, the cost was “catastrophic.”\footnote{Interview with Shlomo Brom.}

\section*{Langley in the Dark}

I have argued that the Iraq failure and the changes they induced made all the difference in Syria. But did they? Some of the facts surrounding the case sit uneasily with one another. How could U.S. intelligence harbor suspicions for “years” and yet remain unaware of what was taking place? And if the United States passed information, probably signals intelligence, to Israel sometime around 2005, can we fairly deem Israel to have been the early detector? Tobey highlighted this point. “It’s my view that Israel received an important tip from the United States,” he said.\footnote{Interview with William Tobey.} Also recall R.’s comment: “Things rarely come out of nowhere.”

I argue that the weight of the evidence still suggests that the U.S. intelligence community remained in the dark, even as the site on the Euphrates attracted occasional American attention. “I was struck by the extent to which proliferators learn from history,” R admitted. The site at Al Kibar contained no perimeter defenses or guns. The structure itself was made to look as unassuming as possible.
Even as late as 2006, we see evidence that the United States doubted any nuclear plot. According to several accounts, Israel approached Western intelligence agencies in the 2005 or 2006 timeframe with its initial suspicions. This may have occurred before or after the United States passed Israel its tip about a connection to North Korea. In response to Israeli queries, the CIA and French intelligence said they “knew about missile sales and cooperation between Damascus and Pyongyang,” Raviv and Melman write. “Yet neither the Americans nor the French knew a thing about nuclear links.” Ari Shavit also reports that in 2006 Israeli intelligence had taken its suspicions to American intelligence but had been spurned.

Did the United States know more than it let on? As in the late 1990s and early 2000s with the Khan network, did the CIA wish to “let things run” in order to gather more information?

I believe that the explanation is more prosaic. The United States harbored genuine doubts about a nuclear project in Syria, not least because of the trauma of the Iraq failure. The tip the United States passed to Israel was just that: a tip. The United States did not have the complete picture. As the briefers at the background briefing put it, all they had in 2005 were indications of a cooperative project in eastern Syria. They had “no specific information on the nature or the exact location of the work.” It was up to the Israelis to piece things together, which took them an additional year and half. During that time, U.S. intelligence could sincerely report to hawks in the Bush administration, such as Cheney, as well to Israel, that it had “no evidence” of nuclear cooperation between Syria and North Korea. After Iraq, the intelligence community would not have been willing to go beyond that without stark physical evidence that could back up a “high confidence” assessment. Moreover, the situation was

---

99 Raviv and Melman, 315.
sufficiently puzzling that U.S. analysts did not need to be intentionally ignorant to remain dubious.

In hindsight, neoconservatives working under Cheney cried foul. After Iraq, they suggest, the intelligence community buried its head in the sand. A group of the Vice President’s staffers protested in the *Washington Post*:

> As Cheney relates in his memoir, he asked repeatedly over a period of years before 2007 about reports of North Korean nuclear officials traveling to Syria. U.S. intelligence analysts acknowledged the reports but had low confidence that any nuclear cooperation existed because of a lack of hard evidence. It was only when the Israelis produced photos of a nearly completed reactor in mid-2007 that low-confidence judgments switched to high-confidence judgments. Still, because we had no photos of a reprocessing facility, the analysts stuck to their low-confidence judgment about a weapons program.¹⁰⁰

> The intelligence briefers in 2008 do not really dispute this account. “[W]e had this body of evidence, kind of almost like a cloud of, ‘Boy, there’s something going on here but we can’t get a whole lot of precision about it.’” For the United States, imprecision after Iraq, especially involving what everyone considered a remote possibility, meant waiting for additional information. For Israel, after Libya, it meant redoubling detection efforts.

### ‘The Tojo Option’

This still leaves open the question of U.S. actions after April 2007, when Israeli intelligence arrived. Several details about U.S. deliberations highlight the organizational power of the intelligence community in its dealing with top policymakers—and the impact of Iraq on both groups. “[T]he disastrous intelligence failure on weapons of mass destruction in Iraq was fresh in everyone’s mind,” the *New Yorker* reports. “Bush’s words, according to [a] former U.S. senior official, were ‘Gotta be secret, and gotta be sure.’” Bush sought secrecy

because he feared leaks by the intelligence community. Like the intelligence community itself, he also wanted to be sure this time around.

By setting up a compartmentalized CIA task force, the White House succeeded in preventing leaks, which became more common as relations between Langley and the White House soured after Iraq. But when it came time for decisions, the task force’s low confidence judgment about the reactor’s part in a larger weapons program effectively painted Bush into a corner. “Given what had happened in Iraq,” Tobey explained in an interview, “and given their refusal to say it was [for] weapons purposes, it would have been very difficult to take action.” According to several participants, Bush anticipated resistance inside the intelligence community. “The president thought that the ‘low confidence’ judgment would leak,” Elliott Abrams writes, “as it surely would have.”\(^\text{101}\)

No one is known to have threatened such a leak. Yet the President apparently factored it into his calculus. At the very least he lacked the kind of political cover from the intelligence community that would have proven useful. Those who believe that Bush should have ordered an American strike point to this as proof of politicization by the intelligence community. Were it not for dovish analysts, Bush would have had free reign to do what he willed.

The truth is probably more complicated. Most of Bush’s advisers opposed an attack, including Secretaries Gates and Rice. The United States, Gates argued at one point, “doesn’t do ‘Pearl Harbors.’” Syria would be the victim of a surprise attack. Further, “an act of war based principally on information provided by a third party is risky in the extreme.” Gates further reminded Bush that President Reagan had joined the rest of the world in condemning the Israeli attack on Osirak. Bush found these arguments compelling. Gates says Bush

thanked him for his comments privately. The possibility of a strike, which they had come to call “the Tojo option,” was off the table. “I’m not going to do that,” Bush said.102

Counter to the revisionist hawks, I believe Bush took the right approach. So did the intelligence community. Hayden and other senior officials tied themselves in knots by telling the president that they “could think of no other explanation for the reactor.” Yet so far as we can tell from the available data, they faithfully stuck to the facts. The Syrians built a hidden plutonium reactor in the desert. Neither the Israelis nor the Americans—either then or since—have furnished hard evidence of the rest of a weapons program: Where would the fuel come from? Where was the reprocessing facility? Did evidence exist of warhead design efforts? All these elicited low-confidence assessments. The intelligence community could not rule out their existence. Perhaps Damascus hid them extraordinarily well. Yet if Israel obtained such high-resolution intelligence on the reactor—to include photos inside of it—then one would expect the trail to have also led to the other facilities. The best explanation for this puzzle is that Assad decided to prioritize secrecy over speed in his proliferation process. The Kibar reactor most likely did not present an *imminent* danger, because it was merely the first step on a long proliferation journey.

In that case, the U.S. intelligence community may have been *late* to detecting al Kibar, but it did not err in judgment once the reactor was found. This raises a broader insight about sensitivities and priorities. For Washington, detecting *early* may be less important than detecting *in time*. For Israel, there is no such room for error. Earlier detection is always better, even at the risk of false positive failures, as Brom points out. Earlier detection offers a better opportunity for preemption. This may be one reason why the United States did not inform Israel of its activities vis-à-vis Libya. Tel Aviv would likely have favored an option other than

“let it run.” In Syria, as Albright puts it, Israel’s assessment of the reactor amounted to a “worst-case” scenario.\textsuperscript{103}

**Failing the Right Way**

The difference in baseline sensitivity perhaps represents the best alternative explanation for the detection pattern I have laid out. While Israel plays the preemption game, the United States is more willing to “let it run.” Washington and Tel Aviv could see the same data, according to this explanation, and make different “detection judgments” because of their differing levels of sensitivity. Israel saw a nascent nuclear weapons program in Syria. We lack the knowledge to say whether they were correct. Once the photographs arrived from Israel, the United States saw a plutonium reactor and little else.

Despite these differences, my theory retains explanatory power. The variables appear to have an impact on both countries, even if the detectors’ priors and evidentiary standards differ.

Future research should tackle other cases. Ideally, these would cover other values on the independent variables, specifically policymaker interest. In the present cases, policymaker interest diverges from its baseline only once.

Pakistan in the late 1970s and 1980s presents an opportunity on this front. As noted in my typology, the Reagan administration (starting in 1981) clearly embodied *policymaker resistance*. While Israel conspired with India to strike the Kahuta reactor, according to a few

sources, the United States maintained chilly relations with India and sought to paper over the Pakistani nuclear issue.¹⁰⁴

As for the United States, critics of the intelligence community harped on the Syria episode as yet another sign of a broken system. Political scientist Graham Allison marveled, “If you can build a reactor in Syria without being detected for eight years, how hard can it be to sell a little plutonium to Osama bin Laden?”¹⁰⁵

The detection did take years—although not eight—and the United States was indeed late relative to Israel. The unfortunate upshot, to which Gates alludes in his account, is that the early detector in that case controlled what to convey to Washington and when. Insofar as it was a failure, though, the United States failed in the right direction on Syria. Iraq loomed over every part of the process. That the president might have feared leaks from his own intelligence system is unfortunate but not unprecedented. Overall, the intelligence community functioned adequately, even if it did not achieve early detection.

¹⁰⁴ Levy and Scott-Clark, 105.