

# PROLIFERATION OF WEAPONS OF MASS DESTRUCTION IN THE MIDDLE EAST

*Directions  
and Policy  
Options in the  
New Century*



Edited by **JAMES A. RUSSELL**



PROLIFERATION OF WEAPONS OF  
MASS DESTRUCTION  
IN THE MIDDLE EAST

## **Initiatives in Strategic Studies: Issues and Policies**

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PROLIFERATION OF WEAPONS OF MASS  
DESTRUCTION IN THE MIDDLE EAST:  
DIRECTIONS AND POLICY OPTIONS  
IN THE NEW CENTURY

*James A. Russell*

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## FOREWORD

The nexus between international terrorism, the proliferation of weapons of mass destruction (WMD), and the countries of the Middle East has emerged as one of the most troubling security issues of the twenty-first century. The reality of this issue is highly complex. The international community has experienced some recent success in stemming the spread of chemical, biological, and nuclear weapons in the region. A.Q. Khan's clandestine effort to sell nuclear-weapon technology and technical assistance has been shut down. Libya also has abandoned its nuclear-weapons program. These achievements, however, have not extended to other important actors in the region. Iran has defied the nonproliferation regime by continuing to build a nuclear-weapons program, and there is a growing concern that it is only a matter of time before terrorists acquire and use a rudimentary chemical, biological, or radiological device. Israel retains its policy of deliberate ambiguity when it comes to its nuclear capability, leaving scholars to assess the impact of Tel Aviv's policies on the region. The "counterproliferation war" fought by a U.S. led coalition against Iraq also has turned into a source of embarrassment. Although the second Gulf war succeeded in eliminating the threat posed by Saddam Hussein's regime, it now appears that the U.S. intelligence community greatly overestimated Iraq's programs to build WMD while it underestimated the apparent effectiveness of international policies to constrain Iraq's weapons programs.

The challenges posed by the presence of WMD programs in the Middle East are highly nuanced. This nuance is reflected in this outstanding collection of analytical compositions, *WMD Proliferation in the Middle East: Trends and Policy Options in the Twenty-First Century*. James Russell and his contributors take a fresh and balanced look at the proliferation issue in the Middle East, seeking to generate theoretically informed policy prescriptions that can help reduce the danger posed by the spread of WMD in this volatile region. By exploring a variety of case studies from several theoretical perspectives, Russell and the contributors to the volume make a much needed contribution to our understanding of the threat of WMD in the Middle East today.

*James J. Wirtz*, General Editor  
Initiatives in Strategic Studies: Issues and Policies



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## ABBREVIATIONS

|            |   |
|------------|---|
| ABM Treaty | Anti-Ballistic Missile Treaty   |
| ADI        | Arab Development Institute  |
| BCCI       | Bank of Credit and Commerce International                               |
| BW         | Biological Weapons  |
| BWC        | Biological Weapons Convention   |
| CBRN       | Chemical, Biological, Radiological, and Nuclear Weapons                 |
| CBW        | Chemical and Biological Warfare / Warfare                               |
| CIA        | Central Intelligence Agency   |
| CTBT       | Comprehensive Test Ban Treaty   |
| CTR        | Cooperative Threat Reduction  |
| CW         | Chemical Weapons  |
| CWC        | Chemicals Weapons Conventions   |
| DoD        | Department of Defense   |
| DOE        | Department of Energy  |
| EIA        | Energy Information Administration                                       |
| EU         | European Union  |
| FDO        | Fysisch Dynamisch Onderzoekslaboratorium<br>(Physical Dynamic Research) |
| FSB        | Federal Security Service  |
| FY         | Fiscal Year   |
| GCC        | Gulf Cooperation Council  |
| GDP        | Gross Domestic Product  |
| IAEA       | International Atomic Energy Agency                                      |
| ILSA       | Iran—Libya Sanctions Act  |
| IMF        | International Monetary Fund   |
| IRC        | Industrial Research Centre  |
| IW         | Information Warfare   |
| KRL        | Khan Research Laboratories Laboratory                                   |
| MEPI       | Middle East Partnership Initiative                                      |
| MTCR       | Missile Technology Control Regime                                       |
| NASR       | National Authority (Academy) for Scientific Research                    |
| NATO       | North Atlantic Treaty Organization                                      |
| NBC        | Nuclear, Biological, or Chemical  |
| NBSR       | National Board for Scientific Research                                  |
| NIS        | Newly Independent States  |
| NPT        | Non-Proliferation Treaty  |
| NSC        | National Security Council   |

|         |   |
|---------|---|
| OPEC    | Organization of Petroleum Exporting Countries         |
| PAEC    | Pakistan Atomic Energy Commission                     |
| PSI     | Proliferation Security Initiative                     |
| RMA     | Revolutions in Military Affairs                       |
| SAAF    | Saudi Arabian Armed Forces                            |
| SANG    | Saudi National Guard                                  |
| SCOPE   | Scomi Precision Engineering                           |
| START   | Strategic Arms Reduction Treaty                       |
| TNRC    | Tajura Nuclear Research Center                        |
| UNC     | Ultra-Centrifuge Nederland                            |
| UNMOVIC | United Nations Monitoring and Verification Commission |
| UNSCOM  | UN Special Commission                                 |
| UNSCR   | United Nations Security Council Resolution            |
| URENCO  | Uranium Enrichment Consortium                         |
| VMF     | Verenigde Machinefabrieken (United Machine Factory)   |
| WMD     | Weapons of Mass Destruction                           |

## INTRODUCTION

*James A. Russell*

In his September 1993 address at the United Nations General Assembly, President William Clinton stated: “One of our most urgent priorities must be attacking the proliferation of weapons of mass destruction, whether they are nuclear, chemical or biological; and the ballistic missiles that can rain them down on populations hundreds of miles away. . . . If we do not stem the proliferation of the world’s deadliest weapons, no democracy can feel secure.”<sup>1</sup> Following the speech, President Clinton signed Presidential Directive 18 that directed the Department of Defense to develop a new approach for the United States to address the proliferation of weapons of mass destruction (WMD). At the time of the initiative, the United States was particularly concerned with the prospect of thousands of unsecured nuclear warheads in the former Soviet republics—the problem of “loose nukes.”

Secretary of Defense Les Aspin voiced concern in late 1993 about the prospect of scientists from Russia’s nuclear programs being available “for hire” around the world. More generally, Aspin noted that “The other new development that exacerbates today’s proliferation problem is a by-product of growth in world trade and the rising tide of technology everywhere. The world economy today is characterized by an ever increasing volume of trade leading to ever greater diffusion of technology. Simply put, this will make it harder and harder to detect illicit diversions of materials and technology useful for weapons development.”<sup>2</sup>

The essential problem identified by President Clinton and Secretary Aspin came home to roost nearly 10 years later as the Bush administration launched Operation Iraqi Freedom based in part on the same conclusions articulated by President Clinton—that the United States remained unsafe and vulnerable to attack by a hostile dictator with the capability to inflict mass casualty attacks using long-range missiles with chemical, biological, and possibly nuclear warheads. These were capabilities that were thought to have been developed indigenously by Saddam Hussein, which he had managed to keep out of sight from the United Nations’ weapons inspectors who were prowling through Iraq’s WMD infrastructure throughout much of the 1990s.

The September 1993 speech and the attack on Iraq in March 2003 represented interesting bookends to a 10-year period that saw growing

recognition throughout the international community of the threat posed by proliferation of WMD. The Defense Department produced several reports documenting the spread of these threatening capabilities, and focused specific attention on four Middle Eastern proliferants: Syria, Iran, Iraq, and Libya.<sup>3</sup> During the 1990s, the Clinton administration tried hard to strengthen multilateral export control regimes designed to slow the spread of dangerous technologies, such as the Chemical Warfare Convention and the Missile Technology Control Regime. The proliferators in the Middle East were isolated politically and, in Iraq's case, militarily in an effort to address these particularly problematic proliferation cases. Military forces were deployed into the Persian Gulf to enforce the United Nations' requirement that Iraq give up its WMD and cease all research. As the decade evolved, these forces increasingly became tools for counterproliferation; on several occasions they were used against target sets thought to be involved in Iraq's WMD infrastructure.

The focus on the proliferation problem coincided with growing concern within the national security affairs community about the emergence of a collection of state actors not conducting themselves in accordance with generally accepted norms of international behavior. The Clinton administration subsequently adopted the term "rogue state" as a way to identify this group of actors.<sup>4</sup> Chief among the objectionable forms of behavior was the acquisition of nonconventional military capabilities and long-range delivery systems that provided these states with a capability to strike at extended ranges, inflicting mass casualties of a most gruesome sort on unprotected and unsuspecting civilian populations. These capabilities included the weaponization of chemical and biological agents in the form of free-fall bombs, long-range missiles, or release by simple crop-duster type sprayers mounted on aerial platforms.

In some ways, the proliferation of these capabilities reopened the long-forgotten debates from the 1960s over counter-value targeting or holding civilian populations at risk. These WMDs afforded rogue states the capability of holding civilian populations at risk, potentially providing them with coercive leverage over regional states and also with the means to resist a coercive framework imposed on them by the United States and other regional actors. The 1990s, for example, saw a de facto balance of terror codified between Syria's long-range missiles and chemical weapons, on one side, and Israel's nuclear weapons on the other.<sup>5</sup>

In addition to the identification of problematic state actors during the 1990s, it also became apparent that non-state actors would emerge as a principal threat to the United States. The development of these new and dangerous non-state forces threatening the United States became apparent only slowly, after being subjected to limited terrorist attacks in the Middle East during the 1980s, the World Trade Center attack of 1993, uncovering the 1995 Bojinka plot to bomb civilian airliners over the Pacific, and attacks against U.S. military facilities in 1995 and 1996 in Saudi Arabia. Open warfare between the United States and al Qaeda finally erupted with the African Embassy bombings in 1998, the attack on the USS *Cole* in 2000, and the 9/11 attacks on the U.S. homeland.

In short, elements of a nefarious “perfect storm” were falling into place. Technology diffusion and globalization had made it easier for state actors to acquire and develop unconventional capabilities. The belated discovery by Japanese officials of Aum Shinriyko’s successful efforts to weaponize sarin and anthrax represented a second element of the growing storm—that non-state actors could and would seek to acquire WMD. Aum’s attacks on unsuspecting civilians made it clear that an age of unrestricted warfare on combatants and noncombatants had arrived, which was further confirmed by Osama bin Laden’s declaration of warfare on civilians and militaries alike in 1998. The third element of the perfect storm was that the so-called rogue states that had acquired unconventional capabilities had also demonstrated links to non-state actors. Iran and Syria’s close relationship with the Lebanese Hezbollah and their indirect support to the emerging radicalized forces in the occupied territories all created the possibility of unconventional attacks on Israel delivered via non-state actors. All the elements in this perfect storm had effectively converged by the end of the 1990s.

The storm broke with the 9/11 attacks, in which a non-state actor effectively mounted a mass-casualty attack using unconventional capabilities against the U.S. homeland. Not surprisingly, in the aftermath of 9/11, the salience of the issue of WMD proliferation and the threats from both state and non-state actors were raised even further—implicitly referenced in the Bush administration’s poignant characterization of the most dangerous threat facing the United States as the “crossroads of radicalism and technology.”<sup>6</sup>

## WMD AND THE MIDDLE EAST

While the United States may have awakened to the problem of WMD proliferation in the 1990s, the Middle East was already well acquainted with the phenomenon. Chemical weapons and long-range missiles had been integrated in the force structures of several states, reflecting a widely held view in the region that WMD constituted viable instruments of national power. The gruesome realities of battlefield use were revealed as the Iraqis dumped tons of chemical agents on Iranian forces during the 9-year Iran–Iraq war.<sup>7</sup> Both antagonists also lobbed long-range missiles at one another in the war of the cities during the latter part of the 1980s. To be sure, Saddam had invested considerable wealth over a long period of time building his WMD capabilities in the faceless industrial parks of the Muthanna State Establishment. With the indirect help of a wide variety of Western European companies, Saddam built the capability to produce up to 4,000 tons of chemical agents annually. His long-range missiles also came from outside suppliers, primarily the Soviet Union.

Saddam’s actions can be placed within a particular regional context—a context that is as problematic today as it was 25 years ago. During the 1970s, WMD came to be seen as an attractive option by other states in the region, such as Libya and Syria, as Arab militaries suffered a series of catastrophic defeats at the hands of the Israelis. Lacking credible conventional capabilities



and confronted by Israel's unparalleled conventional military supremacy in combination with its nuclear capability, Arab states looked at acquisition of WMD as cheap equalizer in this equation. The prospect of one lucky airburst of chemical agent in downtown Tel Aviv was all that was required to maintain some semblance of a credible threat to Israel's military might. The 1970s and the 1980s then saw the proliferation of WMD in the Middle East become a reality—a reality that the United States and the international community failed to realize until it was too late to reverse.

Today, the United States and the international community confront the legacy of this era. Whereas the Bush administration justified the invasion of Iraq as necessary to mitigate the threat from WMD, the problem of WMD was (and remains) particularly concentrated with state and non-state actors in the Middle East. Various nation states in the region possess long-range missiles (Israel, Egypt, Syria, Saudi Arabia, Iran, and Yemen), profess to have chemical or biological weapons (Iran and Syria), and are rumored either to have acquired or to be pursuing the development and/or acquisition of nuclear weapons (Israel, Iran, and Saudi Arabia). Several of these actors are also rumored to have developed substantial hardened underground facilities to protect their assets from the prying eyes of U.S. satellites and from the global positioning system guidance coordinates that are being passed to the new generation of precision-guided munitions that entered the U.S. inventory since the late 1990s.

### **The Detection Problem**

Despite concentrating intelligence collection and analysis on all these problematic WMD cases during the 1990s, the “return” on this investment appeared questionable. From 2003 to 2005 the U.S. intelligence community was buffeted by a series of revelations revealing either its overestimation (Iraq) or its underestimation (Iran) of WMD capabilities. The record of the intelligence community on estimating Libyan capabilities was better.<sup>8</sup> But if anything, the decade of the 1990s revealed an alarming analytical shortfall in intelligence collection and analysis on the Middle Eastern WMD proliferants. The analytical shortfall occurred across the board, with misjudgments of both intentions and capabilities.

Lessons from these cases, as highlighted in the Bush administration's WMD commission report indicate that the United States and the international community cannot be confident about their collective knowledge of the details of the extant WMD programs in the region. The lessons of the Iraq case, in particular, are not encouraging. Despite constructing an extensive on-the-ground inspection and verification system operated over a 7-year period and backed by the use of force, the international community was systematically misled and deceived by Saddam. The disturbing realities of the Iraq case should give all concerned officials reasons to pause and ponder when evaluating the efficacy of the existing regimes meant to oversee, detect, and prevent WMD proliferation.

## The Policy Conundrum

The mixed lessons of these proliferation cases pose significant challenges to policy-makers attempting to operationalize counterproliferation strategy in the Middle East. In Iraq, the efforts of the international community succeeded despite an overwhelming feeling during the period that it had failed to eliminate Saddam's WMD. Libya's abandonment of its WMD programs in December 2003 must be regarded as a success. Yet policy-makers still face the prospect of Iran's continuing pursuit of nuclear capabilities and the possible wider regional impact that Iran's acquisition of nuclear capabilities would have on the security perceptions of other regional states, such as Saudi Arabia and Israel.

The Iraq and Libya cases represent a triumph of the Clinton administration's approach: relying on the tried and tested methods of containment and deterrence to make the costs of proliferation so high that the proliferants would eventually give up the capabilities of their own accord. This has to be the lesson of Libya. As for Iraq, the policy of containment and isolation had succeeded beyond anyone's wildest dreams, with Saddam deciding to disarm in 1991. The effectiveness of the diplomatic, military, and economic instruments of containment effectively removed the prospect of covert rearmament from Saddam's decision-making calculus, though the WMD Commission Report notes that Saddam retained an interest in rearmament once sanctions were lifted. Also, in an incredible display of bad judgment, Saddam continued to claim that he had WMD, thus aiding his own demise by convincing the Western coalition that it had to invade Iraq in 2003 to eliminate this ephemeral threat.

But adopting an essentially defensive approach designed to work over time has become more problematic in the era of non-state actors who are not subject to deterrence. Non-state actors armed with WMD create the real possibility of devastating surprise attacks causing mass casualties. The suspicion that state actors will provide their WMD capabilities to surrogate terrorist groups only makes the proliferation cases in the Middle East that much more problematic. Syrian and Iranian ties with terrorist groups are well known and documented. While neither country has apparently provided WMD to their terrorist clients to date, living with the persistent uncertainty that either or both countries could change their minds has to be a concern for all states that are seeking to prevent mass-casualty attacks.

## OBJECTIVES OF THE BOOK

The authors in this book were each asked to address several key questions in their chapters:

- Shed light on problematic proliferation cases in the Middle East by providing in-depth analysis on current and potential programs in Libya, Syria, Iran, and the potential for proliferation in Saudi Arabia.

- Place the Israeli nuclear program within the context of regional dynamics that forms part of the underlying security environment and is one of several factors driving regional proliferation.
- Frame counterproliferation policy choices facing the United States based on an assessment of the lessons of Libya and Iraq and the challenges facing the international community in Iran.
- Apply findings from past cases to the new proliferation challenges facing the United States and the international community in the twenty-first century in the volatile Middle East.
- Frame policy choices facing the United States as it seeks to develop long-lasting threat reduction policies to mitigate the threat of WMD proliferation throughout the Middle East.

The chapters in this book are organized around these objectives and reveal the complicated and nuanced nature of the regional proliferation environment. Each of the outstanding authors in this volume bites off a piece of the proliferation problem in the Middle East. Taken together, their collective perspectives provide a subtle, multicolored tapestry of the problem.

We urge students, scholars, and public officials to take note of these chapters and the implications they collectively suggest for addressing this seemingly enduring feature of the regional landscape.

## NOTES

1. As quoted by Secretary of Defense Les Aspin in his speech on December 7, 2003, to the National Academy of Sciences announcing, pursuant to Presidential Directive 18, the launching of the Defense Department's Counterproliferation Initiative. Accessed online at <[www.fas.org/irp/offdocs/pdd18.htm](http://www.fas.org/irp/offdocs/pdd18.htm)>
2. *Ibid.*, 2.
3. The last of these reports was released in 2001. See "Proliferation: Threat and Response," Office of the Secretary of Defense, Department of Defense, Washington, DC, January 2001.
4. National Security Adviser Anthony Lake initially characterized these actors "backlash states" but his terminology was eventually subsumed by the "rogue" characterization. See Anthony Lake, "Confronting Backlash States," *Foreign Affairs*, vol. 72, no. 2 (March/April 1994).
5. The problematic nature of counter-value targeting and vulnerable civilian populations was eventually abandoned by the United States during the 1960s in favor of targeting the opponents' military capabilities in what became known as counterforce targeting. In his June 1962 commencement address at the University of Michigan, Defense Secretary Robert McNamara announced that the United States would focus nuclear targeting on destruction of the enemy's forces instead of his civilian populations.
6. *National Security Strategy of the United States* (Washington, DC: The White House, September 2002), p. ii.
7. In 1988, following the chemical attack on the Kurdish town of Halabja, British intelligence estimated that Iraq dumped 100 tons of sarin on Iranian forces on the

Fao peninsula during the last major offensive of the war. See “Iraq’s Weapons of Mass Destruction: the Assessment of the British Government,” September 24, 2002, p. 15.

8. See extensive discussion of the intelligence community’s record on the Iraq and Libyan cases in “The Commission on Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction,” report to the president of the United States, March 31, 2005.

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# THEORETICAL OVERVIEW

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PROLIFERATION, ASYMMETRIC WAR,  
AND THE CONTEMPORARY  
THREAT ENVIRONMENT

*Stephen Blank*

RETHINKING THE ASYMMETRIC  
THREAT ENVIRONMENT

We generally regard proliferation of weapons of mass destruction (WMD) as an asymmetric threat and their use as part of asymmetric strategy. We do so because the use of WMD, especially nuclear weapons, contradicts ideas about ethical conduct in war and because many believe that using nuclear weapons serves no rational strategic purpose, rendering these weapons inherently astrategic.<sup>1</sup> Since proliferation is a real phenomenon indulged in even by terrorists, for example, al Qaeda's interest in obtaining chemical, biological, radiological, and nuclear (CBRN) weapons, the quest for nuclear weapons by terrorists and governments undermines the argument that their use has no rational strategic purpose. Instead, "The degree of reliance on nuclear weapons is clearly related to the presence or absence of the perceived value or even indispensability of nuclear weapons for particular missions."<sup>2</sup>

Indeed, even before September 11 nuclear states were increasing the number of nuclear missions and modernizing nuclear weapons.<sup>3</sup> Governments and terrorist movements seek WMD, especially nuclear weapons, because they retain strategic utility for certain combat missions or the pursuit of otherwise unobtainable vital political goals. As Colin Gray observes, nuclear weapons, even when unusable to achieve reasonable political or military aims, function merely by their presence in a side's arsenals as weapons of strategic influence that could advance a belligerent's policy and war aims in the event of war.<sup>4</sup>

Consequently we cannot assume that horizontal proliferation, the acquisition of new capabilities to use WMD, or vertical proliferation, the qualitative improvement of the capability for delivering and using WMD, will soon stop threatening international security. Indeed, there are good reasons for fearing that either or both forms of proliferation will increase. To fully grasp



the nature of existing and developing strategic threats we must reconsider today's threat environment.<sup>5</sup> Today's strategic environment confirms that unexpected threats and fundamental transformations that expand the realm of possibilities for employing such asymmetric strategies are occurring.<sup>6</sup>

### “ASYMMETRIC WAR” IN OUR TIMES

To achieve greater clarity about today's threat environment, we must first rethink the nature of contemporary war. Although the future remains unpredictable, the widely predicted demise of interstate war cannot be accepted. The belief that we are witnessing the end of so-called Clausewitzian war and that future wars will be largely against insurgents, guerrillas, terrorists, or non-state entities remains unverifiable, even if most wars today are arguably such.<sup>7</sup> Moreover, it misreads Clausewitz and naively assumes that future wars must resemble today's wars.<sup>8</sup> States have not disappeared as belligerents and possess greater capabilities for sustained warfare than do non-state entities. Second, as Gray observes, proliferation, small wars, and terrorism are linked to each other.

Irregular combat—terrorism to take a leading example—is an option attractive to the weak. Non-nuclear WMD represent a basket of options for polities or sub-state groups who need to offset the nuclear and information-led conventional prowess of powerful enemies.<sup>9</sup>

Dogmatism about the nature of future war poorly serves militaries that must truly be ready for anything. This fact plus the poor record of past prognostications about the future of war mandates more modesty and less self-assured but blind dogmatism.

Even though such small, asymmetric, or unconventional wars dominate today's strategic environment, al Qaeda's and Palestinian terrorists' quest for WMD and chemical weapons respectively suggests that no contradiction exists between using WMD and “small wars.”<sup>10</sup> Similarly, the belief that small wars preclude operations alongside of or simultaneously with large-scale conventional or nuclear operations is untenable. It ignores the examples of World War II's resistance and partisan movements in Russia, Yugoslavia, and France; in Vietnam; and in such classical pitched battles as Operation Anaconda in our recent campaign in Afghanistan.<sup>11</sup> Consequently the reality for which we prepare and train must include what Michael Evans and the Russian military thinker Marshal M.A. Gareyev call multivariant war.<sup>12</sup> Such warfare comprises simultaneous engagements involving widely disparate forms of operations and points along the spectrum of conflict. It also means that local operations have distant effects.<sup>13</sup> As Evans observes,

The merging of modes of armed conflict suggests an era of warfare quite different from that of the recent past. Fighting in the future may involve conventional armies, guerrilla bands, independent and state-directed terrorist

groups, specialized anti-terrorist units, and private militias. Terrorist attacks might evolve into classic guerrilla warfare and then escalate to conventional conflict. Alternatively, fighting could be conducted at several levels at once. The possibility of continuous, sporadic, armed conflict, its engagements blurred together in time and space, waged on several levels by a large array of national and subnational forces, means that the reality of war in the first decade of the twenty-first century is likely to transcend a neat division into distinct categories, symmetry and asymmetry.<sup>14</sup>

Richard Harknett similarly writes that,

[T]wenty-first century conflict must be understood as multidimensional in character. There are new security consequences related to the globalization of information and military technologies that pose serious challenges for traditional national security models of defense and deterrence and, by extension, challenges the basic security organization of the international system—the state. The critical factor in multidimensional conflict is the combinations of existing and new forms of organization with existing and new forms of destructive capability. In assessing these combinations, I suggest that a multidimensional threat environment requires a multidimensional response.<sup>15</sup>

In this environment threats associated with WMD proliferation assume a wholly new character. But while warfare has changed because it is a dynamic phenomenon, Clausewitz's chameleon, strategy, or at least its principles or dimensions, have not changed. We can agree with Colin Gray that,

If, as argued here, strategy has a permanent set of dimensions, albeit with each (politics, culture, technology, command, and so forth) playing to greater or lesser effect at different times, that permanence carries a virus potentially lethal to a contemporary thesis on revolutions in military affairs (RMA). If strategy for war—as for peace with security—is a whole enterprise with many dimensions, then signal advantage in one or even several of those dimensions is likely to be held strategic hostage by quality of performance elsewhere.<sup>16</sup>

Certainly if terrorists or their sponsors obtained a usable WMD, then that possession might well trump the high quality of U.S. conventional performance and the near magical belief in better wars through technology. Consequently militaries everywhere must be physically and cognitively prepared for all of these possible kinds of attacks. The following Indian example points in the correct direction but does not go far enough regarding readiness for wars encompassing theater conventional and even nuclear operations.

Any future war in the subcontinent is likely to be a hybrid of the industrial age of warfare and post-industrial age type of warfare, with an emphasis on revolutions in military affairs (RMA) technologies and information warfare. It is less likely that a major conventional war will occur and very likely that limited local wars will continue to occur. The subcontinent is also witnessing internal conflicts due to sectarian divisions, insurgencies, and proxy war where first-wave actors are battling industrial-age state actors. The acquisition

weapons used in the third wave form of warfare (i.e., precision weapons as well as information age weapons) by first-wave actors (e.g., militants, insurgents, and terrorists) would again add to the complexity of the nature of war and conflict in the subcontinent. Thus, the Indian political and military establishment needs to be prepared for a wide bandwidth of war and conflict ranging from highly intense local limited wars to low intensity conflicts and proxy wars.<sup>17</sup>

## THE NATURE OF THE CONTEMPORARY THREAT ENVIRONMENT

First of all, “asymmetric” and strategic threats, including nuclear ones, have become multidimensional and global. Threats originating in any of these dimensions—land, sea, air, underwater, space, and cyberspace—can strike at a target, including major strategic targets, in any of those dimensions.<sup>18</sup> Thinking about how to deal with such multidimensional threats can best be understood in a matrix.

Therefore, threats and operations are no longer exclusively determined by or tied to geography.<sup>19</sup> Because of this multidimensionality, the diffusion of high technology permits anyone anywhere in the world who possesses the means of carrying out a threat to target anyone or any object in any of these dimensions. Moreover, the originator of these threats need not launch them from his point of origin. All he need do is initiate them following Osama bin Laden’s example. Then those executing the mission can identify the appropriate medium and locales for launching a threat and the target.

In a similar vein, those who originate these threats can easily remain anonymous for quite some time. This factor alone can cause strategic havoc because targets may not even know they are going to be attacked or by whom.<sup>20</sup> This increasing ability to use information technologies allows proxies and non-state entities or networks to convey deadly and often unidentifiable threats. The diffusion of technology gives non-state and networked entities capabilities that used to belong only to states.<sup>21</sup> Easy access to information technology, or having the capacity to use existing technology innovatively, or the capacity to create new organizational forms that remain opaque to enemies multiplies security actors and hence people and groups who can and want to will execute threats.<sup>22</sup> This point is particularly relevant to any discussion of proliferation.

While these new groups may be non-state or networked entities, older political–military organizations, for example, proxies of any existing governments, also have greater room for strategic maneuver, including launching threats through any of these multiple dimensions. Proxies’ ability to threaten states depends on their access to their masters’ resources, that is, state subsidies. However, since such attacks are becoming progressively cheaper, the proxies need fewer resources to become a significant threat either on their own or on behalf of their sponsor.<sup>23</sup> And this also includes proliferation threats. The use of such proxies magnifies their and these states’ capability to

mount effective threats; “The potential for anonymous networked organizations empowered with increasing destructive potential could give states unable to compete directly against more powerful economic and military countries a promising option for security competition.”<sup>24</sup>

We need only consider the gains that accrued to Iran and Pakistan from sponsoring international terrorist groups against Israel, America, and India. If these groups can organize where state control has broken down or where they can penetrate and hide behind it for their own uses, they, like al Qaeda, can exploit globalization and untraceable means of financial support to enhance their destructive potential on a global scale.<sup>25</sup>

Sponsoring states and shadowy transnational organizations like al Qaeda thus have expanding opportunities to collaborate while hiding in the shadows. The enemy has no geographical center and is instead a decentralized nonhierarchical organization spawned by a computer network’s organizational requirements.<sup>26</sup> International or transnational terrorist groups, like al Qaeda, embody the revolution in military affairs by showing an aptitude for effectively utilizing new technologies in order to achieve their strategic objectives, by means of novel and effective organizational responses. Many believe that this organizational response is the hallmark of a successful RMA.<sup>27</sup>

Consequently the number of strategic actors can grow with few constraints and the number of strategic targets approaches infinity. Any place on earth can become a strategic target or “launch pad” for threats possessing a strategic magnitude. Therefore, we cannot preplan sufficient capability to ensure global multidimensional readiness. Rather, the threat environment’s evolving nature has driven the Pentagon to develop force-sizing and training concepts that relate to our vulnerabilities and the capabilities we need across multiple dimensions and venues to meet them.<sup>28</sup> Our growing awareness of the magnitude of this strategic transformation and its consequences also generates the pressure for reforming the national intelligence system.<sup>29</sup>

Obviously this system had failed regarding terrorism and proliferation well before Iraq. These failures suggest the magnitude of our vulnerability to surprise: September 11, major changes in the number of Chinese or North Korean intercontinental ballistic missiles, Indian nuclearization, or terrorist acquisition of WMD capabilities. Certainly the International Atomic Energy Agency’s (IAEA) unhappy experiences with both Iran and Iraq strongly suggest its unreliability for understanding the capabilities or intentions of proliferators.

There are compelling reasons for this drive to undertake comprehensive military and intelligence reforms. Clearly nobody imagined before September 11 that Afghanistan’s regime was a vital American interest or that Afghanistan itself was a strategic target. Certainly not enough action or vigor to impel action was undertaken to change the status quo there before the 2001 attacks. Indeed, the Bush administration admitted that it did not realize it was at war with al Qaeda.<sup>30</sup> Additionally, the idea that a strategic attack upon vital U.S. targets could be directed or launched from Afghanistan was not taken seriously.

More broadly, few realized that failed states provide ideal refuge for threats of this magnitude against our allies, our interests, or us. Yet, while nobody fully appreciated the full magnitude of al Qaeda's threats, within days of September 11 virtually the entire assessment and analysis of it appeared in the press, indicating the availability of this information.<sup>31</sup> Since we now know that calls for action from within the Clinton and Bush administrations encountered great obstruction and obstacles dating back to the Clinton administration, much of this intelligence failure lies at the level of strategic analysis and assessment.<sup>32</sup> Therefore what makes proliferation a compelling "asymmetric threat" is that it surpasses our cognitive capabilities and calls them and their products into question. This multidimensional threat environment also facilitates the growth of threats against us in at least three directions.

### **New Directions of Threat**

Beyond being multidimensional, threats are growing in three directions: the nature of the weapons that can pose major threats; the number of targets whose loss would have a disproportionately strategic significance; and the number of players—state and non-state actors—who actively seek or possess real capabilities and who can then hit those targets. While WMD are not new; today's proliferation threat encompasses more than CBRN weapons. More and different weapons used or combined together in unforeseen and innovative ways can achieve comparable strategic or operational results thanks to the quantitative proliferation of dual-use and/or primarily military technologies and this certainly includes information technologies.<sup>33</sup> This reason for growing proliferation threats does not even address impending developments, for example, systematic exploitation of artificial intelligence that could remove people from automated decision making, nano-technologies, or genetic engineering.<sup>34</sup>

The capability for making weapons is spreading throughout the world to third world states and to non-state entities like Abdul Qadeer Khan and his network. Such networks allow states or non-state entities to proliferate, increasing possibilities for proliferation. Second, ever more diverse players are participating in proliferation—like A.Q. Khan and his network, al Qaeda, and other Middle Eastern terrorist groups who seek CBRN weapons. Proliferation is no longer restricted to states or firms who export the skills, technology, or weapons needed to pose credible threats. Even non-state actors like the Revolutionary Armed Forces of Colombia (FARC) in Colombia, which combines revolutionary rhetoric with drug running, possess an air force.<sup>35</sup>

Accordingly, the revelations of Khan's network transcend the alarming possibility that nuclear proliferators, suppliers, and consumers could have a one-stop shopping mart where they could covertly buy and sell nuclear technology and know-how, allegedly without governments knowing what is transpiring. Since several Pakistani scientists other than Khan have had contact with al Qaeda, we must assume that other scientists elsewhere might follow suit. However, the problem does not end with one rogue scientist since his global network had to involve political protection in at least some countries.

These warnings apply with particular force to Russia, China, and North Korea, the largest proliferators of ballistic missile technologies and systems and potential sources of even nuclear transfers, both legal and illegal. Khan's network is only one of many interlinked "icebergs" in the archipelago of proliferation and more sources of proliferation may be developing in the contemporary threat environment.

While governments with nuclear weapons make strategic decisions based on relationships with other similar states and are therefore not fully autonomous actors, strategically speaking, "The number of independent, semi- and quasi-independent decision-makers within the national structures of the individual nuclear weapon powers has been increasing."<sup>36</sup> Thus, delegation of decision-making capability or authority is almost inevitable.

Thus, the rogue states that sponsor terrorism can provide extended deterrence for its executors. Iran has already threatened Israel with such a response if it conducts counterterrorist activities against Iran's clients, such as Hezbollah in Lebanon.<sup>37</sup> Pakistan's sponsorship of terrorism to entangle India while using its own WMD to deter Indian counterattacks in Kashmir is well known. Yet, as Israeli Prime Minister Ariel Sharon said, "terrorism has an address." It cannot function without extensive logistical and long-term financial support, even if the actual costs of operations are small and covert or in cyberspace. Accordingly a state either must actively support or at least passively permit terrorists to establish a base in its country or in countries allied to or controlled by it.<sup>38</sup> Weapons production also finally depends upon support from either a government or elements of it, whether they be rogue or official elements. Iraq and Iran's extensive sponsorship of the Palestinian Authority and other terrorist groups and al Qaeda's freedom of action in Afghanistan show that terrorist operations may exist in their own right as transnational organizations but still depend upon state patronage.<sup>39</sup>

These states and or terrorists can form multiple kinds of relationships. Governments can supervise terrorist activities by controlling the support it gives them. Alternatively, weak or failing states can permit or allow terrorists to exploit their resources and power to accomplish their goals. Or the relationship can be deeply covert, where terrorists operate under conditions of "plausible deniability" and uncovering the relationship's true nature is extremely difficult. Or we could see a tactical alliance where a state or terrorist group puts its resources at the disposal of the other to conduct coincident operations against shared enemies without having a deeply institutionalized relationship. All these types of state-terrorist relationship exist or recently existed and no obstacle in principle exists to the revival of earlier forms of state supported terrorism. And frequently a nuclear state or one striving for such capability is involved.

Since the states supporting or that have supported terrorist activities are also proliferators, some of which are also exporting their own WMD, Washington's apprehensions about living "at the crossroads of radicalism and technology" are well founded.<sup>40</sup> Moreover, there is evidence that as North Korea's conventional posture relative to South Korea and the United States

declines, its dependence upon asymmetric capabilities grows.<sup>41</sup> Therefore the possibility that it or other similarly situated states may increasingly exploit those capabilities to support terrorism or other forms of unconventional war, even possibly going beyond extending deterrence to the provision of capabilities, is growing.

As the so-called asymmetric threat environment is expanding, not shrinking, and our allies often become more direct targets—as terrorist plots in Europe and Asia, or Israel’s experience, indicate. Thus this proliferation of opportunities for waging campaigns based on the use or threatened use of CBRN weapons, terrorism, and other components of so-called asymmetric threats is the second trend or direction that shapes the contemporary strategic and threat environments.

The third trend shaping those environments is that existing capabilities, which can create immense damage either to military or civilian targets, are increasing in quality and quantity. Mass destruction or large-scale social crises can be triggered by means other than CBRN weapons that with conventional weapons approach the lethality of nuclear weapons but are more usable in combat. Qualitative improvement means not just the incorporation of IT and advanced electronic and sensor capabilities that enhance precision targeting and lethality, but also new and emerging technologies, or space-based systems. China, Israel, Iran, and India already have or are building space capabilities that could allow them to use space either for the weapons transit or, ultimately, as a location for weapons platforms. Further, Russia is providing major assistance to states like Iran, China, and India, while China does the same for Iran, North Korea, and Pakistan.<sup>42</sup>

### **Growth of Conventional Military Capabilities**

Beyond proliferators’ support, recipients of WMD capabilities are steadily improving their deception and denial efforts, upgrading their access to relevant dual-use and other technologies, capacities for assimilating them, and their access to the expertise needed to build and maintain these weapons. Proliferation of conventional weapons is becoming more global because states now build their own indigenous capabilities for producing weapons like cruise missiles and others.<sup>43</sup>

India, Pakistan, Israel, Iran, and Turkey are all developing conventional arms production capabilities and are seeking markets; not least in the Middle East and Central Asia. Iran, North Korea, and Pakistan support terrorists as an integral part of their strategy. Additionally, disaffected elements within the government, as in Pakistan, are supporting terrorists. Iran even boasts that it can produce all the antiship cruise missiles it needs to defend its territorial waters against attack. Further, testimony from Admiral Thomas Wilson, the former head of the Defense Intelligence Agency, and his successor, Admiral Lowell Jacoby, claim that Iran can already block the Persian Gulf to outside traffic for brief periods of time.<sup>44</sup> Iran’s weapons acquisition program, which stresses naval, air, and air defense systems, clearly aims to deny the United

States access to the Gulf.<sup>45</sup> Iran also now offers the Shahab-3 missile for sale abroad.<sup>46</sup> Iran also provides large quantities of conventional weapons to terrorists.<sup>47</sup> Given the fragile controls over Pakistan's armed forces and intelligence agencies and their links to Islamic and drug trafficker forces, it would hardly be surprising if its weapons migrated to hostile forces.

Highly precise conventional weapons and other emerging technologies, that are capable of striking at key or strategic targets, represent a threat that transcends strike platforms. Other states believe the possibilities inherent in these weapons justify a possible nuclear retaliatory strike, as their possible effects are capable of rivaling a nuclear strike, for example, conventional strikes on nuclear power plants.<sup>48</sup> It is not just that information warfare (IW) and information operations (IO) could degrade critical infrastructures and precipitate a major social crisis. As some Russian theorists warn, new generations of weapons could combine threats, for example, information weapons that leave lasting biological aftereffects on their target.<sup>49</sup> While insisting that armed force remains the essence of war, some Russian analysts have stated that the major strategic events of the 1990s indicate that wars remain the continuation of politics by other means. Therefore, the resort to force or to nonviolent means like IW is a conscious act of strategy and policy that has a definite strategic goal. Such operations are implicitly close to, if not tantamount to, war or warlike actions. The strategic goal may be to destroy an entire sociopolitical order over time without even firing a shot.

Future wars could be fought without resorting to force, purely by informational and electronic means. For this reason, the cataclysm culminating in the collapse of the Soviet empire and the Soviet Union illustrate that whole states and coalitions can disintegrate as a result of confrontation on the international arena without the direct application of force.<sup>50</sup> Russian military writing increasingly accepts that IW can trigger such destabilizing or "disorganizing" actions to achieve strategic goals.<sup>51</sup> Such attacks could easily incite internal disturbances, demonstrations and uprisings, and even terrorism.

Information Warfare also permeates all other forms of strategic confrontation: political and economic warfare, diplomacy, armed struggle, and war. Yet, IW retains its essentially independent character and goal of demoralizing armed forces and populations, as well as paralyzing the other side's will. It accompanies political and diplomatic pressure and confrontation and targets the adversary's home front and military forces.<sup>52</sup> Some Chinese theorists writing on contemporary war think along similar lines.<sup>53</sup> Russian analysts now include as IW those weapons and warfare targeted against the minds and bodies of enemy combatants and societies. This form of warfare is ushering in a new series of weapons or technologies that can strike enemies in wholly new ways, including biological or psychotropic weapons, thus combining IW with biological weapons (BW) or bacteriological threats. This approach could eventually generate a formulation linking informational and biological weapons with chemical and biological warfare (CBW) and IW in theory and/or in practice.<sup>54</sup> Moreover, because we arguably cannot deter IW without threatening preemptive strikes or overwhelming reprisal, up to and including



nuclear strikes, information attacks can lead either to preemption or possible threats, if not use, of nuclear weapons.<sup>55</sup>

## RETHINKING ASYMMETRIC WAR

Apart from the multidimensionality of threats, the opportunities for waging asymmetric war and employing asymmetric strategies have grown by orders of magnitude. Potential aggressors have vastly enhanced opportunities for surprise and even anonymous attack using any of the media listed earlier.<sup>56</sup> Where the first operation may be the only operation, and given our enemies' belief that they need only generate large casualties to oust our partners, allies from forward bases, and us, surprise attacks of enormous magnitude become more possible and tempting an operation.<sup>57</sup> The pervasive belief in American casualty aversion provides the perspective needed to believe that surprise attacks combining high and low-tech, innovatively employed, can, in a single blow, either decisively defeat America or inflict such harm that it cannot reply effectively. Allegedly, we would then have to fight a war of attrition suited to our adversaries' preferences. These enemies have not assimilated contrary experiences and could easily miscalculate the consequences of their attack. This potential for misapprehending U.S. policy confirms warnings about the likelihood of surprise and justifies the belief that deterrence against such enemies is impossible, a conclusion that animates our preemptive or preventive war posture.<sup>58</sup>

These actors are clearly exploiting the emerging threat environment to achieve strategic effects greatly disproportionate to the means involved.<sup>59</sup> As the nature of a strategic threat is also defined by the targets involved, strategic targets need not be attacked or be vulnerable to attacks by WMD. Conventional strikes, using existing weapons innovatively, even those not launched by precision-guided munitions, can achieve damage comparable to that of WMD or raise the possibility of a retaliatory nuclear first strike. Russia's defense doctrine recognizes this possibility.<sup>60</sup> These trends could easily transform the strategic environments to our detriment unless we properly understand and counter the new threats posed to us.

Today's proliferators are building WMD capabilities based on technology, weapons, and know-how obtained from Russia, China, North Korea, and Pakistan, as well as through covert business dealings abroad, and with each other. These programs embody secondary and tertiary proliferation where states that received assistance from proliferators then assist other states that seek to emulate them. Such proliferation, especially when coupled with the ability to use existing weapons innovatively, to improve their quality, or to increase their capability to produce them or provide for terrorists to exploit them, greatly enhances the consequences of proliferation from Russia and China—states that have hitherto essentially stonewalled America on proliferation.<sup>61</sup>

Although proliferating states have multiple and diverse interests, they apparently share common strategic goals that oppose U.S. strategic objectives.

Once they acquire truly usable capabilities they become immune from most, if not all, foreign control over their defense programs. Indeed, proliferation represents their vote of no confidence in the status quo, increases the security problems of other neighboring states, and establishes the limits to any regional system of collective security.<sup>62</sup> This point possesses critical significance for Iraq and North Korea. Clearly those who opposed action against Iraq would avoid risks to enforce UN mandates if Iraq had usable nuclear weapons and delivery systems.

Likewise, the administration may have thought that Pyongyang had nuclear weapons even before it claimed to have them. However, even if we discount Pyongyang's claims, the conventional threat it poses to Seoul and South Korea is so great that we remain effectively deterred from coercing it, despite its proliferation activities and violation of international agreements. Thus, even possible possession of nuclear weapons, combined with a threatening and formidable conventional deterrent, evidently frees Pyongyang from yielding to foreign and stronger powers. Proliferation, whatever other purposes a government has, promotes an autarkic defense policy that removes the proliferator's territory and sphere of influence from other powers' military policy and influence.<sup>63</sup> It represents a determined effort to free the state from all foreign influences on its defense policy, while bidding for untrammelled power to deter or threaten neighbors and third parties.

Recent trends suggest that, in such cases, the international community's default option is accommodation, continued engagement, and the offer of more rewards to that state, that is, appeasement. Consequently, many fear that America's commitment to extended deterrence for distant allies will decline.<sup>64</sup> As that outcome contradicts our strategy, objectives, and policies, proliferation becomes an inherently asymmetrical act vis-à-vis that strategy, policies, and goals. Since doctrine and policy aim at giving the administration an almost unhampered ability to project global military power and deter everyone else, proliferation is inherently an asymmetrical counterstrategy to that aspiration.

A second common denominator of proliferating states' threats to our interests is that their increased capabilities then feed their growing appetite. Iran's acquisition of WMD and improved conventional capabilities led it to threaten Israel, Azerbaijan, and Kazakhstan with conventional forces.<sup>65</sup> Iran now also admits that many al Qaeda operatives have fled there and Pakistan's Inter-Services Institution, claims that the operational base of al Qaeda has now shifted to Iran; presumably to intensify the cooperation among terrorist groups in the Middle East against Israeli and American interests. Meanwhile, the State Department lists Iran as the leading state sponsor of international terrorism.<sup>66</sup> In 2002 it was caught red-handed trying to escalate the terrorist war against Israel, which was started by Yasser Arafat and other Palestinian terrorist groups.<sup>67</sup> Since Iran has also sponsored terrorism as far away as Argentina, long-range attacks cannot be excluded.<sup>68</sup>

Iran has also provided Hezbollah between 8,000 and 12,000 rockets and short-range missiles through Syria, for use against Israel or other enemies.<sup>69</sup> Iran has also conducted exercises employing chemical weapons in the Persian

Gulf.<sup>70</sup> Iran allegedly can produce its own land-based antiship cruise missiles to deny access to the Persian Gulf and is developing anti-aircraft and missiles, including systems that attack stealthy planes, to deny us access to the Gulf or contiguous bodies of air, sea, and land.<sup>71</sup> Similarly, our enemies can, evidently, threaten at least some of our space assets or seek to acquire space denial, precision strike, and counterprecision capabilities.<sup>72</sup>

We can easily envision scenarios where a nuclear armed state that sponsors and harbors terrorists could deliberately sponsor terrorist attacks and then try to deter retaliation by invoking escalation to nuclear or other forms of WMD. Simultaneously, it could also use or threaten to use whatever precision, counterprecision, or anti-space and space denial assets it possessed for those purposes. Pakistani support for conventional probes, like that in Kargil in 1999 and terrorist offensives in Kashmir, is based on the belief that Pakistan's nuclear capability deters Indian escalation. This shows that proliferators' rising nuclear and conventional capabilities facilitates their interest in and capabilities to wage asymmetric warfare.

North Korea, likewise, exemplifies this phenomenon. North Korea sells its missiles abroad for income. Perhaps its closeness to achieving a usable nuclear capability has emboldened it to launch more conventional probes against the South Korean armed forces and strengthen its conventional and missile capabilities, as American commanders have testified to Congress.<sup>73</sup> It openly proclaims that its WMD program aims should give it complete freedom from international and/or American controls.<sup>74</sup> Therefore, the consequence, if not intention, of the new proliferation is to make much of the world safer for conventional war and/or terrorism while trying to make it off limits to the United States and allied forces.

Our enemies have many incentives to proliferate. Many earlier U.S. policies and statements suggesting profound casualty aversion have reinforced their perception that possessing weapons of mass destruction deters Washington from retaliating or intervening against them. We never attained accurate or complete knowledge of Iraq's overall military or WMD capabilities before attacking it in 1991 and again in 2003. The same holds true for Iran. Obviously these capabilities can be hidden. Nor has anyone countered the use of WMD in the Middle East dating back to Egypt's use of chemical weapons in the Yemeni civil war of 1962–1967.<sup>75</sup> Thus, local governments have ample reason to believe that they can threaten or actually use these weapons with relative impunity.

Consequently, proliferators seek to threaten and intimidate their neighbors, deny America and its allies access to threatened allies' territories, and compel us to leave the potential theater of operations, lest we face the threats of WMD or terrorism backed up by burgeoning conventional capabilities. Hence, proliferation is an excellent anti-access or area denial strategy. As Chris Donnelly observes,

The nature of modern weaponry means that, unless the technology gap is truly enormous (as it was between the U.S. and the Taliban), a determined and

competent defender today could make a “forced entry” too costly for any country to contemplate. The West’s capacity for military intervention may be a lot less than is sometimes supposed.<sup>76</sup>

Moreover, as proliferators improve their capabilities they also seek to extend their ability to threaten our allies in Europe. Certainly, modern weaponry’s strike capabilities increase their owners’ ability to strike distant targets. The reports about Iran and Iraq’s projected capabilities all point to a desire for the capability to threaten not only each other, or Central Asian governments, or Israel, but also Turkey and even European states.<sup>77</sup>

## CONCLUSION: TOWARD A NEW U.S. STRATEGY

However we label the threat that proliferation poses, its potential for realization is growing. Moreover, the strategic landscape is changing due to this growing threat and its manifestations. Classical deterrence is all but impossible in a situation where multiple players contend with each other and can mount comparable conventional threats equal to those posed by WMD.<sup>78</sup> Without arguing for or against any particular force structure or policy, this assessment suggests that the administration’s appreciation of the threat environment is not misplaced, even if its responses are debatable. That environment is undergoing profound change that invalidates many of the policy nostrums of an earlier generation regarding proliferation and asymmetric war. Additionally, our assessment hardly exhausts the possibilities for proliferation or other revolutionary transformations that make asymmetric strategies and their embodied threats more likely. While trends in warfare justify the United States’ strategy of preemption and preventive war, we must anticipate a range of asymmetric strategies employing old and new ways of threatening our assets, forces, and interests. Since our capabilities are finite, we must devise new ways and new organizations including new force packages and new thinking to rebuff those threats.

While an asymmetric strategy aims to leverage capabilities where one has an advantage to achieve strategic objectives, this does not mean that its strategists can accurately gauge their actions’ consequences. However, since we confront an action program to realize strategic objectives an appropriate response is necessary. We need new approaches to force structures and strategy and forces optimized for all forms of conflict, including post-conflict stability, counterproliferation operations, and even operations in a WMD environment. This is full spectrum dominance.<sup>79</sup>

This chapter calls for clearer thinking regarding threat and strategic assessments to preclude new strategic surprise attacks like those of September 11. In an age of new threats, revolutionary technologies, and new forms of military operations, where earlier policies no longer retain their potency, the requirement for clear thinking increases commensurately. Information about threats is not enough. Indeed, our enhanced capability for data retrieval obligates us to understand our enemy and his threats as never before, lest we drown in data. Indeed, in many ways the strategic threat, including proliferation, is a

cognitive one and demands a cognitive response. Only to the extent that we improve our capability for assessment and understanding of the implications of contemporary threats like proliferation, will our enhanced cognitive capability serve us and only that well.

## NOTES

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# MIDDLE EAST CASE STUDIES

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CONTINUITY AND CHANGE IN  
ISRAELI STRATEGIC THINKING:  
REFLECTIONS IN THE WAKE OF  
OPERATION IRAQI FREEDOM

*Avner Cohen*

INTRODUCTION

In a press briefing in Israel during the July 2004 visit of Mohammed El Baradei, the director general of the International Atomic Energy Agency (IAEA), a senior Israeli official illuminated Israel's commitment to the policy of nuclear ambiguity. The official made it plain that Israel had no interest in changing this policy anytime soon and stressed that its policy is based on great deal of continuity and stability. He also made an oblique note that the continuity of that policy was a reflection of two long-term Israeli imperatives: a sense of respect toward the lessons of Jewish history but also an expression of political caution.

Israel was the sixth nation in the world, and the first in the Middle East, to develop and acquire nuclear weapons capability. It started to construct its nuclear infrastructure in the late 1950s and less than a decade later it completed the research and development phase for its first nuclear device. By 1970 it became known (but never officially confirmed) that Israel had already crossed the nuclear weapons capability threshold. Now, two generations later, Israel is considered an established nuclear weapon state in terms of both the quality and quantity of its nuclear arsenal. Estimates as to the size of Israel's nuclear arsenal vary significantly, ranging from less than 100 to 300 warheads. It is also believed that Israel's current nuclear arsenal, along with its related delivery and command and control infrastructure, is closer—surely in quality and less surely in quantity—to France and the United Kingdom than to those of India and Pakistan.

However, Israel's strategic behavior and code of conduct in the nuclear field, both at home and abroad, has deviated from the behavior of all other nuclear weapons states. Unlike the other seven established nuclear weapons states—the five members of the nuclear club under the Nuclear Non-Proliferation Treaty (NPT) and, since 1998, India and Pakistan (which,

like Israel, are outside the NPT)—Israel has not openly acknowledged its nuclear status. Since Prime Minister Levi Eshkol pledged in the mid-1960s that “Israel will not be the first nation to introduce nuclear weapons to the Middle East,” all eight of his successors have maintained this opaque declaratory formula. While Israel keeps the status of its nuclear capability deliberately veiled, it does so in a manner that has shaped strategic perceptions and actions of friends and foes alike. This policy has become known as Israel’s policy of nuclear opacity (or nuclear ambiguity) and is perhaps the most distinguished Israeli contribution to the nuclear age.

This chapter analyzes and assesses Israel’s outlook on the nuclear issue, and applies it to the regional security situation after Operation Iraqi Freedom. In particular, it considers the extent to which the new geopolitical context is likely to bring about continuity or change in Israel’s outlook on the nuclear question. It examines the elements of continuity and stability in Israeli strategic thinking by looking backward and outlining the historical evolution of Israel’s posture of nuclear opacity. Then it places Israel’s strategic outlook against the new strategic reality in the wake of Operation Iraqi Freedom.

## ISRAEL’S NUCLEAR OPACITY IN HISTORICAL CONTEXT

### **Ben Gurion and the Fundamentals of Israel’s Strategic Outlook**

Four factors were critical in shaping Israel’s early attitudes on matters of national security and grand strategy: (1) the Zionist ethos that led to the establishment of Israel as a nation-state; (2) the key historical memories that shaped Israel’s approach to national security; (3) the leadership power and the strategic outlook of Israel’s father-founder, Prime Minister David Ben Gurion; (4) and a unique leadership triumvirate—Ben Gurion as the national leader, Professor Ernst David Bergmann as his scientific advisor, and the young Shimon Peres as his chief administrator—that made the nuclear pursuit feasible.

*Ethos.* From its early days, the ethos of the Zionist movement stressed the role of science and technology in advancing the dream of establishing a Jewish state. For Ben Gurion, scientific and technological achievements were the hallmarks of the Zionist revolution, a secular manifestation of the notion of the Jews as the “people of the book.” This ethos highlighted the view that only science and technology could compensate for Israel’s small population and lack of natural resources. “We are inferior to other peoples in our numbers, dispersion, and the characteristics of our political life,” Ben Gurion remarked, “but no other people is superior to us in its intellectual prowess.”<sup>1</sup> As Shimon Peres put it years later, “Ben Gurion believed that science could compensate for what Nature has denied us.”<sup>2</sup>

*Historical Memories.* The state of Israel was born in the shadow of two traumatic historical experiences: the Nazi Holocaust and the 1948 War of

Independence. The memory of these events provided the subtext for Ben Gurion's pursuit of nonconventional weaponry (in particular, the nuclear project). As a student in Istanbul, Ben Gurion had witnessed the genocide of the Armenian minority in Turkey during World War I. This horrifying experience gave him an early lesson that ethnic minorities that could not protect themselves in a hostile environment faced the real threat of genocide. The subsequent Nazi Holocaust, and the failure of the world to save the Jews from Hitler forced Ben Gurion to recognize that his people were equally vulnerable. As the Holocaust decimated the Jews of Europe, the leaders of the *Yishuv*, the Zionist community in Palestine during the British mandate period, felt utterly helpless.<sup>3</sup> The determination to prevent a similar catastrophe from happening again drove Ben Gurion's campaign for Jewish statehood after World War II.

*David Ben Gurion.* Imbued with the lessons of the Holocaust, Ben Gurion was consumed by fears for Israel's long-term security.<sup>4</sup> Those fears stemmed from his understanding of the geopolitical realities of the Arab–Israeli conflict. As the War of Independence concluded in 1949 with an impressive Israeli victory, Ben Gurion already worried about Israel's future. He became convinced that the cessation of hostilities would not lead to a lasting peace, but would be only a temporary pause before the next round of Arab–Israeli conflict.<sup>5</sup> His strategic pessimism regarding the Arab–Israeli conflict was rooted in three fundamental convictions:

- The Arab–Israeli conflict ran deep and was not amenable to a quick diplomatic solution. Only when the Arabs were convinced that Israel could not be eradicated by force, and accepted their losses as final, would lasting peace become possible.
- The conventionally armed Israel Defense Forces (IDF) would encounter great difficulty in deterring an all-Arab war coalition. Given the geopolitical asymmetries of the Arab–Israeli conflict, conventional weapons might not be sufficient to ensure victory.
- After the Holocaust, the small Jewish community in the Middle East, lacking a formal alliance with an outside power, required an existential insurance policy for “a rainy day.”<sup>6</sup>

Ben Gurion's conviction that the Holocaust may not have been a single and unique event in Jewish history, but a recurring threat, became engraved in Israel's collective psyche and its concept of national security. Beginning in the early 1950s, Israeli military planners considered a scenario in which a pan-Arab military coalition would launch a war against Israel with the aim of liberating Palestine and destroying the Jewish State. This worst-case contingency became known as *mikre ha-kol*, the “everything scenario.” Israel's pursuit of nonconventional weaponry was a direct answer to Ben Gurion's fundamental anxieties about national survival. Ensuring that a Holocaust would never happen again to the Jewish people meant that Israel must have the capability to deter such a calamity, if necessary by threatening to inflict a



holocaust on its enemies. This attitude led Israel to build infrastructure and capabilities in all three areas of nonconventional weaponry, notwithstanding the great effort and cost involved.

It is important to recognize that, as a matter of national policy, Israel's pursuit of the nonconventional option has always been a somewhat reluctant one. This is the other element of continuity and stability in Israel's nuclear thinking. Although Ben Gurion believed firmly that Israel must possess nonconventional options for situations of last resort, he (and other Israeli leaders) recognized that Israeli interests required that nonconventional weapons not be introduced into the Arab–Israeli conflict. Because of the fundamental geopolitical asymmetries between Israel and the Arab side, Israel was more vulnerable to nonconventional weaponry than its larger Arab enemies. If Israel's own pursuit of these weapons led its Arab enemies to obtain them as well, the search for absolute security would become self-defeating. Today, more than 30 years after crossing the nuclear threshold, Israel is still careful to avoid any actions that would confirm its nuclear capability.

*The Founding Triumvirate.* Two other men were instrumental in making Ben Gurion's strategic vision a concrete technological reality. The first was Professor Ernst David Bergmann, an organic chemist by training, who was Ben Gurion's faithful scientific advisor. The second was Shimon Peres, then young director-general of the Ministry of Defense, who was the administrator–politician who associated himself with that technological vision. As the architect of the “special relations” between Israel and France in the mid–late 1950s, Shimon Peres was the chief executive of the nuclear project during its formative years (until he left the Ministry of Defense in 1965). This triumvirate was indispensable for Israel's decision to pursue science-based, non-conventional capabilities. Without it, such a large-scale national commitment could not have been set in motion.

### **Toward Nuclear Opacity**

Shimon Peres was the man who negotiated and put together the French–Israeli nuclear package that became the basis for Israel's nuclear infrastructure. The deal was secretly signed in Paris on October 3, 1957. Its details are still unknown. According to French author Pierre Pean, the most sensitive aspects of the package were not spelled out in any of the official agreements but were left as oral understandings.<sup>7</sup> In 1958 Israel started excavation and construction work at the Dimona site. When newly elected French President Charles de Gaulle learned about the secret project he acted to end French participation in it, but it took almost a year until his decision was translated into meaningful action. After de Gaulle finally informed Prime Minister Ben Gurion in June 1960 about his decision to terminate French involvement, Israel decided to complete the project on its own.<sup>8</sup> This was a decisive moment of Israeli resolve.

By early December 1960, some 3 years after the project had been initiated, the United States finally learned about it and asked Israel an explanation.

On December 23, 1960, Prime Minister Ben Gurion told the Knesset that the 24-megawatt research reactor under construction would be “peaceful,” as it was designed for scientific, industrial, and medical applications. It was the first and last time that the Israeli government made a public statement about Dimona project.<sup>9</sup> Ben Gurion’s statement was surely meant to be opaque, quite misleading if not deceptive, but one must keep in mind that it was made in a time when there were no clear-cut nonproliferation norms, let alone a Nuclear Non-Proliferation Treaty.

From the outset, the Israeli nuclear case posed a great challenge to American nonproliferation policy. While President Kennedy’s diplomatic efforts to halt the Israeli nuclear project ultimately failed, they shaped the very special manner in which Israel became a nuclear-weapons state. The United States was not in a position to stop the Israeli nuclear program, since Israel in the early 1960s was already fully committed to having a nuclear option. America’s efforts determined the way Israel acquired the bomb: opaquely, not overtly, in a manner that was highly considerate of American policies. Israel was careful to avoid openly defying American nonproliferation policies; similarly, the United States wanted to avoid confronting Israel publicly over this most sensitive issue. A policy of nuclear opacity was born.

It was during the years of the Lyndon Johnson administration that Israel crossed the technological nuclear threshold. When Israel completed its research and development work in 1966, it pledged to the Johnson administration that “it will not be the first to introduce nuclear weapons to the region.” Israel was committed to having some kind of nuclear option, but at that point it had not necessarily committed to becoming a nuclear weapons state. In fact, Israel was quite unsure what it exactly wanted and, even more significantly, how far it would be permitted to go. In those days the Israeli nuclear project was not yet considered a weapon system, but rather a technological option to hedge against an unknown “rainy day.”

The 1967 Six-Day War was a major turning point in Israel’s nuclear history. On the eve of the Six-Day War in late May 1967—Israel’s most traumatic “rainy day” period—Israeli engineers improvised a rudimentary, but operational, nuclear weapons capability.<sup>10</sup> It was the first time that Israel actually assembled a nuclear device and the first time the option was materialized. Israel’s great victory in the 1967 war created a new political and strategic reality, as well as domestic changes in Israel itself, that lowered the nation’s nuclear inhibition. Now Israel could pass the vulnerable transition period without worrying too much about Arab reaction. There were those in Israel who suggested that an opportunity was created to expose Israel’s nuclear capability, but the advocates of caution prevailed. The threshold was crossed, but Israel decided not to test and expose.

While in the post-1967 era Israel was less concerned about Arab reactions, a new and important international factor came into the picture in 1968 that started to shape Israel’s nuclear behavior. The advent of the Nuclear Non-Proliferation Treaty in the summer of 1968 was critical for the quiet American–Israeli dialogue on the nuclear issue. By November 1968, against

the background of strong American pressure to join the NPT (which was linked to the sale of Phantom aircraft to Israel), Israel told the United States that, given its unique security needs and with no American security guarantees, it could not sign the NPT. President Johnson ultimately approved the Phantom deal without linking it to Israeli concession on the NPT issue. This was another landmark toward the making of opacity the nation's permanent nuclear policy.

Less than a year later, in September 1969, Israeli Prime Minister Golda Meir reached a secret understanding with President Richard Nixon over the Israeli nuclear issue. Meir explained to Nixon why Israel had been compelled to develop its nuclear capability, and why it could not sign the NPT, but also continued to pledge that Israel would not declare itself a nuclear power. Meir made no formal change in Israel's declaratory commitment not to be the first to introduce nuclear weapons to the region. It was understood that operationally, under the new circumstances, Israel would not test, not declare itself a nuclear weapons state, and not waive its nuclear status capability for diplomatic gains. While Israel would not join the NPT, neither would it defy the treaty. A commitment to a "bomb in the basement" posture was taken as a measure of continuity with the past, regardless of the technological changes on the ground.

In the wake of the Meir–Nixon understandings, the United States ended its annual visits to Dimona and no longer pressured Israel to sign the NPT, adopting instead a de facto policy of "don't ask, don't tell." This opaque policy was perceived by both Israeli and American policymakers as the only policy, both for Israel and the United States, to address the uniqueness of Israel's nuclear case with America's own commitment to the nonproliferation regime. To this day, all Israeli and American governments have adhered to these formal understandings. By July 1970, the *New York Times* made public the fact that Israel was considered by the U.S intelligence community as a nuclear weapon state.<sup>11</sup> Shortly thereafter, Israel started to deploy its first nuclear capable missile, the Jericho I. By the time of the 1973 war Israel was already a small nuclear power.

The 1973 Yom Kippur War had a nuclear dimension even though the full drama has not been told yet (or even officially confirmed). It has been reported that during the early phase of the war Minister of Defense Moshe Dayan readied the nuclear weapons infrastructure, apparently even proposing to Prime Minister Golda Meir to arm the weapons, in case Israel reached the point of "last resort." Whatever happened during the year, Israel's nuclear weapons remained opaque and unacknowledged. In retrospect, the Yom Kippur War strengthened Israel's commitment to opacity and its aura of continuity. Israeli weapons are thought of as the leader's ultimate shield.

### **The Golden Age of Opacity: Visible Continuity and Invisible Change**

Israel's nuclear history in the period from 1973 until the Gulf War in 1990–1991 can be constructed along two distinct themes. First, it was the

period in which Israel's policy of nuclear opacity was transformed from a short-lived improvisation to a semipermanent strategic posture. In looking back, the period from 1974 to about 1990 was the golden age of nuclear opacity. By the end of the period, Israelis had come to view the policy as a great strategic success because it provided Israel the benefits of existential deterrence at a very low political cost. Nuclear opacity and its aura of continuity became an indispensable pillar in the nation's national security doctrine. Many Israelis came to believe that the low-profile nuclear deterrent played a constructive role both in making peace (in the case of Egypt) and in deterring regional war (in the case of Iraq). Opacity was also critical in removing the nuclear issue from the American-Israeli agenda, but without restricting Israel's freedom of action in this field. Even public disclosure of Dimona's secrets in 1986 was politically insufficient to shake Israel's posture of opacity.

Second, it was a period of a rapid but invisible growth of Israel's nuclear arsenal. Israel took advantage of its freedom of action. It is widely believed that during that period Israel's nuclear arsenal made a major transformation. Israel no longer possessed simply a dozen or so low-yield first-generation bombs; it expanded and modernized its arsenal, which became qualitatively advanced and numerically sizable. But whatever changes were made, it was done quietly.

Since the mid-1970s Israel expanded and modernized its nuclear infrastructure in Dimona to be able to reportedly produce new types of advanced nuclear weaponry, both small and large, and in larger quantities. It is believed that Israel produced in that period both larger advanced weapons (boosted, and possibly even thermonuclear) as well as advanced tactical weapons (possibly enhanced radiation weapons). In parallel, by the mid- to late-1970s Israel started the development of the Jericho II missile, a ballistic missile with operational range of 1,500 kilometers or more. The Jericho II was tested in the late 1980s and it was deployed in the period 1989–1990.<sup>12</sup>

While Israel expanded its nuclear capability throughout that period, it did not move to establish a secure second-strike capability. Apparently there were occasional discussions about doing so; yet costly operational decisions were deferred. The underlying assumption that guided Israel's strategic planning was that Israel's regional nuclear monopoly was still holding, and if and when things were to change Israel would have ample time to adjust. This assessment was reinforced by the success of Israel's attack on the Iraqi Osiraq reactor in June 1981. As a result, Israel assumed that Saddam's nuclear ambitions had been removed, at least temporarily. But this assumption was found wrong by the late 1980s. As the Iran-Iraq War came to a close, Iraq emerged as a regional Arab power with strong nuclear aspirations. In 1990, just before Iraq invaded Kuwait, Israeli strategists realized that Israel and Iraq were on a collision course over the nuclear issue.

### **The First Gulf War and After (1990–2003)**

The 1991 Gulf War was the third occasion on which Israel placed its nuclear/strategic forces on alert. In line with its flexible opaque strategy, Israel made

a deliberate effort to “remind” Iraq of its nuclear capability. Israeli Prime Minister Yitzhak Shamir pushed the policy of nuclear opacity to its limits when he issued a solemn warning to Iraq, promising to inflict “terrible and awful” pain on Iraq if it attacked Israel, but without ever using the n-word. A “visible” missile test that Israel made in December 1990 meant to highlight this deterrence message. During the war itself the U.S. secretary of defense, Richard Cheney, referred directly for the first time ever to Israel’s nuclear capability if Iraq dared using chemical or biological weapons against Israel.

By the war’s end, some 40 Iraqi Scud missiles had been fired at Israel, most of them aimed at Israel’s population centers. The fact that Iraq did not launch a chemicals and biological weapons (CBW) attack at Israel led many Israelis to believe that their nation’s veiled nuclear threat was effective in deterring Saddam’s use of nonconventional weapons. This assertion may have some grain of truth, but it leaves nagging questions: Can nuclear weapons effectively deter the use of other weapons of mass destruction (WMD)? Conversely, are there situations in which nuclear weapons cannot deter a nonnuclear adversary equipped with CBW?

The Israeli threat perceptions of nuclear and other WMD-related developments during the 1990s in both Iraq and Iran, compounded by the recognition of the intelligence failure in detecting Iraq’s nuclear program, were critical in Israel’s strategic decision to establish its own sea-based strategic arm. By July 2000 Israel completed taking delivery of three Dolphin-class submarines it had ordered at the Thyssen-Nordseewerke shipyard in Kiel, Germany, in the early 1990s. It is widely assumed that in doing so Israel has moved significantly toward acquiring a survivable second-strike nuclear capability.

By all indications, Israel at the eve of Operation Iraqi Freedom was on the way to finalizing the restructuring of its nuclear forces into a triad form, like the other five declared nuclear weapons states. A fleet of three submarines is believed to be the minimum Israel needs to have a deployment at sea of one nuclear-armed submarine at all times. Such a survivable deterrent is perceived essential due to Israel’s unique geopolitical and demographical vulnerability to nuclear attack, and one that no potential nuclear enemy of Israel could ignore.

Another related long-term strategic development that began since the late 1980s was Israel’s growing presence in space for strategic purposes, command and control, and intelligence. Realizing the lessons of the Gulf War, Israel made a strategic decision to develop independent satellite coverage on countries of the “third tier” who were perceived as posing a threat with their ballistic missile and nuclear weapons programs in the 1990s: Libya, Iraq, and Iran.

### **Operation Iraqi Freedom: The New Geopolitical Context**

It is indisputable that Operation Iraqi Freedom in 2003 created a new strategic reality, but it is still difficult to tell what that new reality is, let alone the kind of future trends, processes, and developments it may open the door for. Major hostilities in Iraq were declared to be ceased in April 2003, but as of

early 2005 there was still a great deal of uncertainty over key aspects of the new reality. While in some areas the changes are clear and obvious, in other areas there is still a great deal of fog.

From an Israeli perspective, Iraq itself is no longer a military threat for Israel, at least not for the short- and mid-term period. Even prior to Operation Iraqi Freedom Iraq had lost much—some would say most—of its potential as a military threat. Since the Iraqi defeat in the first Gulf War, and during nearly a decade of inspections and military and economic sanctions, most of Iraq's military machine that survived the 1991 war had deteriorated badly. By February 2003 Iraq posed minimal conventional threat to Israel.<sup>13</sup> But in the wake of Operation Iraqi Freedom the Israeli strategic construct known as the “eastern front” (of which Iraq has always played a major role) collapsed as well.<sup>14</sup>

Operation Iraqi Freedom also put an end to the Israeli worst-case scenarios built upon unaccountable Iraqi WMD capabilities, in particular in the biological field. Since the end of the Gulf war in 1991, and in particular after the revelations of the full extent of the Iraqi biological weapons (BW) program in 1995, speculations about Iraqi unaccountable CBW capabilities fed a full array of Israeli worst-case scenarios.<sup>15</sup> In fact, those scenarios repeated themselves in virtually every confrontation Iraq had with the UN Special Commission on Iraq (UNSCOM) in the 1990s. This was particularly true in February 1998 when it was rumored that the prime minister was considering nuclear retaliation should Iraq hit Israel with chemical or biological weapons. Obviously, those scenarios no longer exist today. In this respect, Operation Iraqi Freedom has improved Israel's overall strategic situation, not only in reality, but also in perceptions.

Probably no single issue highlights the potential of historic change in the region more than attitudes and perceptions toward WMD. The 2003 war itself and the removal of Saddam and his Baath regime is at the heart of these changes. It was that regime, with its pursuit of nuclear weapons, that provoked great Israeli anxiety nearly three decades ago—which led Israel to attack the Osiraq nuclear reactor in 1981 as the first preemptive act of unilateral counterproliferation—and also (at least in part) drove Iran to the path of a nuclear weapons program. While it was often argued that concerns about Iraq's nuclear weapon program played a role in pushing the George H.W. Bush administration to wage the first Gulf War, it was surely concerns about Iraq's residual CBW that reinforced the second Bush administration's determination to go to war.<sup>16</sup>

President George W. Bush's decision to prosecute Operation Iraqi Freedom almost alone while risking a major rift within the North Atlantic alliance highlights the U.S. commitment to the proposition that in the age of global terrorism the United States must not forgo the risk of preempting a hostile WMD threat. From the perspective of the Arab and Islamic worlds, the war in Iraq showed that the doctrine of preemption in dealing with emerging WMD is real and must be taken seriously. This American resolve may reinforce the perception in the region that the pursuit of WMD, combined with

harboring terrorism and opposition to the United States, may be a dangerous combination for any state. And yet different nations can infer different conclusions from this very lesson. Enter the nuclear cases of Libya and Iran.

### THE LIBYAN NUCLEAR CASE

While it is still too early to place in full historical context Libya's decision in late 2003 to dismantle its nuclear and chemical weapons programs, one thing is evident: the Libyan move was unexpected and unprecedented. There have been a few other cases of countries that decided to surrender their nuclear weapons and/or to submit their nuclear infrastructure to international inspections out of their own political will, but in all those cases the surrender was accompanied by a major regime change or at least by a domestic political transformation. The Libyan transformation is probably the first case of a state's dismantling its nuclear and other weapons of mass destruction programs voluntarily without a regime change or a move toward democracy.<sup>17</sup> Regardless of the specific motivation behind Qadhafi's turnaround—whether it was a response to American hegemonic policies, the victory of European multilateral sanctions, or a response to domestic politics—his move has potentially far-reaching significance, both in the region and the world.

After Qadhafi's announcement some suggested that the significance of the Libyan move might have to do with changing perceptions about the value of WMD programs among Middle Eastern states. In the not too distant past, the pursuit of WMD was part of the ethos of becoming a regional power. Such weapons were valued as an attractive asset. The Libyan move may manifest a critical point in a movement toward the devaluation of WMD. This is exactly what happened in Argentina when the country decided it wanted to rejoin the civilized world after the overthrow of the military government and found its unsafe nuclear program an obstacle. Similar motivations existed in South Africa, Belarus, Kazakhstan, and Ukraine. But Qadhafi is the first Muslim ruler who has expressed so directly the understanding that WMD programs have lost their attraction because they stand in the way of Western economic assistance and can even provoke active hostility. This dynamic was not the result of a fruitful process of multilateral arms control in the Middle East, but was largely a reaction to the exercise of American military might and economic strength.

Viewed from this perspective, the first signs of this devaluation trend may have even preceded Qadhafi's move. Iraq may have given up its pursuit of WMD after its defeat in the first Gulf War, but Saddam was uncomfortable declaring so publicly. Indeed, many now speculate that (counter to assessments in the prewar period) in response to effective activities in Iraq by UNSCOM and the International Atomic Energy Agency (IAEA), Saddam decided to dismantle much of his banned weapons but could not bring himself to admit it. Some even suggested in early 2004 that Iran's voluntary decision to suspend its enrichment activity is also part of that trend.

As for Israel, the Libyan move is all but net gain for Israel. Libya's nuclear program was always considered a threat to Israel and its dismantlement is only good news for Israel. Beyond the Libyan case in itself, a trend toward a devaluation of WMD in the region is probably the best news Israel has received for years. But it was also recognized that Israel's status in the process is not that of a passive observer. Israel is also a key player. Its reaction to Qadhafi's move will be very important, perhaps even decisive, in determining the direction the process will take. It is plain that the future of any new trend on the matter of WMD is predicated on Israel's own reaction to such a development. Some states have already proposed that Israel make gestures of its own in the area of nuclear weapons in response to the Libyan transformations.

Some in Israel have recognized that Israel's response is essential. The Israeli Chief of Staff, Lieutenant General Moshe Ya'alon, in what some noted as a veiled rebuke of governmental silence, referred publicly to the Libyan move as "serious, very serious." He noted that this could be part of a "domino effect" following the U.S. invasion of Iraq, and that combined with Iran's agreement last month to accept additional nuclear inspections, it had created the beginnings of a changed regional landscape and lowered the strategic threats facing Israel. By late December 2003 the Israeli inner cabinet was convened by Prime Minister Sharon to consider whether and how Israel should contribute to these dynamics. While there is a national consensus in Israel that its nuclear status is nonnegotiable at the present time—prior to comprehensive regional peace—there are voices in Israel, in and out of government, saying that the nation should join the process of controlling weapons of mass destruction in a meaningful way.<sup>18</sup>

## THE IRANIAN NUCLEAR CASE

Within less than a year, however, the focus of the international nonproliferation community shifted from Libya to Iran. While the fate of the Iranian case is still a work in progress, Iran represents a very different problem. Notwithstanding the Iranian abundant talk about "peaceful uses" of atomic energy, as well as the IAEA lacking a conclusive "smoking gun," Iran clearly positions itself as close to having a complete fuel fabrication cycle as the international circumstances would allow her.<sup>19</sup> Whether Iran has actually a dedicated weapons program or not—a contested issue of great speculation—it does not change the fact that Iran has challenged the nonproliferation regime from within to the fullest extent possible. Iran appears to push to the limits any possible loopholes in the NPT. In doing so Iran seems to follow the North Korean and Iraqi path of going nuclear clandestinely within the NPT.

Already prior to the Libyan announcement in December 2003, Iran was forced to admit that for longer than a decade it had not been declaring all of its nuclear sites and activities—and had not been subjected to IAEA safeguards. In response to those damning revelations, and the threat of UN Security Council sanctions, Iran pledged in early 2004 a voluntary "suspension" of all its enrichment and reprocessing activities, a move that some observers took



as a hopeful indication that the combination of international pressure and rigorous inspections could be effective in halting proliferation.<sup>20</sup>

But this optimism was short-lived and premature. Only 5 months later, as the IAEA started to set up a baseline to monitor the Iranian suspension commitment, Iran notified the IAEA that it was suspending some of those voluntary suspension measures, and would resume, under IAEA supervision, manufacturing centrifuge components, as well as assembly and testing centrifuges. For all practical purposes, Iran reversed course and resumed research and development activities on uranium enrichment. By August 2004 Iran's foreign minister openly asserted that his country had a "legitimate right" as an NPT member to enrich uranium. "We will lobby for our rights in the international community to deal with the negative atmosphere our enemies have created against Iran," Kamal Kharazi was quoted as saying "We will never allow the enemy to trample upon our legitimate rights enshrined in the international conventions."<sup>21</sup>

An IAEA report indicates that the traces of highly enriched uranium (HEU) that U.S. officials believed were obvious signs of Iran's weapon-related activity could plausibly be traced back to Pakistan, the source of Tehran's equipment. To be sure, vital questions remain about Iran's past enrichment activities, but nothing points conclusively to a clandestine weapons program. There is no evidence of a dedicated weapons program. The IAEA report states that it is still not in a position "to draw definitive conclusions concerning the correctness and completeness of Iran's declarations," but that it is continuing to make "steady progress in understanding" Iran's nuclear program. It faults Iran in delaying the provision of critical information in some cases, but states that Tehran has continued to act "as if its Additional Protocol is in force," providing related information and allowing access to sites on a timely and forthcoming basis.<sup>22</sup> The report is also inconclusive on the nature of the undeclared activities that took place at the razed site at Lavisan-Shian.<sup>23</sup>

In response to the Iranian decision to suspend suspension on enrichment, American officials stated openly that the Bush administration would not rule out covert military action against Iranian nuclear installations. National Security Advisor Condoleezza Rice noted that the Bush administration was considering "many means" to prevent Iran from building a nuclear weapon. "We cannot allow the Iranians to develop a nuclear weapon," she said. "The president will look at all the tools that are available to him."<sup>24</sup>

Iran responded with its own escalated verbal threats, as well as with missile tests, all evidently aimed to deter Israel and the United States. "The entire Zionist territory, including its nuclear facilities and atomic arsenal, are currently within range of Iran's advanced missiles," Yadollah Javani, the head of the Iranian Revolutionary Guard's political bureau, declared.<sup>25</sup> In a most bellicose statement Iran even noted that, like the United States and Israel, it reserved the right to preempt American or Israeli strategic targets even prior to actual attack.

Officially, Israel avoided making any counter threats. While Israel sat tight and said nothing, it did act in an extraordinary way. In August 2004 Israel

started distributing “logol” tablets, what are popularly known as “anti-radiation” pills, to residents near its two nuclear reactors, Dimona and Soreq. This extraordinary move caused more puzzlement than panic. Israel never had a known radiation leak from those two facilities. No explanation was given to that unprecedented decision, except claiming that this is merely a general measure of precaution in the unlikely case of radiation accident in those reactors.<sup>26</sup> Some observers, however, did not fail to speculate about the link between this unprecedented Israeli measure and the threats from Teheran.

The fact is that since the inception of the Iranian grand nuclear program Israel has given very little credibility to the official Iranian talk about peaceful uses of atomic energy. Nor is Israel impressed by the IAEA’s lack of evidence. Based on its own history, Israel knows well how deceptive the talk about peaceful purposes can be. It was Israel’s own nuclear father, Ernst David Bergmann, who never forgot to remind his listeners that there is only one “nuclear energy,” to be used for good or ill. Israel also knows how easy it would be to conceal dedicated weapons activities from international nuclear inspectors. Even if the Iranian political leadership has not made a formal decision about producing weapons, Israelis know that this is almost immaterial to the way technological reality is being shaped. The momentum is there, with or without an explicit decision. For these reasons, Iranian official explanations, pledges, gestures, and the like make little impression on the Israeli assessment.<sup>27</sup> Those are no more than delaying efforts, strategies to split and exhaust Western opposition while the Iranian case is being kept outside the Security Council.<sup>28</sup>

From the perspective of Israeli threat perception, the Iranian determination to acquire full nuclear capability is firm, steady, and unquestioned. What is not clear is the specific technological route and the political modality Iran would use to achieve its goal. Like other nations, Iran hedges by pursuing a multitude of technological avenues simultaneously. Those matters would be ultimately resolved by utilitarian and opportunistic considerations.<sup>29</sup> The head of Israeli military intelligence told the Knesset’s Foreign Affairs and Defense Committee that by his estimate Iran would obtain its first nuclear weapons device in 2006.

It is the nuclear issue that elevates Iran to constituting the highest threat to Israel. This alarmist Israeli attitude toward the Iranian nuclear program should be viewed in a larger context. Iran is more hostile to Israel on ideological and political grounds than any other country in the region. Iran does not recognize Israel’s right to exist as a state not only *de jure* but also *de facto*. Of all nations in the Middle East, Iran uses the most hostile rhetoric to express its rejection of the legitimacy of Israel as a nation-state. It is the combination of Iran’s pursuit of nuclear weapons (as well as other WMD programs) and its advanced missile capabilities that elevates the concern over Iran from being a destabilizing factor in the southern Lebanon frontier to a strategic threat with existential consequences. It is Iran’s relentless efforts to obtain ballistic missiles that cover areas far beyond its adjacent neighbors that forces Israeli strategists to take it seriously as a threat. Over more than a

decade Iran has been investing billions of dollars in developing a series of medium-range ballistic missiles, from the operational Shihab-3 (range 1,300 km, 700 kg payload) to its newer experimental derivatives (the Shihab-4, estimated range 2,000 km, 1,000 kg payload; and the Shihab-5, estimated range 5,500 km), all of which are believed to have been developed with the aid of North Korea. As part of its effort to deter Israel from preempting its nuclear program Iran made it repeatedly explicit that the Shihab-3 can hit any target in Israel.<sup>30</sup>

### CHANGE VERSUS CONTINUITY

The Libyan case is a model of nonproliferation success; the Iranian case is a model of failure. Which case is likely to prevail? Which case is likely to shape attitudes and perceptions in other nations in the region on the role and value of nuclear weapons? Is the pursuit of nuclear weapons (and other WMD) in the region on the decline (as the Libyan case suggests) or on the rise (as the Iranian case appears to indicate)? As of this writing, nobody can tell for sure. Israel has an interest in encouraging and promoting the disarmament trend, but at the same time it must hedge against the armament trend.

Israel is surely not a neutral and detached observer to these cases. Tel Aviv has much at stake on the question of the future of nuclear weapons in the region. Israel clearly prefers the Libyan case to be a regional trend, even if it has to be part of the process. Ultimately, the bottom line is that Israel prefers a region without nuclear weapons—without any nuclear weapons—rather than a nuclearized region under mutual nuclear deterrence. The impact of Qadhafi's action must be gauged among policy-makers and the elite of some key regional players—Egypt, Saudi Arabia, Syria, and above all, Iran—but those nations will point their finger at Israel. If so, should Israel encourage by its own action, say by some arms control initiative, the Libyan move? If Libya's unilateral decision has a chance to be the beginning of devaluation of WMD programs in the region, Israel itself must be part of that process.

However, if Iran creates the bomb—and, of course, depending on the specific modality by which Iran goes nuclear—then Israel would have to reverse directions and make its own nuclear capabilities more explicit. Many Israeli analysts suggest that the advent of the Iranian bomb would inevitably be the end of Israel's policy of nuclear ambiguity. A few years ago former Prime Minister Binyamin Netanyahu hinted that he believed that the time had come for Israel to rethink its policy of nuclear ambiguity, citing the nuclear developments in Iran as justification.

Israel is also fully aware that its own reactions and policies in response to these developments do matter. Israeli action is important to the regional outcome of these cases. But whether Israel would react or not depends, in turn, on a strategic assessment of the present situation as well as the outcome of the action. Is an Israeli response required? What kind of response is needed?

What is the trade-off of risks and benefits involved in each option, including no action at all?

There remains a great deal of strategic obscurity. Israel has great concern over the Iranian situation, but it is unlikely that Israel would do anything unilaterally that could compromise a broad diplomatic effort of the international community to thwart Iran from getting nuclear weapons. Those efforts must be concluded and exhausted.

There is a great deal of uncertainty not only in the nuclear realm, but also in two other areas that are quite relevant to the overall Israeli assessment of its national security. First, the future of the war against global terrorism led by radical Islam: Will the war against al Qaeda and similar groups of Islamic terrorists develop into a clash of civilizations, or end with a whimper? The new threat of WMD terrorism looms high and ties the first uncertainty with the second. Second, there is the future of Iraq itself: Will Operation Iraqi Freedom be recognized as a great American success in the Middle East or as an American failure?

These areas of strategic uncertainty are of utmost concern to Israel, to the way Israel looks at its own future as a small Jewish–Western enclave in the Arab Middle East. These uncertainties bear directly on the way Israel conceptualizes its national security situation, both in terms of threat perceptions as well in terms of the nation's strategic response to those threats.

These uncertainties also bring us back to the question of Israel's own nuclear policy. Not only has Israel's posture of nuclear opacity been an extraordinary display of stability and continuity, but it also has a certain "schizophrenic" face. Nuclear opacity is an effort to live with somewhat opposite commitments: resolve and caution. On the side of resolve, small Israel—with population of less than 2 million when it had initiated its nuclear program—crossed the nuclear weapons threshold only 2 years after China, at a time when no other nation in the region was even close to establishing a nuclear fuel cycle capability, let alone to produce nuclear devices. Israel was determined to develop a nuclear option. On the side of caution, however, and with full contrast with the cases of India and Pakistan, Israel did not want to nuclearize the conflict. The Israeli bomb remains as opaque as it has always been. Israel has kept its nuclear status veiled, but it does so in a manner that has shaped strategic perceptions and the actions of others, friends and foes alike.

If anything, the present uncertainties only confirm and reinforce Israel's determination to continue, as long as it can, with its well-established practice and policy of nuclear ambiguity. This policy is based on stability continuity, leaving Israel with maximum flexibility for an uncertain future. This policy, based on quiet resolve and public caution, is the Israeli idea of dealing with uncertain future in uncertain region. More than two generations ago Israel felt compelled to prepare itself for a "rainy day," while at the same time making deliberate efforts to prevent a situation of a nuclearized Middle East. For most Israelis this rationale is still as valid today as it was then.

## NOTES

1. David Ben Gurion, *Be-mah Nekabel Pnei Habaot* (With What Will We Face the Future) (Tel Aviv: Merkaz Mifleget Po'alei Eretz Israel, November 1948), pp. 35–36; also cited in Ephraim Katzir, “The Beginning of Defense Research: Ben Gurion and the HEMED,” in *David Ben Gurion and the Development of Science in Israel* (Jerusalem: Israeli Academy of Science, 1989); pp. 26–27; and excerpted in David Ben Gurion, *Be-hilabem Israel* (When Israel Fights) (Tel Aviv: Am Oved, 1950), p. 236. The English translation is by this study’s author.
2. Shimon Peres, *Battling for Peace: A Memoir* (London: Weidenfeld & Nicolson, 1995), p. 132.
3. Tom Segev, *The Seventh Million: The Israelis and the Holocaust* (New York: Hill and Wang, 1993), p. 82.
4. In a letter to a noted Israeli scientist, Ben Gurion wrote, “There is a saying, ‘the dead will not praise God,’ and if we face the threat of destruction—and unfortunately we do, and Hitler’s Holocaust was only the most extensive and terrible of the attempts to destroy us during our history—to a certain extent this is the most fateful of our existence.” Letter, David Ben Gurion to Professor Shmuel Sambursky, March 17, 1963, David Ben Gurion Archive, Letters, cited in Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998), p. 358.
5. Letter, Ben Gurion to Kennedy, June 24, 1962, John F. Kennedy Presidential Library, Boston, MA, NSF, Box 118.
6. DBGD, April 26, 1949; DBGD, October 23, 1950. For a detailed analysis of Ben Gurion’s views, see Zaki Shalom, *David Ben Gurion: The State of Israel and the Arab World 1949–1956* (in Hebrew) (Sdeh Boker: Ben Gurion University of the Negev Press, 1995).
7. Pierre Pean, *Les Deux Bombes* (Paris: Fayard, 1981), pp. 95–96, 110.
8. Cohen, *Israel and the Bomb*, 73–75.
9. *Ibid.*, 79–97.
10. *Ibid.*, 273–276.
11. Hedrick Smith, “U.S. Assumes the Israelis Have A-Bomb or its Parts,” *New York Times*, July 18, 1970.
12. “Israel,” in Joseph Cirincione, Jon B. Wolfsthal, and Miriam Raj Kumar, *Deadly Arsenals: Nuclear, Biological, and Chemical Threats*, 2nd ed. (Washington, DC: Carnegie Endowment, 2005), pp. 259–275.
13. This state of affairs was not fully appreciated by strategic planners due, in part, to the systematically flawed intelligence assessment of Iraq’s WMD capabilities.
14. Since the mid–late 1970s, in the period after the Yom Kippur War and after the Peace Treaty with Egypt in 1978, Israeli strategic planners “constructed” a scenario of an Eastern Front made of columns of thousands of tanks (Syrian, Iraqi, and Jordanian) marching westward as a worst-case scenario for the purposes of Israeli force building. That construct was a result of the Yom Kippur War trauma.
15. After the defection of Hussein Kamel Iraq admitted to UNSCOM that it had created about a dozen biological agents in vast quantities, most importantly 8,500 liters of anthrax. Iraq even admitted that Israel was the rationale for its efforts to weaponize BW onto the warheads of Scud missiles. These numbers were used by various military and media sources throughout the years, and were used by Hans Blix (former UNMOVIC chairman) in his report to the UN Security Council on Iraq, January 27, 2003.

16. For a comprehensive interpretation of the first Gulf War as a war about WMD see Avigdor Haselkorn, *The Continuing Storm: Iraq Poisonous Weapons and Deterrence* (New Haven, CT: Yale University Press, 1999); see also Avner Cohen and Marvin Miller, "Nuclear Shadows in the Middle East: Prospects for Arms Control in the Wake of the Gulf Crisis," *Security Studies*, vol. 1, no. 1 (Autumn 1991), 54–77.
17. South Africa dismantled its nuclear weapons and the program that produced them shortly prior to the end of the Apartheid regime in 1993. When the Soviet Union dissolved and weapons and nuclear facilities were left behind in three former Soviet republics—Ukraine, Belarus, and Kazakhstan—all three states transferred former Soviet nuclear weapons to Russia and negotiated the terms under which they signed the NPT as nonnuclear weapon states. Similarly, Argentina and Brazil opened their advanced nuclear infrastructures to mutual inspection, and subsequently joined the NPT and the Tlatelolco nuclear-weapon free-zone agreement. In all of these cases, the reverse in nuclear status was the outcome of a political decision that followed a profound change in regime and/or political identity. Interestingly, in all the mentioned cases the change in regime was also to a degree a democratic change.
18. "The Disarmament Issue," *Ha'aretz*, editorial, January 4, 2004.
19. There are many accounts of the Iranian nuclear program. See, for example, Marshall Breit, "Iran's Programs to Produce Plutonium and Enriched Uranium," Carnegie Non-Proliferation Project, updated December 1, 2003 <[www.ceip.org/files/projects/npp/resources/Factsheets/iransnuclearprogram.htm](http://www.ceip.org/files/projects/npp/resources/Factsheets/iransnuclearprogram.htm)>; as well as U.S. Undersecretary for Arms Control and International Security John R. Bolton, "The New World After Iraq: The Continuing Threat of Weapons of Mass Destruction," October 30, 2003.
20. For a comprehensive and updated information on the Iranian nuclear issue see <[www.ceip.org/files/nonprolif/countries/country.asp?ID=2&country=Iran](http://www.ceip.org/files/nonprolif/countries/country.asp?ID=2&country=Iran)>
21. See <[www.eubusiness.com/afp/040804134101.sutfy8y7](http://www.eubusiness.com/afp/040804134101.sutfy8y7)>
22. For an assessment of the report see Miriam Rajkumar and Joseph Cirincione, "The IAEA Report on Iran: No Slam Dunk, September 2, 2004." <<http://www.ceip.org/files/nonprolif/templates/article.asp?NewsID=6745>>
23. This is the site that some believe that Iran conducted clandestine nuclear weapons activity. In its own account to the IAEA Iran says that a Physics Research Center was established there in 1989 to prepare to combat and neutralize casualties resulting from nuclear attacks or accidents and to provide scientific advice and services to the Ministry of Defense. Iran maintains that "no nuclear material declarable in accordance with the Agency's safeguards was present," and that no nuclear fuel-cycle activities were carried out at the site. Iran provided the IAEA access to the site belatedly, only after it became public. Referring to "security concerns," however, Iran declined to provide a list of the equipment used at the site. As to why the site was razed, Iran told the IAEA that the site had been destroyed due to a decision to return the site to the Municipality of Tehran from the Ministry of Defense. The IAEA is currently assessing the documents and the environmental samples. <<http://www.ceip.org/files/nonprolif/templates/article.asp?NewsID=6745>>
24. See <<http://actnow.saferworld.org/ctt.asp?u=3319286&l=49668>>
25. Abraham Rabinowich, "Iran Boasts Dimona Now 'Within Range,'" *Washington Times*, August 23, 2004. <<http://www.washtimes.com/world/20040823-093433-2855r.htm>>

26. Abraham Rabinowich, "Iran Boasts Dimona Now 'Within Range.'" The Logol pills consist of an iodine compound that blocks absorption of radioactive material by shutting down the thyroid gland. Defense officials insisted that there was no danger from the 40-year-old reactor and that the move was a precautionary measure. "The public is not to do anything with this pill . . . just put them aside to be taken only upon explicit instructions," said a military official. Israel justified the distribution by saying that a joint committee of the Israel Defence Forces (IDF), the Ministry of Defense, and the Atomic Energy Commission decided that the pills should be distributed in order to facilitate the protection of residents in the event of an emergency.
27. According to Israeli analysis, Iran still needs time without external interruption to complete its nuclear infrastructure, in particular to establish access to a complete fuel cycle as a key to produce fissile material. Once Iran achieved that "nuclear option" capability it would care less about keeping itself within the NPT. The NPT is also, viewed from an Israeli outlook, a diplomatic shield on its nuclear program, presenting it as "for peaceful purposes." As long as Iran is not declared in noncompliance, the NPT provides it a great political cover. At the same time Iran uses its NPT membership as a way to maintain a threat to leave the NPT, following the North Korean example. Israelis believe that Iran already has a dedicated weapons program, but to "prove" its existence is almost impossible.
28. For a good illustration of the Israeli semiofficial mindset regarding the Iranian nuclear program see Ephraim Asculai, "Iran, the IAEA and the Legend of the Smoking Gun," *Tel Aviv Notes*, no. 110, September 8, 2004 (published by the Jaffe Center for Strategic Studies at Tel Aviv University). Asculai express this common Israeli view in the following way: "What are Iran's plans at present? It is not difficult to assume that it will proceed with its program in the fashion it laid down from the beginning. When it has accumulated sufficient quantities of low-enriched uranium (LEU) and when the time is ripe, it will do one of two things: either withdraw from the NPT (citing the North Korea precedent) and then enrich the LEU to HEU, or begin enriching the LEU it will have diverted and concealed in order to produce concealed nuclear weapons. Whatever the choice, it will be made on the basis of opportunity."
29. *Ibid.*
30. See <[http://news.bbc.co.uk/2/hi/middle\\_east/3555878.stm](http://news.bbc.co.uk/2/hi/middle_east/3555878.stm)> and <[www.janes.com/defence/news/jdw/jdw040816\\_1\\_n.shtml](http://www.janes.com/defence/news/jdw/jdw040816_1_n.shtml)>

## IRAN AT THE STRATEGIC CROSSROADS

*Ray Takeyh*

As the Bush administration energetically addresses the issue of nuclear proliferation in the Middle East, Iran has suddenly emerged as one of Washington's foremost concerns. Over the years, many Western analysts have assumed Iran's nuclear program was largely limited to the Bushehr installation near the Persian Gulf that operates under the oversight of the International Atomic Energy Agency (IAEA). The ostensible purpose of this installation is to provide Iran with an alternative source of energy to gas and oil. Western concerns were not so much that Bushehr would produce a nuclear bomb, but that under the cover of a civilian research program Iran was gathering sufficient knowledge and expertise to achieve a nuclear weapons capacity.

Over the past few years, a series of revelations has shocked the Washington establishment and forced a revision of previous intelligence assessments. The first shock came in August 2003 when U.S. intelligence reported that Iran had built extensive facilities for the enrichment of uranium in Natanz, approximately 200 miles south of Tehran. The Natanz installation currently contains 160 centrifuges needed for this purpose, with another 1,000 under construction. The plan is to have 5,000 operational centrifuges within 2 years. This would give Iran the capacity to produce enough fissile material for several nuclear bombs a year.

In addition, it appeared that Tehran was completing another facility at Arak in central Iran for the production of heavy water needed for the production of plutonium. Although initial Central Intelligence Agency (CIA) assessments were that Iran could achieve a nuclear arms capacity within 5 to 8 years, the sophisticated nature of these installations indicates that it may be able to do so within 3 years. The more alarming aspect of the recent discoveries is that, increasingly, much of the technology for assembling a nuclear device is being indigenously produced.

The enormity of the evidence finally compelled Iran to accept the International Atomic Energy Agency's enhanced protocols in October 2003. Under the auspices of the IAEA, the inspection teams are to conduct inspections with little notice and undertake extensive environmental sampling to determine the scope of Iran's operations. The IAEA process has already



yielded results, as it has been revealed that Iran's installations and programs were even more advanced than initially assessed. From secret facilities to weapons-grade uranium, the IAEA inspectors have offered ample and alarming evidence regarding Iran's intentions and capabilities. However, the IAEA process has distinct and self-defeating limitations. Even under the auspices of the IAEA, Iran has the statutory right to enrich uranium, construct heavy water plants and essentially have an indigenous fuel-cycle capability. In essence, as a good member of the IAEA, Iran can develop the infrastructure and installations that can produce nuclear weapons in short order. However valuable the IAEA inspections process may be, it is not the answer to Iran's proliferation conundrum.

### THE REGIONAL LANDSCAPE AND NUCLEAR PRESSURES

The alarming reports that have pervaded the international press and the seemingly dire developments of the past few years need not imply that Iran will be the next member of the exclusive nuclear club. In Tehran's corridors of clerical power, there is in fact a subtle debate regarding the wisdom of crossing the nuclear threshold. What the Islamic Republic decides to do in this respect will depend to a great extent on the nature of its evolving relationship with the United States and the security architecture of the Persian Gulf. An imaginative U.S. policy can still influence the outcome of Iran's deliberations, stacking the scales in favor of those within Iran who seek to remain within the confines of the Nuclear Non-Proliferation Treaty (NPT), to which Iran is a signatory.

However, time is not necessarily on the side of the United States and the international community. The lessons and history of proliferation in South Asia offer an ominous pathway for Iran. In the cases of Indian and Pakistani bombs, as time went on, bureaucratic constituencies and nationalistic pressures conspired to perpetuate the nuclear programs and reinforce the strategic logic that initially provoked the search for the atomic deterrence. Similar sets of pressure are beginning to be evident in Iran. A vast scientific community along with Revolutionary Guards who derive prestige and profits from the continuance of the nuclear program are emerging as stalwarts of Iran's proliferation machinery. As such a bureaucratic constituency congeals, it would be difficult to divest Iran of its nuclear installations. In the meantime, the international attention and condemnations have provoked a nationalistic backlash with the aroused Iranian nationalism pressing for resumption of prohibited nuclear activities. A highly nationalistic populace is beginning to coalesce around Iran's sovereign rights and invoking the all too familiar slogans of autonomy and superpower double standards. As these twin pressures intensify, it would be difficult for any Iranian leadership to reverse the nuclear course and effectively dismantle the program, irrespective of the rewards and penalties proffered by the international community. Iran is not yet at this point and it is still the strategic arguments that guide nuclear

deliberations. However, time is not on the side of advocates for cooperation with the IAEA.

Contrary to Western assumptions, Iran's nuclear calculations are not derived from an irrational ideology, but rather from a judicious attempt to craft a viable deterrent capability against an evolving range of threats. Despite its dogmatic rhetoric, continuing support of international terrorism, and defiant opposition to the Israeli–Palestinian peace process, Iran has evolved during the past decade into a largely circumspect and cautious regional power whose strategic doctrine is predicated on preserving its independence and safeguarding its vital interests. This transformation reached its apex with the election of the moderate cleric Muhammad Khatami to the presidency in 1997. The new president set the tone early on by noting that “making enemies is not a skill; real skill lies in the capacity to neutralize enemies.”<sup>91</sup> Under Khatami's stewardship, Iran sought to advance its interests through a pragmatic diplomacy emphasizing trade, reconciliation with erstwhile foes such as Saudi Arabia, and mutual security compacts. The crude tactic of brandishing nuclear threats is inconsistent with Iran's current international orientation and should not be presumed to be the motivation behind its nuclear policy. This policy enjoys widespread support through competing sectors of Iranian politics. Given its trade and security benefits, the conservatives have also embraced the essential elements of the reformist international orientation. Iran seems to be moving away from a partisan-based foreign policy where key initiatives are reversed pending ebbs and flows of domestic politics, to a consensus-based international orientation whereby the state continues with its policies irrespective of its shifts in the internal balance of power.

On the surface, Iran has ample incentives to acquire nuclear weapons, given its dangerous and unstable neighborhood. However, despite persistent chaos on its frontiers, Iran's nuclear program has always been conditioned by a narrower but more existential set of threats. Instability in Afghanistan and Central Asia may be an important concern for Iran's defense planners, but it is hard to see how nuclear weapons can ameliorate the handling of these crises. Since the inception of the Islamic Republic, negating the Iraqi and American challenges has been the most significant task for Iran's national security establishment. These two states have dominated Iran's threat perceptions and determined its defense priorities.

Here, it is important to set the Israeli question in its proper context with respect to Iran's unconventional weapons aspirations. To be sure, even a cursory survey of the clerical regime's declarations would lead one to conclude that the Islamic Republic perceives a nuclear-armed Israel as an existential threat not just to itself but to the entire Islamic world. However, the invocation of the Israeli military threat is largely rhetorical, employed by the clerical regime as a means of mobilizing regional and domestic opinion behind a range of policy initiatives. In the clerical cosmology, Israel is seen less as an imminent military threat than as an ideological threat, with Zionism transgressing onto sacred Muslim land. However disturbing the Zionist threat may be to Iranian clerics, it does not drive Tehran's pursuit of nuclear

weapons. Despite its rhetorical fulminations and aggressive posturing, Iran has opted for a low-intensity challenge to Israel by fueling terrorist actions against the Jewish state while avoiding direct military confrontation.

The Israeli dimension, however, may alter given the belligerence of Sharon's government and its periodic threats to attack Iran's atomic installations. The bellicose rhetoric of the hawkish Israeli government and any precipitous action by Jerusalem can elevate the nature of the Israeli threat that thus far has been rather limited. Should Israel become more of a security factor for Iran, it will be even more difficult to reverse Iran's proliferation path. In the end, whether Israel will loom large in Iran's nuclear calculations will depend on the conduct of the Israeli regimes. A more tempered policy by Israel can have a salutary impact on Iran's internal debates on this crucial strategic issue.

While the Israeli-Palestinian arena may still be peripheral to Iran's core interests, the critical Persian Gulf area constitutes Tehran's most serious strategic concern. The Gulf is Iran's most important outlet to international petroleum markets and essential to the country's economic stability. During the past two decades, Saddam Hussein's Iraq has presented a formidable threat to Tehran, as the Iraqi dictator sought supremacy in the Gulf and waged a merciless 8-year war in which he employed chemical weapons against Iranian troops. The war ended in 1988 with an uneasy cease-fire, which led neither to genuine peace nor greatly improved relations. The border between the two states remained unsettled, and both sides continued to sponsor proxy wars against each other. The fear of a revived Iraq, free of the straitjacket into which it had been forced, in 1991, after its defeat in the Gulf War shaped Iran's defense posture. With Saddam's downfall in 2003 and the absence of weapons of mass destruction (WMD) in Iraq, the existential threat once posed by Iraq has diminished. Any successor regime in Baghdad is likely to adhere to Iraq's nonproliferation commitments (it is a signatory to the Nuclear NPT) and may even cultivate favorable ties with the Islamic Republic.

As with Israel, however, the Iraqi factor could once more present Iran with challenges mandating nonconventional deterrence. Should the United States resume its early policy of employing its allies to contain non-friendly regimes the dimension of the Iraqi challenge can alter. A revival of the early 1970s policy whereby the Nixon Doctrine deputized Iran as the policemen of the Persian Gulf and offered Tehran all the arms that it needed for this task, this time making Iraq that strategic partner, could alter Iran's strategic calculus. Should Iraq be the cornerstone of the new American doctrine deployed against Iran, the defense planners in Iran must take account of the reemergence of the Baghdad factor.

With Saddam gone, America has emerged as the foremost strategic problem for Iran and the primary driver of its nuclear weapons policy. The Bush Doctrine, which pledges the preemptive use of force as a tool of counterproliferation, combined with the substantial augmentation of American military power on Iran's periphery, has intensified Tehran's fears of "encirclement" by the United States—or even worse, of being its next target. President

Bush's characterization of Iran as a member of the "axis of evil," and Secretary of Defense Donald Rumsfeld's more recent rhetorical support for regime change, has aggravated an already strained relationship. Iran's leadership clearly sees itself as being in Washington's cross hairs, and it is precisely this perception that is driving its accelerated nuclear program. As Khatami confessed in April 2003, "They tell us that Syria is the next target, but according to our reports, Iran could well follow."<sup>2</sup>

In the menacing shadow of the American colossus, Iran's strategic planners have drawn sobering lessons from Operation Iraqi Freedom. The clerical oligarchs certainly noticed that Saddam's much-bruited repositories of chemical weapons did not prove a deterrent against an American president determined to effect regime change. As an Iranian official confessed, "The fact that Saddam was toppled in twenty-one days is something that should concern all countries in the region."<sup>3</sup> In the meantime, developments on the Korean peninsula offered their own lessons. The North Korean model suggests that a presumed nuclear capability may not only avert a preemptive American strike but also generate its own set of economic rewards and future security guarantees. The paradox of the post-September 11 Middle East is that although Iran's security has improved through the removal of Saddam and of the Taliban in Afghanistan, its feelings of insecurity have intensified. The massive projection of American power in the region and the enduring antagonism between Washington and Tehran constitute Iran's foremost strategic dilemma and its primary motivation for the acquisition of the "strategic weapon." However, as with nearly every other important issue currently being debated in the Islamic Republic, the notion of crossing the nuclear threshold is hardly a settled topic. A more adroit American diplomacy can have an impact on the parameters of this debate.

## TO GO NUCLEAR OR NOT?

It is often assumed that the Islamic Republic has already made its decision and is relentlessly pursuing a determined nuclear strategy. Ascribing such cohesion and efficacy to a fractious and polarized polity is too simple. While much of the political debate in Iran is conducted in public, nuclear discussions are largely held in secret. Nonetheless, at times of intense international crisis, such as the recent American war in Iraq, the veil of secrecy lifts and the contours of the debate seep into the pages of newspapers and specialized journals that often act as surrogates for the various clerical factions.

The first sustained exposure of Iranian nuclear deliberations came when Pakistan test fired its first nuclear weapon in 1998. The debate in Tehran focused not so much on whether Iran should pursue a robust nuclear research program but on the wisdom of crossing the nuclear weapons threshold. The respected journal *Payam-e-Emrouz* set the parameters of the debate in stark terms by suggesting that "the dangerous regional situation in which our country exists reminds us that more than any other time we have to be thinking of our national interests."<sup>4</sup> The proliferation of WMD on Iran's

frontiers, it was argued, mandated development of a more effective deterrent power. However, the notion that this necessitated the possession of nuclear weapons did not go unchallenged. The journal *Farda*, with connections to the Foreign Ministry, argued against the proposition:

Does deployment of nuclear weapons—if possible and of the weak kind such as those of Pakistan—bring us security or insecurity against large countries such as the U.S.? Certainly the answer is insecurity since Iran does not have the superior military technology of the U.S. and these weapons cannot play a deterrent and security role against the U.S. On the other hand, Iran has befriended the small countries of the region and at least for now has no critical problems. Deploying such weapons not only cannot solve any problems for Iran; it will further add to its problems.<sup>5</sup>

In essence, the opponents of a nuclear breakout suggest that such a move may accentuate Iran's strategic vulnerabilities by undermining its carefully cultivated ties with the Gulf States and the international community. The argument that Iran's existing international relationships and long-standing commitment to the nonproliferation treaty act as a constraint on its nuclear activities should not be easily dismissed. The Islamic Republic has invested considerable effort in recent years in fostering favorable ties with most of its neighbors, as well as with Europe and Asia. To be sure, given the recent projection of U.S. power in Afghanistan and Iraq, the case for achieving a nuclear deterrent has become measurably more compelling. As one of Iran's leading reformist politicians, Mostafa Tajazadeh, said on the eve of the U.S. invasion of Iraq, "It is basically a matter of equilibrium. If I don't have a nuclear bomb, I don't have security."<sup>6</sup> Others within the Iranian leadership are frustrated by what they view as an American double standard that would maintain U.S. strategic supremacy but deny nuclear capability to regional powers. In the words of the prominent conservative columnist Amir Mohebian, "The Americans say in order to preserve the peace for [their] children, [they] should have nuclear weapons and [we] should not."<sup>7</sup> However, all is not lost, as those calling for restraint continue to press their case. The opponents of a nuclear breakout, including reformist politicians and officials in the Foreign Ministry, maintain the necessity of adhering to the broad confines of the international nonproliferation regimes as the best means of ensuring Iran's fundamental interests. As Ali Reza Aghazadeh, an important Khatami advisor on nuclear issues, affirmed recently, "Peace and stability cannot be achieved by means of nuclear weapons."<sup>8</sup>

While the events in Iraq have caused considerable consternation among the clerical oligarchs, the developments on the Korean peninsula offer a window of opportunity for an Iranian officialdom that is still prone to come to an arrangement over its nuclear weapons program. Iran's planners may be opting for a variation of the North Korean strategy, namely threatening to cross the nuclear threshold as a means of fostering better relations with the United States, including a resumption of economic ties. The economic

dimension is particularly important as, in the last decade, Tehran has grudgingly come to realize that Iran's tense relations with the United States preclude its effective integration into the global economy and access to needed technology. Foreign Ministry spokesman Hamid Raza Asefi first unveiled this strategy in March, claiming, "We are ready for discussions and negotiations, but we need to know what benefits the Islamic Republic would get from them."<sup>9</sup> Assadollah Saburi, the deputy head of Iran's Atomic Energy Organization, dangled the prospect of Iran's acceptance of additional IAEA inspection protocols, but said, "We do not want to increase our commitment in the face of [trade] sanctions that are currently imposed."<sup>10</sup> Given the economic and diplomatic cost of financing a clandestine nuclear weapons infrastructure, Iran's officialdom may be prepared for a grand deal, which would involve agreeing to limits on Iran's nuclear activities in exchange for the United States allowing Iran access to such international lending institutions as the International Monetary Fund (IMF) and permitting American investments in Iran, particularly in the petroleum sector. At any rate, the real significance of these declarations is that there still exists in Iranian official circles a propensity to negotiate and bargain.

The ultimate fate of Iran's nuclear program may still rest on the outcome of the intense power struggle going on inside the country. While there is currently consensus across the political spectrum with respect to the necessity of sustaining a nuclear *research* program, no such agreement is evident on the issue of actually crossing the nuclear-weapons threshold. The division is not necessarily between reformers and conservatives but between pragmatic and hard-line conservatives. Many pragmatic conservatives have embraced the reformers' essential foreign policy advocacy and call for engagement with the international community and adherence to the flexible guidelines of Iran's nonproliferation commitments. This is very much a fluid debate and can be impacted by the scope and successes of the program and the behavior of the international community. However, in general, conservative hardliners are more prone to dispense with Iran's nonproliferation obligations than their reformist counterparts.

Nonetheless, unlike many aspects of Iran's foreign policy, the nuclear issue is particularly vulnerable to internal divisions and rivalries. The hard-liners—with their suspicions of the United States and indeed of the entire international order—have always pressed for a revolutionary foreign policy. A prominent figure of the right, Ayatollah Muhammad Yazdi, represented this worldview when he stated, "The enemy wants to westernize the country, eliminate the Islamic regime, and the Koran with whatever methods [it has at its disposal]."<sup>11</sup> This notion is echoed by another influential hard-liner, the former head of the Revolutionary Guards, Mohsen Rezai, who deprecates the reformers' approach as "submissive policies, weakness and giving unilateral concessions in the name of *détente*."<sup>12</sup> The truth is that given its ideological precepts, its suspicions, and paranoia, the Iranian right does not find international isolation and dogmatic confrontation with the West necessarily objectionable.

Moreover, hard-line conservatives are wary of international treaties and diplomacy when it comes to preserving the vitality of the Islamic Republic. As Ali-Akbar Hashemi Rafsanjani, Iran's powerful former president, said in the aftermath of Iran's war with Iraq, "The war taught us that international laws are only scraps of paper."<sup>13</sup> Indeed, President Khatami's declared policy of *détente* came under intense criticism, with the commander of the Revolutionary Guards, Yahya Rahim Safavi, pointedly asking:

Can we withstand America's threats and domineering attitude with a policy of *détente*? Will we be able to protect the Islamic Republic from international Zionism by signing conventions banning the proliferation of chemical and nuclear weapons?<sup>14</sup>

Since the mid-1990s, when the reform movement began in intellectual and political circles, reformers have endorsed a foreign policy of engagement and integration in the global society. Khatami has led the charge by insisting on a "new paradigm of interaction among nations and cultures in a world that longs for peace and security."<sup>15</sup> This pragmatic reformist diplomacy calls for protecting Iran's interests through an interlocking set of commercial and strategic ties with critical international actors such as the European Union and the Gulf states. As Khatami has also noted, Iran must respect "the right of other nations to self-determination and access to the necessary means of honorable living."<sup>16</sup> Many pragmatic conservatives such as Hassan Rowhani, Iran's point man on nuclear negotiations, largely embrace the reformist ideas and seek to balance Iran's nuclear aspirations with its quest for international engagement. As the program develops further and international scrutiny and pressure intensify, it may be difficult for this faction to maintain its balancing act. In the next few years, the pragmatic conservatives will face a precarious crossroads: Whether to persist with the nuclear program in defiance of the international community or accept restraints and provoke the wrath of their more hard-line brethren.

At any rate, the Bush administration, which has been dismissive of the reform movement and shifts within the conservative bloc, would be wise to recognize that the contest in today's Iran is not just about the nature of domestic Islamic rule but also about what type of international orientation the theocracy will pursue in the future. While the reformers may not yet have been successful in liberalizing the Islamic Republic, in the realm of foreign affairs they have been quietly effective in restraining the impetuous impulses of the hardliners.

### WHAT CAN WASHINGTON DO?

Thwarting Iran's nuclear ambitions has been the aim of successive U.S. administrations. Over the years, Washington has scored some impressive gains and managed to delay and frustrate Tehran's quest for nuclear technology. The Reagan administration succeeded in obtaining Europe's agreement

to rigorous export controls with respect to dual-use technologies and in getting Germany to abandon its cooperation with Iran's nascent nuclear research program. During the Iran-Iraq War, Iran's nuclear research program remained largely dormant and was not reactivated until the early 1990s. Given Europe's continued unwillingness to participate, Iran turned to the Russian Federation, with which it signed a nuclear cooperation agreement in 1995.

Russia is helping Iran rebuild its two nuclear reactors at the Bushehr installation, which suffered from neglect during the Iran-Iraq War, and has provided the Islamic Republic with fuel fabrication technology and, possibly, even uranium enrichment centrifuge plants. Throughout the late 1990s, both the Bush and Clinton administrations attempted to deter Russia from this course by means of warnings, selective sanctions, and promises of expanded economic ties. A number of compacts were negotiated between the United States and Russia, most notably the December 1995 accord hammered out by Vice President Al Gore and Prime Minister Viktor Chernomyrdin, in which Russia agreed to limit its cooperation with Iran to work on one unit of the Bushehr plant. Russia in essence agreed not to provide additional reactors or fuel-cycle assistance to Iran. By the year 2000, this arrangement had unraveled. The meeting between Presidents Bush and Putin at the G8 summit in Evian, France, did not fully resolve the dispute. President Putin seemingly accepted the need for the international community to check Iran's nuclear ambitions, but his economic advisor, Andrei Illarionov, emphasized, "Iran is a neighbor. We want to have good relations with it, including in the field of civilian nuclear energy."<sup>17</sup>

Persuading Russia to alter its policy has proven difficult because Moscow has compelling economic and geopolitical reasons for cooperating with Iran. On the economic front, Russia's own nuclear research and aerospace industries have few domestic customers and must look elsewhere for business if they are to survive. Over 300 Russian firms have participated in the construction of the Bushehr facility, which has provided approximately 20,000 jobs for Russians.<sup>18</sup> However, Russia has another incentive for continued cooperation with Iran. As with his predecessor, Boris Yeltsin, Vladimir Putin appreciates Iran's influence in the Islamic realm and seeks favorable ties with Tehran as a means of preventing Iranian mischief in the unsettled states of Central Asia. The fact that Tehran has largely stayed out of the Islamist struggle in Chechnya and has been restrained in promoting its ideology in the former Soviet Republics is a testimony to the success of Russia's diplomacy.

This was the situation that the Bush administration inherited and quickly proceeded to make worse. Given that Iran's nuclear ambitions stem, in large part, from seeing the United States as a threat, Washington's conduct has a material impact on Tehran's proliferation tendencies. Thus far, the Bush administration has exacerbated Iran's strategic anxieties and further fueled its desire for acquiring nuclear arms. President Bush's earlier denunciation of Iran as a member of the "axis of evil" and more recent statements by administration officials such as Undersecretary of State John Bolton, who called on



Tehran to “draw the appropriate lesson from Iraq,” only buttress the position of those within the Islamic Republic’s hierarchy who insist that the only way to negate the American challenge is through the possession of nuclear weapons.<sup>19</sup> In the meantime, the administration’s focus on missile defense, its withdrawal from the Anti-Ballistic Missile Treaty (ABM Treaty), and its relative disdain for European opinion in the run-up to the war with Iraq have limited its capacity to gain Russian cooperation regarding Iran.

Moreover, since Iran is increasingly producing much of its nuclear infrastructure on its own, attempts to derail Tehran’s nuclear activities by pressuring external actors will yield limited results. It is time for the Bush administration to remove its ideological blinders and recognize that America’s central role in Iran’s strategic conception gives it a unique opportunity to diminish Tehran’s zeal for nuclear arms. Washington should take up Iran’s recent offer, made by the Foreign Ministry, that it would adhere to additional IAEA protocols if the United States were to relax its trade sanctions against Iran. Indeed, the United Nations Security Council could be the venue for such a discussion.

A more forthcoming U.S. policy of easing economic restrictions on Iran would be wise for two reasons. It would help induce Tehran to conform to nonproliferation standards, and it would also help the reformers rehabilitate Iran’s economy and thus consolidate their power base. Given the fact that two decades of sanctions and coercion have failed to modify Iran’s objectionable policies—its sponsorship of terrorism, opposition to the Arab–Israeli peace process, and pursuit of an ambitious nuclear weapons research program—a more adroit diplomacy and economic engagement may prove more effective in pushing Iran in the right direction.

While holding out the prospect of dialogue and cooperation, Washington should also begin assembling a new “coalition of the willing” designed to exert pressure on Iran should it prove uncooperative. The European Union and Russia should be induced to make it clear to Tehran that crossing the nuclear threshold will force them to impose rigorous economic sanctions. At a time when Iran is in dire need of foreign investment, such a step would make a significant impression on Tehran. The timing is propitious for Washington to make such a move since the recent revelations of Iran’s nuclear aspect appear to have led many Europeans to move in the direction long desired by the United States. Dominique de Villepin, the much-maligned French foreign minister, has taken the lead on this issue, telling Tehran that “it is essential to continue confidence-building measures, in particular by signing the additional protocols of the Nuclear Non-Proliferation Treaty.”<sup>20</sup> At the same time, Washington should press the Gulf states (particularly Saudi Arabia), with which the United States has close security and economic ties, to make it clear to Tehran that continued favorable relations will be contingent on Iran’s adherence to its nonproliferation commitments.

Today, Iran stands at a strategic crossroads and will soon have to make fundamental decisions regarding its nuclear program. Shrill rhetoric of the “axis of evil” variety and imperious presidential doctrines are unlikely to

prevent nuclear proliferation. A more clever diplomacy of carrots and sticks, offering to integrate Iran into the global economy while holding out the stark threat of multilateral pressures, can best dissuade it from taking the nuclear road.

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## SYRIAN WMD PROGRAMS IN CONTEXT

*Murhaf Jonejati*

### INTRODUCTION

As part of the shift in U.S. foreign policy from constructive engagement to deterrence following the tragedy of 9/11, the George W. Bush administration has exerted global efforts to curb the spread of weapons of mass destruction (WMD), aggressively pushing those states it calls “rogue” to renounce their pursuit of WMD. In explaining the new direction, U.S. President George W. Bush said, “We don’t want the most dangerous weapons in the hands of the most dangerous regimes.”<sup>1</sup> Indeed, the spread of WMD has become a major security concern, all the more so because these lethal weapons have the potential to fall into the hands of terrorists.

From a security perspective, it is a good thing that the United States is actively seeking to make the world a safer place. The problem is that Washington’s application of punitive measures against some states—regardless of their motivation and despite the fact that their regional conflicts are unresolved—neglects the underlying issues that drive these states to pursue WMD in the first place. Although some states pursue WMD for status or aggrandizement, other states pursue WMD for legitimate reasons.

This chapter argues that the Bush administration’s across-the-board punitive measures are not a suitable solution to the problem. The stick the administration has unilaterally wielded against Syria is one case in point. In May 2004, Washington imposed economic sanctions against Syria, due in part to Syria’s pursuit of WMD. The evidence, however, suggests that Syria seeks neither status nor aggrandizement. Rather, Syria’s pursuit of WMD is a product of its threat perceptions: Syria is surrounded by American power and part of its territory is occupied by Israel, Washington’s junior ally in the region. In light of this, punishing Syria is not sound policy, for in the absence of peace in the Middle East, and given Washington’s unwillingness to question Israel’s own pursuit of WMD, Washington’s aggressive stance toward Damascus may be counterproductive as Washington’s one-sidedness undermines U.S. credibility in the Middle East and further inflames Arab anti-American sentiment. A more effective approach would be for Washington to facilitate the peaceful settlement of the Arab–Israeli conflict.

## U.S. SANCTIONS AGAINST SYRIA

On May 11, 2004, the Bush administration issued an executive order imposing a range of new economic sanctions against Syria.<sup>2</sup> The sanctions prohibit the export to Syria of most goods (excluding food and medicine); ban commercial air service between the United States and Syria by Syrian-owned aircraft; and freeze assets and property of individuals who, among other things, contribute to Syria's development of WMD. The sanctions also require U.S. financial institutions to sever relations with the state-owned Commercial Bank of Syria. According to the letter to Congress that accompanied the announcement, the U.S. imposed these sanctions in part because Syria's pursuit of WMD was "sufficiently grave to constitute a threat to the national security, foreign policy, and economy of the United States."<sup>3</sup>

### Does Syria have WMD?

The claim that Syria constitutes a threat to U.S. national security seems to be highly exaggerated. So is the claim that "Syria's development of biological, chemical and nuclear weapons has progressed to such a point that they pose a threat to the stability in the region."<sup>4</sup> The Central Intelligence Agency (CIA) and other agencies vigorously objected to this assessment, which Undersecretary of State for arms control John R. Bolton was apparently prepared to tell members of a House of Representatives International Relations subcommittee in June 2003.<sup>5</sup> Parenthetically, Bolton, a leading Bush administration hawk, set off a similar controversy in May 2002 when he asserted that Cuba had a biological warfare program. A State Department intelligence expert, Christian Westermann, later told a closed-door Senate Intelligence Committee hearing that available intelligence data did not support that assessment.<sup>6</sup> According to news reports, Bolton's planned remarks regarding the alleged Syrian threat caused a "revolt" among intelligence experts who thought Bolton inflated the progress Syria has made in its weapons programs. The CIA's objections and comments alone are said to have run to 40 pages, forcing Bolton to postpone his testimony until September of that year.<sup>7</sup>

The Monterey Institute of International Studies provides a more likely story regarding Syria's WMD program. According to that Institute's Center for Nonproliferation Studies, Syria has no nuclear weapons program, nor does Syria have the capability to produce biological weapons.<sup>8</sup> However, Syria does have the largest and most advanced chemical weapons capability in the Middle East. That capability is said to include chemical warheads for SCUD ballistic missiles and chemical gravity bombs for aircraft delivery.<sup>9</sup> Syria's chemical weapons stockpile is said to be in the hundreds of tons. Syria's stockpile is believed to include sarin, VX, and mustard gas, with major production facilities near Damascus and Homs.<sup>10</sup>

There is nothing to suggest in the historical record that Syria might actually use chemical weapons against its foes, Israel included. Unlike Saddam Hussein's Iraq, which used chemical weapons against Iraq's Kurdish

minority in March 1988 and against Iran at various times during the Iran–Iraq War, Syria never used chemical weapons, either against its internal opponents (the Muslim Brotherhood in 1982 in Hama) or externally (Israeli forces during their invasion of Lebanon in 1982). Nor is there any indication that Syria might willingly transfer chemical weapons to terrorists. In this regard, the record shows that Syria has kept a very tight rein over the militant groups it supports. This caution is a product of Syria’s acute awareness that it would ultimately pay the price for any major terrorist incident it was believed to be behind, especially against Israel.<sup>11</sup>

### **What Motivates Syria to Develop Chemical Weapons?**

Although Syria’s development of chemical weapons (CWs) is not in violation of any international law (Syria is not a signatory of the chemical weapons convention), the mere fact that Syrian officials deny the existence of a chemical weapons program in their country suggests that Syria is not motivated by status. Nor can one attribute Syria’s development of CW to aggrandizement. Other than Lebanon, where until early 2005 Syria maintained a force of 20,000 troops, Damascus has come to terms with its irredentist desire to recreate “Greater Syria.” In 1970, Syria recognized the Arab state system (the sovereignty of all Arab states). Syria also recognized Turkey’s annexation of Iskenderun (“Hatai” for Turks), Syria’s de facto northeastern province. Syria has even come to terms with the loss of Palestine. Syria’s acceptance of UN Security Council land-for-peace resolutions as a basis for peace with Israel and its acceptance of the principle of normalization of relations with the Jewish state testify to that.<sup>12</sup>

Syria’s development of chemical weapons is related to its threat perceptions. More specifically, Syria develops CW in order to deter Israel, Syria’s long-term enemy, from engaging in military actions against Syria. To be sure, Syria’s perception of Israel is, to say the least, not flattering to the Jewish state. From a Syrian perspective, Israel, a scion of imperialism, is an aggressive, expansionist, and settler-colonial state. Israel colonized Palestine, tossed out a segment of its local Palestinian inhabitants, and, at any one time, invaded each and every one of its neighbors, occupying parts of their territory in flagrant violation of international law.

That Israel is a nuclear power further increases Syria’s sense of vulnerability. Israel’s nuclear capability is, by most accounts, quite sophisticated. Most public estimates of Israel’s nuclear arsenal range between 100–200 weapons,<sup>13</sup> but one analyst, Harold Hough, concludes that “the Israeli nuclear arsenal contains as many as 400 deliverable nuclear and thermonuclear weapons.”<sup>14</sup> Furthermore, Israel has an active CW program, including the production of mustard and nerve agents, and a biological warfare capability.

In addition to the Israeli threat, Syria feels vulnerable in its US-dominated regional security environment. A quick glance at the map buttresses this argument. Syria shares 900 miles of border with Turkey, a powerful North Atlantic Treaty Organization (NATO) ally of the United States, and a state

with which Syria has traditionally had tense relations.<sup>15</sup> Although Syrian–Turkish relations have improved dramatically since the landmark trip to Turkey by Syrian President Bashar Assad in January 2004, the underlying issues that divide the two states have not been resolved.<sup>16</sup> Moreover, Turkey and Israel are strategic allies and, by the terms of their alliance, Turkish authorities allow the Israeli air force to train in Turkish airspace. To Syria’s east lies Iraq, with which Syria shares 360 miles of border and where the United States has deployed 140,000 troops since March 2003. Syria’s Iraqi challenge predates the United States’ occupation of that country. In addition to the personal animus between the late Hafez Assad and Iraq’s former leader Saddam Hussein, and in addition to the ideological competition that pitted the two rival factions of the Baath Party, Syria and Iraq have for a long time been caught up in a classic geopolitical rivalry. As a result, the two states tried to destabilize each other throughout the 1970s and 1980s and came close to armed conflict on more than one occasion. Moreover, Saddam Hussein’s willingness to use chemical weapons against Iraq’s Kurdish minority and against Iran heightened Syria’s sense of threat. To its south, Syria maintains an often uneasy relationship with Jordan. Although Syrian–Jordanian relations have recently improved, these have traditionally been on a roller coaster. Finally, to Syria’s west, there is the U.S. Sixth Fleet. In these circumstances, it is easy to understand why Syria feels the need to be strong. It is also easy to understand why Syria maintains a sizeable force in neighboring Lebanon.

### **Strategic Objectives**

Syria’s development of chemical weapons was directly related to its two interrelated strategic objectives: one is to deter Israel from attacking Syria and to contain Israel within its 1967 boundaries. Should Israel attack Syria, Damascus would be in a position to strike Israel’s centers of mobilization and inflict “unacceptable harm.”

Syria began developing CW in the late 1970s as part of Hafez Assad’s quest to reach strategic parity with Israel. Assad sought parity with Israel to strengthen his hand in future negotiations over the terms of peace between Israel and the Arabs. For Assad, strategic parity did not necessarily mean matching Israel tank-for-tank and plane-for-plane. To do so in terms of conventional military power was unthinkable as Syria had always been inferior to Israel. During the 1948 War, Syria could deploy no more than 2,000 poorly armed personnel along the old Palestine border. In June 1967, the Syrian army was decimated by Israel’s invading force. In 3 days of combat, Israel’s army seized the entire Golan Heights. It was not until 1973 War that Syria could claim some successes against Israel. However, when Egypt, Syria’s wartime ally, declared a cease-fire just a few days into the war (enabling in the process Israeli forces to concentrate on the Syrian front), the Syrian army nearly collapsed as Israel’s army broke through Syrian defenses, reaching the town of Sa’sa’ 25 miles from Damascus. Israel later withdrew from that portion of Syrian territory, but only as a result of the U.S.-brokered 1974

disengagement of forces agreement. In the process, however, the disparity of power between Israel and Syria brought the message home to Assad that, in the absence of a deterrent, Israeli forces could easily overrun Damascus. Even as Assad later tried to bolster the offensive and defensive capabilities of Syria's armed forces, the balance of power continued to be lopsided. In 1982 Israel invaded Lebanon and its army routed Syrian forces there. Although the retreat of Syrian ground forces was orderly, the Syrian air force did not fare as well: Syria lost 82 aircraft compared to the loss of one Israeli combat aircraft in 1 day of dogfights.<sup>17</sup>

Hafez Assad's decision to seek strategic parity with Israel was the stepchild of his earlier attempts to alter the balance of power—all of which failed. Assad believed that a balance of power could be reached if Arab states worked together to force Israel to the negotiating table. The first attempt was in 1973 when Syria and Egypt launched a surprise attack against Israel. That attempt failed because Egypt later engaged in separate talks with Israel that led to the Egyptian–Israeli peace treaty. The second attempt was in 1979 when Assad sought to build an Eastern Arab front in compensation for the loss of Egypt from the Arab power equation. That attempt also failed; the Arab states that made up the front (Iraq; Jordan; in addition to the PLO) were far too divided among themselves to pursue “joint-Arab action.”

Despite Assad's efforts to bring Syria's armed forces on par with Israel, Syria was not able to alter the balance of power. Syria had to abandon its quest for parity in April 1997 when, during a visit by Assad to Moscow, Soviet leader, Mikhail Gorbachev, indicated that the Soviet Union would no longer support Syria's quest for strategic parity with Israel. Gorbachev warned Assad that efforts to achieve parity could not succeed: Israel would strike preemptively long before Syria attained its goal and, with firm U.S. support, would come out ahead in any arms race.<sup>18</sup> Since the demise of Syria's Soviet patron, the asymmetry in conventional power between Syria and Israel steadily widened, as Syria has not been able to systematically upgrade its weapons systems. Additionally, Russia, the Soviet successor state, now demands payment before it will supply Syria's armed forces with the spare parts needed to keep Syria's ageing equipment running—money that Syria's stagnant economy is unable to generate.

In these circumstances, the strategic value of Syria's CW arsenal has, from a Syrian perspective, multiplied and CW continue to be the choice weapon with which to deter and contain Israel. In light of this, Washington's attempts to persuade Syria to follow Libya's example and renounce its WMD programs are unlikely to succeed.

### THE LIBYAN MODEL

Many in Washington and elsewhere seem to think that through continued U.S. pressure, Syria will emulate Libya and renounce its WMD programs. Libya, a pariah state for decades, drew praise from Washington and London when it announced in late 2003 that it would abandon its WMD programs



and allow unconditional inspections of its facilities. The move represented a shift for a nation long regarded as an outlaw. However, the circumstances surrounding Libya's retreat are different from those facing Syria. First, the burden of 30 years of multilateral economic sanctions against Libya has, according to Libyan estimates, deprived its economy of \$33 billion (the World Bank's assessment is a lower, but still daunting, sum of \$18 billion).<sup>19</sup> By contrast, the economic cost to Syria of U.S. sanctions is not heavy. In 2003, U.S. exports to Syria were around \$300 million (as compared to \$7 billion in exports to the EU). Given Syria's threat perception, the strategic benefit that Syria derives from its CW arsenal outweighs the economic cost of U.S. sanctions.

Second, Libya is not contiguous to Israel. It is not directly threatened by Israeli power; nor is any part of its territory occupied by Israel. By contrast, Damascus is 40 miles from Israel, which occupies Syrian territory. In emphasizing the difference between Syria and Libya, President Bashar Assad told the British *Daily Telegraph*: "We are a country which is [partly] occupied and . . . exposed to Israeli aggression."<sup>20</sup> Assad was referring to Israel's occupation of the Golan Heights and to an Israeli air strike on an alleged Palestinian training camp inside Syria in October 2003.<sup>21</sup> Finally, domestic opinion makes it difficult for Syria to give up its chemical weapons; doing so under U.S. pressure and in the absence of the Golan's return to Syrian sovereignty would undermine the legitimacy of the Syrian regime.

### SYRIA'S ALTERNATIVE PROPOSAL

Ironically, it was Syria that proposed a solution to the problem, and it was the United States that torpedoed that solution. Syrian Foreign Minister Farouk Shara' said his government was willing to sign a treaty making the entire Middle East free of WMD.<sup>22</sup> Syria's willingness was manifested in the draft resolution that Syria submitted to the UN Security Council calling for the implementation of two previous resolutions aimed at freeing the Middle East region of all weapons of mass destruction.<sup>23</sup> The Syrian proposal also urged Middle East states to sign international treaties barring the spread of nuclear, biological, and chemical weapons.<sup>24</sup> However, according to Syria's UN Ambassador, the United States' delegation lobbied its allies to oppose the draft resolution and threatened to veto it if the draft reached the stage of discussion at the Security Council.<sup>25</sup> Although the United States favors a Middle East free of WMD, Secretary of State Colin Powell linked any possible inspection of Israel's arsenal to peace with Syria and Lebanon.<sup>26</sup>

### CONCLUSION

This chapter demonstrated that, in the absence of a peaceful settlement of the Arab-Israeli conflict, the imposition of economic sanctions against Syria would not dissuade Syria from developing WMD or persuade it to reduce its existing WMD stockpiles. The strategic benefits that Syria derives from WMD outweigh the cost of sanctions. Beyond a simple cost-benefit analysis,

Washington's aggressive policy vis-à-vis Damascus may be counterproductive. By imposing economic sanctions, Washington is indirectly delaying the reforms it would like to see in Syria, as it unwittingly weakens the moderate, reformist elements within the Syrian administration and gives ammunition to the radical Old Guard elements of the regime.

Washington's "get tough" approach also bears negative implications for the United States beyond the Syrian angle, as it reduces U.S. credibility in the Middle East. Washington cannot hope to meet its objectives by pressing Syria (or any other Arab state for that matter) to renounce its chemical-warfare capability while it turns a blind eye to Israel's unchecked nuclear power. That double standard increases anti-American attitudes in the region. In both cases, the effects of that policy conflict with the postulated U.S. objectives of enhancing U.S. credibility and winning the hearts and minds of the Arab street.

To advance U.S. objectives, Washington must use its leverage with both sides to achieve a just and lasting settlement to the Arab-Israeli conflict. At this point in time, given the high level of tension in the Middle East, the mention of a peaceful settlement may seem to be a pipe dream. Yet, the ingredients for peace exist and the parameters of such a settlement are known. The solution to the Arab-Israeli conflict lies in the land-for-peace equation, embodied in UN Security Council Resolutions 242 and 338. That equation provides the foundation on which a peaceful settlement stands. Any deviation from its basic tenets by either side is a nonstarter. Israel is to withdraw its armed forces from Arab territories it seized by force during the 1967 war in return for Arab recognition of Israel. The controversy over Israel's obligation to withdraw from "all" or "some" territories is solved by the key UN principle of the "inadmissibility of the acquisition of territory by force," a principle emphasized in the preamble of Resolution 242.<sup>27</sup> If Washington seeks to enhance its credibility in the Middle East, Washington must make it clear to both sides that it is serious about the implementation of relevant UN Security Council Resolutions.

Ultimately, it is only through this approach that the United States can change Syrian behavior. Indeed, a just and lasting settlement of the Arab-Israeli conflict means that Syrian leaders can no longer justify the imposition of martial law in Syria, continue hosting radical Palestinian organizations, or seeking to deter Israel. Syria, then, would no longer have any use for WMD.

## NOTES

1. George W. Bush, State of the Union address, 2002, at [www.whitehouse.gov/news/releases/2002/01/20020129-11.html](http://www.whitehouse.gov/news/releases/2002/01/20020129-11.html)
2. The United States had already banned the export of military and dual-use items to Syria, because Syria is on the State Department's list of states that sponsor terrorism.
3. President Bush's message to Congress on Syria sanctions, May 11, 2004.
4. For the full text of Undersecretary Bolton's testimony, see [www.state.gov/t/us/rm/24135.htm](http://www.state.gov/t/us/rm/24135.htm)

5. Warren P. Strobel and Jonathan S. Landay, "CIA: Assessment of Syria's WMD Exaggerated," *Knight Ridder Newspapers*, July 15, 2003 <www.miamiherald.com>
6. Ibid.
7. Ibid.
8. For a complete breakdown of Syria's WMD capabilities and programs, see the Monterey Institute of International Studies' Center for Nonproliferation Studies web site <http://cns.miis.edu/research/wedme/syria.htm>
9. Ibid.
10. Ibid.
11. Syria has not been directly implicated in any terrorist activity since the 1986 "Hindawi affair" (the attempted bombing of an EL AL flight from London).
12. Syria made clear its terms for accepting the mid-July 1991 U.S. proposals for convening a Middle East peace conference: a peaceful settlement based on UN land-for-peace resolutions (UNSCR 242 and 338) in exchange for Israel's withdrawal to the 1967 lines. For a description of the evolution of Syria's acceptance of the land-for-peace resolutions, see Alasdair Drysdale and Raymond A. Hinnebusch, *Syria and the Middle East Peace Process* (New York: Council on Foreign Relations Press, 1991), pp. 200–203. With regard to the normalization of relations with Israel, according to the Clinton team's (leaked) draft peace agreement outlining the areas of agreement between Syria and Israel, Syria accepted Israel's three requirements for peace during the Syria–Israel peace talks at Shepherdstown, West Virginia, in January 2000. These requirements included the normalization of bilateral relations (including the establishment of an Israeli Embassy in Damascus and the free flow of people, goods, and services across the Syria–Israel border); a mutual security regime (including Israel's retention of its early warning station on Mount Hermon); and a water-sharing agreement over the waters of Lake Tiberias. For further reading, see *Haaretz*, January 13, 2000, p. B3, and *Al-Safir*, January 16, 2000.
13. See Amy Dockser Marcus, "Growing Dangers: US Drive to Curb Domsday Weapons In Mideast Is Faltering," *The Wall Street Journal*, September 6, 1996, p. A1.
14. Harold Hough, "Could Israel's Nuclear Assets Survive A First Strike?" *Jane's Intelligence Review*, September 1997, p. 410.
15. Tensions in the Syrian–Turkish relationship can be traced back to the turn of the twentieth century when Arab nationalists, resentful of Ottoman rule, aligned themselves with Britain. Subsequently, Turkey, the successor state to the Ottoman Empire, has come to view the actions of the Arab National Movement, in which Syrians played a leading role, as a stab in the back. For further reading on Syrian–Turkish relations, see Muhammad Muslih, "Syria and Turkey: Uneasy Relations," in *Reluctant Neighbor: Turkey's Role in the Middle East*, Henry J. Barkey (ed.) (Washington, DC: U.S. Institute of Peace, 1996), pp. 113–129.
16. One of the major issues dividing Syria and Turkey is the question of riparian rights over the Euphrates River. For further reading, see Murhaf Jouejati, "Water Politics As High Politics: The Case of Turkey and Syria," in *Reluctant Neighbor: Turkey's Role in the Middle East*, Henry J. Barkey (ed.) (Washington, DC: United States Institute of Peace, 1996), pp. 131–146.
17. According to Anthony Cordesman, it was following this incident that Syria decided that surface-to-surface missiles could counter Israel's air superiority. See Anthony H. Cordesman, *Weapons of Mass Destruction in the Middle East* (New York: Brassey's, 1991), p. 144.

18. Alasdair Drysdale and Raymond A. Hinnebusch, *Syria and the Middle East Peace Process* (New York: Council on Foreign Relations Press, 1991), p. 165.
19. Ray Takeyh, panelist at a Middle East Institute Conference: "US-Libyan Relations: A Way Forward," April 12, 2002.
20. Andrew Clennell, "Assad: Syria Will Only Abandon WMD Stockpile if Israel Does" <[www.commondreams.org/headlines04/0106-04.htm](http://www.commondreams.org/headlines04/0106-04.htm)>
21. Andrew Clennell, "Assad: Syria Will Only Abandon WMD Stockpile if Israel Does" <[www.commondreams.org/headlines04/0106-04.htm](http://www.commondreams.org/headlines04/0106-04.htm)>
22. HCJB World Radio, April 16, 2003 <[www.hcjb.org/displayarticle/346-mode=thread.html](http://www.hcjb.org/displayarticle/346-mode=thread.html)>
23. See "Official Documents of the Nuclear Non-Proliferation Treaty Review Conference" of 1995 and 2000; see also UNSCR 487, 1981, and UNSCR 687, 1991.
24. Nicholas Blanford, "Syria Pushes WMD-free Mideast," *The Christian Science Monitor*, December 29, 2003.
25. Author's telephone interview with Ambassador Feisal Mekdad, Syria's Permanent UN representative in New York, June 22, 2004.
26. HCJB World Radio.
27. For a complete reading of UNSCR 242, see <<http://daccessdds.un.org/doc/RESOLUTION/GEN/NR0/240/94/IMG/NR024094.pdf?>>

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## SYRIAN WEAPONS OF MASS DESTRUCTION

*Ahmed S. Hashim \**

### INTRODUCTION

Syria has been described as one of the leading proliferators of chemical and biological weapons (CBW) in the Middle East. Syria is the last Arab power that confronts Israel militarily. Syria owes its emergence as a military power to President Hafez al-Asad who ruled the country from 1970 to 2000.<sup>1</sup> Syria's weapons of mass destruction (WMD) capabilities are aimed specifically at its neighbor and primary enemy, Israel, the most powerful nation in the Middle East and with whom no bilateral peace has been achieved. Its CBW arsenal has come under close scrutiny in recent months for political reasons. Both the United States and Israel have begun to focus on Syria's possession of weapons of mass destruction as a destabilizing factor in the region even though Damascus has neither threatened any of its neighbors, including Israel, with its WMD capabilities nor has it made any startling breakthroughs or major acquisitions in nonconventional weaponry. The Israeli Prime Minister urged the United States to exert "very heavy diplomatic and economic pressure" on Syria shortly after the United States had toppled Saddam Hussein.<sup>2</sup> In the wake of the stunning success of the United States in the war against Iraq in 2003, Israeli Defense Minister Shaul Mofaz reportedly stated that "we have a long list of issues we are thinking of demanding of the Syrians, and it would best be done through the Americans."<sup>3</sup> Remarkably, even the British government, which has supported a Middle East free of WMD, seems to have jumped on the U.S.-Israel bandwagon. In early 2004, an unnamed senior British official stated that "Israel is in a unique position as the only state whose existence is threatened."<sup>4</sup> This was followed by an equally remarkable statement by a senior Western diplomat who said "They [the Syrians] have to make a decision about whether the chemical weapons will make much of a difference against the Israelis, or whether they would not be in a better position by saying 'we are giving it up and now we want a Middle East free of weapons of mass destruction.'"<sup>5</sup>

From the perspective of many Arab observers not only are the Arabs being told that they cannot have certain categories of weapons but that also the Anglo-American powers, in concert with Israel, have decided on behalf of those Arab countries that they no longer face any national security threat, or that even if they do still feel threatened that such weapons will not help them, and that they must put their faith in the norms of nonproliferation.<sup>6</sup> Not surprisingly, Syrian leader Bashar al-Asad responded that “unless this applies to all countries, we are wasting our time.”<sup>7</sup>

Clearly, for the Syrian leadership the Libyan model of “coming clean” on its entire WMD program, which was hailed by the West as a good example of voluntary Arab disarmament, is not an applicable model. The attempts of ostensibly disinterested strategic observers such as Avner Cohen and George Perkovich to instill in the Arabs the virtues of the devaluation of Arab WMD capabilities are seen as one-sided.

The renewed focus on Syria’s WMD capabilities requires an updated analysis of its origin’s motivations and future. This chapter is a study of the Syrian WMD arsenal. First, it provides a conceptual framework for an understanding of the nature of military power in the Middle East. Second, the chapter addresses the evolution of the WMD arsenal over the years. We have very little accurate information in the open sources concerning the Syrian WMD programs but an attempt will be made to provide a chronological analysis. Third, it examines the strategic rationale and context for the Syrian WMD program.

## SYRIA’S CBW CAPABILITIES

### Development of Chemical Weapons Capabilities

It is difficult to know with any degree of certainty when Syria first acquired chemical weapons (CW). Some reports claim that Egypt provided Syria with CW from its own stocks in the early 1970s. Strategic analysts Seth Carus and Anthony Cordesman, as well as *Jane’s Sentinel Security Assessment-Eastern Mediterranean*, note that Syria may have first acquired chemical munitions in 1972, on the eve of the October War of 1973.<sup>8</sup> All the sources refer to the acquisition of limited quantities of mustard gas by Damascus in that time frame. During that war both Egyptian and Syrian troops were allegedly equipped with defensive and offensive CW gear and their armored vehicles were designed to operate in a chemically contaminated environment. Such preparations for CW operations raise an interesting question: Why did these two countries forgo the use of CW during the October War of 1973, particularly in the latter stages of the war when both were losing on the battlefield?

First, in the initial stages of the war when they were winning, Egypt and Syria probably felt that they had no reason to use CW. Possession but nonuse of such weapons acted as a brake on Israel’s ability to mount extraordinary retaliatory strikes. In short, CW were to be held in reserve.

Second, in the latter stages of the war when Egypt and Syria were suffering significant battlefield reverses, the answer could be that the Israelis were not doing as well as they claimed. Neither Egypt nor Syria may have felt a dire threat to their most critical centers of gravity that would have necessitated their use of CW. It is also possible that Egypt and Syria hoped that they could rely on their superpower patron, the Soviet Union, to use its diplomatic and military muscle in the international arena to get the United States to restrain Israel if the danger of an overwhelming defeat akin to the Six-Day War of 1967 existed.

Other sources have claimed that Syria began efforts to acquire CW in earnest after its defeat in the Lebanon War of 1982. Syria first concentrated on the build up of a surface-to-surface missile force. After acquiring Scud-Bs from the Soviet Union, Syria began to consider the problem of how to equip its ballistic missiles with chemical munitions. By 1983 Syria had begun to manufacture nonpersistent nerve agents and commenced extensive training of its troops to operate in chemically contaminated combat environments. In the mid-1980s a flurry of reports surfaced about the nature of Syria's secretive CW arsenal. In 1985, Syria was reputed to have the most advanced chemical-warfare capability in the Arab world with the possible exception of Egypt's. It was generally accepted that Syria had CW warheads on its ballistic missiles as early as in 1986. In 1988, noted American CBW expert Matthew Meselson declared that while Iraq had a greater stockpile of CW Syria's was more advanced. This analysis was generally taken to mean that Syria had chemical warheads on its ballistic missiles as early as 1986.<sup>9</sup>

By the late 1980s, Syria was reported to have at least two facilities producing CW, one near Damascus and the other near Homs. These facilities reportedly produced blister and nerve agents.<sup>10</sup> Israel believes that most of Syria's chemical arsenal is composed of the nerve agent sarin. The Syrian CW effort has relied extensively on outside help. In 1992 Syria acquired several tons of trimethyl phosphate—a nerve-gas precursor—from an Indian company, United Phosphorus, which processed the shipment because it had no evidence that the chemical would be misused. William Webster, a former director of the Central Intelligence Agency, stated in prepared testimony that "Western European firms were instrumental in supplying the required precursor chemicals and equipment. Without the provision of these key chemicals, Damascus would not have been able to produce chemical weapons."<sup>11</sup>

Ironically, the Soviet Union—Syria's most important supplier of conventional weapons and onetime supplier of early model Scud ballistic missiles during the Cold War—may never have supplied Syria with an offensive CW capability. In fact, the Soviet Union may have tried to restrain Syrian efforts in that direction, as it clearly recognized the dangers of chemical warfare in the context of the Arab-Israeli conflict. In March 1988, Colonel General V.K. Pikalov, the head of Soviet chemical warfare forces, went to Syria to warn Damascus that the Soviet Union would not support Syrian use of CW in combat against Israel. This was in stark contrast to Soviet indifference to extensive Iraqi use of CW against Iran during the Iran-Iraq War of 1980-1988.



The changes meant that the Soviet Union would no longer support an offensive Arab military option against Israel and would thus no longer provide Syria with more weapons than were necessary for defensive purposes.

The Soviet warning came too late. By the early 1990s the consensus was that the Syrians had respectable CW production and operational capabilities. Syrian companies had by then developed a clandestine procurement network. The main Syrian organization involved in the procurement of dual-use technologies for CW and ballistic missiles is the Center for Scientific Studies and Research, known by its French acronym, CERS. While it is officially a civilian research center with ties to other scientific research centers around the world, it is heavily involved in weapons research. Syrian CW efforts are also said to rely on a large network of state-run pharmaceutical firms.<sup>12</sup> But Syrian efforts to continue developing chemical weapons capability was reflected in their attempt in 1993 to get several hundred pounds of chemical precursors out of Russia with the aid of a retired Russian army general, Anatoly Kuntsevich, who, ironically was Russian President Boris Yeltsin's top chemical weapons disarmament official.<sup>13</sup>

### **Syrian Development of Biological Weapons**

Our knowledge of the extent of the Syrian Biological Weapons program is very limited. Syria did sign the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological and Toxin Weapons in April 1972, but it has refused to ratify the BWC. Biological agents consist of living infectious organisms such as bacteria, fungi, Rickettsiae, and viruses that reproduce within the host to cause an incapacitating or fatal illness; and nonliving toxins such as botulin, ricin, and trichothene mycotoxins that do not reproduce within the host. Very little is known about Syria's Biological Weapons program. Indeed, as one source put it: "the bulk of open source references to Syrian BW activity is unclassified statements by U.S. or Israeli government officials, most claiming that there are reasons to believe that an offensive BW program exists in Syria."<sup>14</sup> No details are provided to back up assertions that have been made about Syrian BW. As for the Syrians, apart from a long and rambling paper on general BW themes by a former defense minister, Mustafa Tlas, where he says that such weapons have been used in the past against those who cannot retaliate, the Syrians have not said much about such weapons.<sup>15</sup> Syria does clearly have a national capability in the pharmaceutical and biotechnological fields to develop offensive BW. Whether it has made a decision to do so, and how it would weaponize and use a BW arsenal, is not clear.

### **Syrian Non-Development of Nuclear Weapons**

Syria has never had any serious or focused aspirations to be a nuclear weapons state. There is some debate on whether the notorious black-market nuclear

network operated by the Pakistani nuclear scientist Abdul Qadir Khan helped Syria.<sup>16</sup>

Syria has routinely castigated the United States and Israel's efforts to deny the Arab world in general the benefits of nuclear research. In 1987 the government party paper *Al Ba'ath* had the following to say about the perceived frenzied efforts on the part of the U.S. and Israel to prevent Arab mastery of the nuclear arena:

The cooperation between U.S. intelligence quarters and Mossad via the setting up of special units to monitor research in the atomic field by Arab students in Western universities is perhaps the best proof of the enemy's great fear of the Arabs shifting from the agricultural mentality to the multifaceted scientific mentality which could usher in their possession of the secrets of the future, in which case the Zionists will be divested of their power.<sup>17</sup>

The claim often made by Arab leaders and thinkers that both the United States and Israel sought to deny the Arabs the fruits of scientific and technology progress by putting obstacles in the way of their acquisition of nuclear power was repeated in detail by the Syrian government's official paper, *Al Thawrah* in 1995:

With its monopoly on nuclear weapons and its refusal to sign the Nuclear Non-Proliferation Treaty (NPT), Israel and those who stand behind it are trying to prevent the Arabs from acquiring nuclear technology for civil, scientific and medical purposes.<sup>18</sup>

But Syria itself has not been on a focused quest for either a large nuclear energy program or even a nuclear weapons program hidden within an allegedly peaceful nuclear power program. This is quite surprising in light of the fact that it faces a serious threat from Israel. A realist theory of nuclear proliferation would argue since Syria faces acute insecurity vis-à-vis its powerful neighbor it would seek to redress that imbalance. There is no evidence that Syria has developed a cohesive politico-military and scientific community or constituency in favor of the development of nuclear weapons.<sup>19</sup> Several years ago in an extensive interview with the Kuwaiti newspaper *Al Qabas*, Hafez al-Asad indicated that notwithstanding Israeli possession of nuclear weapons, it would not be easy for that country to use such weapons because the international community would not stand idly by. Moreover, he argued, a nuclear-armed power can be challenged and defeated by a nonnuclear armed power. It is interesting that Asad, a man who recognized the importance of power as a currency in international affairs, became a believer in the moral force of the international community that "could not remain idle if the atomic bomb were used, not for our sake but for their sake and for the sake of human life."<sup>20</sup> Over the years, however, Syria has continued to insist that the international community should persuade Israel to adhere to the Non-Proliferation Treaty.

## STRATEGIC RATIONALE OF AND CONTEXT FOR THE CBW PROGRAM

Why has Syria acquired extensive CBW capabilities? In the case of Syria, we can state from the outset that prestige is not a motivating factor. Prestige is an important currency of international interaction, but it has generally been neglected in the theoretical study of international relations. Moreover, the issue of prestige has almost invariably been misunderstood by those in the nonproliferation community, who use it as an all-embracing explanation for the acquisition of nuclear, biological, and chemical (NBC) weapons by regional powers. The other explanation for the acquisition of such weapons is, of course, the security dilemma. However, if we want to be accurate, prestige does not come primarily from the possession of untried military power, it comes primarily from the successful use of that military power. If a country does not brag about or tout a particular weapon in its arsenal, its decision-makers are clearly not concerned by prestige as a major factor. As a former Syrian diplomat put it

prestige can be discounted as a prime motivation because the Syrian CW program is veiled in secrecy (i.e. prestige requires transparency or “showing off” of a capability). Instead, national security requirements appear paramount in this area.<sup>21</sup>

There is one certainty applicable to Syria’s CBW program: the country’s acquisition and deployment of CBW is due to the political vision, iron determination, and political and military experiences of Hafez al-Asad.<sup>22</sup> While he did not become president until 1971, the starting point for understanding Syrian national security is 1970 when Asad overthrew the discredited left-wing government of Salah Jadid. Until then it was hardly possible to discern a coherent national security concept for the Syrian state. The period between independence in 1946 and the “corrective revolution” in 1970 was characterized by rampant domestic instability, endless coups d’etat, and interference by outside powers in Syrian domestic affairs. Syria was not a player but a plaything on the regional and international arenas. Asad changed this.

### **Al-Asad and the Impact of the Six-Day War**

In order to fully understand Asad’s views on the nature of power and the role of military power in particular, one must begin with the traumatic Arab defeat in the Six-Day War of 1967. As defense minister, Asad knew how ill prepared for deterring or fighting a war the Syrian army was in 1967. As noted Syria expert Patrick Seale put it: “it was a poorly-trained, under-officered force some 50,000 strong which had been equipped on the cheap by the Soviet Union with weapons being phased out of the Red Army.”<sup>23</sup> Yet Asad played a central role in the miscalculations that led up to the war. However, the shock of defeat “woke him up as nothing else could and transformed the parochial putschist into a student of strategy and international politics.”<sup>24</sup>

Not surprisingly, during the extraordinary and acrimonious Tenth National Congress of the Baath Party in November 1970, which ended with Asad's total seizure of power, the future Syrian leader stated "territory cannot be liberated without capable and efficient armies which are equipped with all kinds of weapons."<sup>25</sup>

Moreover, more than any other Syrian ruler before him, Asad was aware of the fact that of the three major Arab military powers—Egypt, Iraq, and Syria—his country had traditionally been the weakest. Unlike Iraq, which had been marginal to the regional balance until the 1970s, Syria had always been central to the Arab–Israeli military balance because of its geographical position as a direct confrontation state. This factor also highlights Syria's serious strategic weaknesses with respect to its Israeli adversary. Egypt and Iraq had intrinsic strengths that Syria could not match. Egypt's strengths were its demographic weight, its strong state, and its large army that was the best equipped and best trained in the Arab world. In the case of Iraq, its strengths derived largely from oil power and the resulting financial wealth, its relatively large (but fractious population), and its relative distance from the front lines of the Arab–Israeli battlefield. Moreover, both Egypt and Iraq were the only two Arab powers that had some success in creating large—if inefficient and dependent—arms industries.

Syria's one intrinsic strength that gave it a centrality in the inter-Arab subsystem was that it was the cradle of Arab nationalism as an ideological force. But Asad realized that ideological forces without military underpinnings do not constitute a fungible currency in international relations. This was a situation that Asad sought to change by building Syrian military power in the aftermath of defeat in 1967. But Asad like many Arab rulers in the aftermath of 1967 had been transformed into a realist. While most Arabs were in no mood to accept the defeat of 1967, they were ready to jettison grandiose dreams of eliminating Israel. The Arabs simply did not have the capability for such a task and in any case would be prevented from carrying it out. Both Egyptian leader Gamal Abd al-Nasser and Asad came to that conclusion in the late 1960s. Views toward Israel did not become any less benign: it was perceived as an expansionist entity bent on establishing a greater Israel. Its conquest of Arab lands in 1967 was merely proof. The immediate operational concern was to reverse this disgrace and regain occupied lands.

## THE ORIGINS AND EVOLUTION OF STRATEGIC PARITY AS CONCEPT

### **The Role of Arab Solidarity in the Balance of Power**

In the lead-up to the fourth Arab–Israeli War (October War, 1973) both Asad and Egyptian leader Anwar al-Sadat recognized the limitations of their respective countries and of their armies. Rebuilding conventional power to face the Israelis, shake the regional and international status quo with regard to the Arab–Israeli conflict, and wipe out the disgrace of 1967 were perceived

as the primary tasks. Nonconventional capabilities were not central to the quest to regain territory, honor, and to force the world to sit up and take notice of the petrified conflict. In this context, Syria managed to create an effective conventional capability that gave a good account of itself during the October War of 1973. Syria at that time however, was minimally equipped with WMD. Any offensive chemical weapons capability in its arsenal was negligible. Nor did Syria have a ballistic missile capability with which to deter or retaliate against Israeli Air Force attacks that were directed at Damascus during the height of the war.

Ironically, Israel was perceived as a greater threat in the aftermath of the 1973 war by both Egypt and Syria. First, it had overcome the shock of initial defeat by turning the tide on both Egypt and Syria in the latter stages of the war. Second, after 1973 its armed forces were liberally equipped by modern U.S. weapons. Third, its arms industries began to take off dramatically. And last, but not the least, its covert nuclear capability took on a greater degree of salience in the Arab–Israeli strategic balance.

Each major Arab country dealt with this reality in its own way. For Asad acquisition of a WMD capability was to play a central role in his post-October War strategy vis-à-vis Israel. In the lead up to the war of 1973 Syria had based its strategy of military action on coordination with other Arab parties. Indeed, the October War was conducted by a trilateral alliance of Egypt, Syria, and Saudi Arabia. While the first two had provided the soldiers and the equipment, Saudi Arabia provided the financial wherewithal.

In the aftermath of the October War, Egypt proved to be a fickle ally from Asad's perspective. At the Arab summit in Rabat in 1974 Asad first uttered his conception of "strategic parity," which was to be based on the continuation of a solid Cairo–Damascus axis. In 1975 Asad was profoundly disturbed by Sadat's signing of a quasi-permanent ceasefire with Israel in the Sinai that left Syria isolated in its confrontation with its neighbor. Egypt, traditionally the single most important Arab military power facing Israel, removed itself as a front-line state when it signed the 1979 Camp David peace accords. This was a major coup for Israel, whose southern front became demilitarized.

Asad looked around for and sought an Arab front—minus Egypt—that could be headed by Syria. The prospects were not good. As for Jordan, it has never had a serious impact on the Arab–Israeli military balance. Although Jordan has traditionally had well-trained and well-motivated military forces, it has never had the technological / demographic infrastructure or an arms relationship with a major arms supplier to emerge as a serious military contender in the region. Moreover, over the past two decades Jordan has not had the financial wherewithal to keep up with its more powerful neighbors.

Iraq was traditionally a marginal player in the Arab–Israeli confrontations. While it always managed to send forces to the front to fight Israel, it was never a strategic player on the scene until Saddam Hussein endeavored to alter this fact by engaging in a massive conventional and nonconventional arms buildup from the mid-1970s to the early 1980s. This was designed primarily to ensure that Iraq took a leading political and strategic role in the

Arab–Israeli conflict by taking Egypt’s place. In 1979 there was hope that a Syrian–Iraqi rapprochement would go some way to restoring the balance between the Arabs and Israel via the creation of an “eastern front.” Saddam wanted to be the leading partner in this alliance but Asad was not about to countenance the subordination of Syria to Iraq’s boundless ambitions.<sup>26</sup> Unfortunately for Saddam, the outbreak of war with Islamic Iran detracted attention away from the Arab West and the Arab–Israeli conflict for eight long years. The lack of Arab solidarity in the battle with Israel led Asad to lament that fact quite forcefully in an interview with the Kuwaiti paper *Al Ra’i al-‘Amm* in December 1981: “The eastern front is Syria. This is a fact. We had hopes in Iraq . . . we tried to expand matters to establish what we can call the eastern front in which we and Iraq would be one state.”<sup>27</sup>

### **The Impact of the Lebanon War of 1982 on Strategic Parity**

The Lebanon War of 1982, which was initiated by Israel against Syrian and Palestinian forces, was one of the defining strategic events for the Syrian leadership. Syria put on a respectable showing in the ground fighting against the Israel Defense Force.<sup>28</sup> But the air war resulted in massive and embarrassing losses that highlighted Syrian backwardness in the arena of high-tech conventional warfare.<sup>29</sup>

Under Asad, Syria tried to move strategic parity from the realm of concept to implementation, that is to say, the attainment of a military, economic, and technological balance vis-à-vis Israel. It is best to let its chief architect, Asad, and then other Syrian official sources expound upon it in some detail. In 1981 Asad told the Arab media that

The current situation in the area and that between us and Israel make it impossible to achieve a just peace. Peace cannot be attained in the absence of a comprehensive strategic balance between the two combatant sides, us and the enemy, nor can it be attained between the strong and the weak. A peace concluded between the strong and the weak is bound to dictate a state of capitulation, not a state of peace.<sup>30</sup>

In 1981, Asad mentioned an aspect of strategic parity that is rarely mentioned. Syria, he argued, did not seek a balance with Israel merely in order to go to war. Only through a military balance of power can countries enter peace negotiations. And only through a balance of power can the peace be maintained. He argued quite correctly and logically that in a situation where one of two cobelligerents enters into negotiations with a stronger side, the result is capitulation. Moreover, he asks, why is it that Israel and its ally, the United States, always argue that Israel can enter peace negotiations with the Arabs only if it is strong? This speech—made in front of Syrian Special Forces units in Latakia—is worth quoting at length because it resonated in the Arab world and continues to resonate in both Syria and the rest

of the Arab world, which is facing enormous pressures to disarm.

It is inconceivable to have peace in the presence of a disequilibrium. Comrades, peace cannot be established between weak and strong persons. We should all understand that if military balance is needed to liberate land and repel aggression, it is equally necessary for the achievement of a just peace. Without a balance, there can be no peace . . . A few days ago, the U.S. Administration made several statements insulting our intelligence and belittling us by asserting that a strong Israel is necessary for peace. Comrades, Arab citizens: Does this not mean that the weakness of the Arabs is necessary for peace as understood by the United States? Why did they not say once that Arab strength is necessary for peace? Why did they not say once that military balance between the Arabs and Israel is necessary for peace. They say only that Israel's strength is necessary for the achievement of peace.<sup>31</sup>

The mid-to late 1980s constituted the apogee of Syria's military power vis-à-vis Israel.<sup>32</sup> In 1986, Abdel al-Halim Khaddam, then vice president, confidently stated that "let us affirm that an attack on Syria will no longer be a picnic. Syria will repel that attack with its resources. We realize that Israel's policy—and this is part of their strategy—is based on aggression and expansion."<sup>33</sup>

The official Syrian paper *Al-Thawrah* argued quite vehemently that only with the attainment of strategic parity could Syria (and the Arabs) gain their rights; only the strong are respected in the international arena.

Strategic parity is the one option to attain just and comprehensive peace in the area, the one guarantee to deter Israeli aggression and confront the threat it poses to the entire Arab region . . . the world now reckons only with the strong, the weak cannot impose just and comprehensive peace, as they lack the muscle to force an acceptance of right and justice upon the enemy. The strong . . . can make peace and realize their military and political goals. Syria is making every effort toward strategic parity with the Zionist enemy, as it knows only too well that such a balance is the only guarantee for liberating the occupied Arab lands and restoring usurped Palestinian rights. This is the sound approach to protect and buttress the Arab existence against hostile expansionist Israeli ambitions.<sup>34</sup>

In summary, it could be argued that in the short to medium term, the acquisition of WMD capabilities provided Syria with a modicum of parity that was meaningful in an operational context against Israel. Even though there were major transformations going on in the Soviet Union and the Eastern Bloc in the late 1980s, it did seem for a while that the Soviet-Syrian arms relationship would continue despite a greater Soviet emphasis on the need for diplomatic solutions to the Arab-Israeli conflict and criticism of the regional arms race by the Soviet foreign minister, Eduard Shevardnadze.<sup>35</sup> There was, however, a distinct lack of coordination and Arab solidarity in the political, strategic, and economic fields to confront the enemy. In the long-term, strategic parity depended on a profound scientific, technological, and economic transformation within Syria.

## THE DETERIORATION OF SYRIA'S STRATEGIC POSITION IN THE 1990S

Asad's grim determination and Khaddam's optimism were misplaced on almost all fronts. Syria's strategic position and conventional military capabilities eroded rapidly in the 1990s. Its poor economic situation in that decade meant that it could not afford to engage in a massive conventional modernization. The putative and elusive Arab front receded further as a result of a major regional and international crisis in 1990–1991.

### Impact of the Kuwait Crisis 1990–1991 & Collapse of the Soviet Union

With the end of the Iran–Iraq War it looked like Iraq was about to enter the arena of the Arab–Israeli conflict in a big way. It had ostensibly defeated Iran and its military power had surpassed that of Syria.

Once again, however, Iraq was distracted by Saddam's megalomaniacal ambitions, this time directed against Kuwait. Of course, with the end of the Gulf War in 1991 Iraq's military power was destroyed and the country subjected to stringent sanctions. Despite the historically nasty relations between Damascus and Baghdad and Asad's bitter denunciation of Saddam's adventure in Kuwait, the Syrian leadership saw the destruction of Iraqi military power by the U.S.-led coalition of 1991 benefiting Israel. One anonymous Syrian political source close to the government put it in the following manner in the summer of 1991: "Saddam Hussein is to blame for the Gulf war. But Iraq's defeat is a defeat to the whole Arab order. Victory in the region went to America, and consequently to Israel . . . the balance of power has changed. The Soviet Union is no longer helping us."<sup>36</sup>

The military lessons of Operation Desert Storm in 1991 had a tremendous impact on Syrian views of the future of conventional warfare. A Syrian officer, Karim Daghir, offered a Syrian assessment of what was coming to be referred to as the Revolution in Military Affairs in the early 1990s.

A major advance in the technology of weaponry occurred in recent years which led to a major advance in all varieties of weaponry and guided anti-tank rocketry projectiles which were made specifically for the battle against tanks . . . The technological advance in the realm of weaponry rapidly changes the nature of battle and the character of combat.<sup>37</sup>

The slow but steady decline of the Soviet Union ended with collapse in 1991. Although bilateral relations between Syria and Mikhail Gorbachev's Soviet Union had cooled, the actual disappearance of the superpower ally was yet another catastrophe for Syria.

In an interview with *Time* in 1992 Hafez al-Asad felt obliged to give a forthright answer to the question about Syrian possession of ballistic missiles: "what is the purpose of keeping these kinds of strategic weapons?"



He responded by asking why the same kind of question is almost never posed of Israeli leaders:

What is strange about this? We had these missiles 20 years ago . . . We are a country in a state of war, and we need the means to defend ourselves. Israel is a pioneer in the field of armament. It has many times more weapons than Syria. Israel has chemical, biological, and nuclear weapons. We are in a state of war with Israel, so why should we not have missiles? These missiles are not new, but Israel acquires new weapons every day. The question about weapons should be directed to Israel. Why does it obtain all these weapons . . . ? Why does it have the atomic bomb?<sup>38</sup>

Not only are Israel and Syria two heavily armed neighbors; their mutual relationship over the past decade has been filled with tension and missed opportunities for resolving their differences. The verbal war of words between two neighboring countries armed with extensive arsenals of nonconventional weapons could have led to serious miscalculations. Of course, one could argue that both sides were trying to establish the parameters of a deterrence relationship. Syria and Israel failed to sign a peace treaty between 1992 and 1996 when the latter was under the stewardship of Prime Ministers Yitzhak Rabin and Shimon Peres.

The fragmentation of Arab solidarity and collective action in the 1990s, which was a result of Iraq's aggression against Kuwait in 1990, remained a focus of lament on the part of the Syrian leadership. The issue of military power and WMD capabilities played a key role in the Syrian perception of the kind of peace Israel wanted. Indeed, Walid al-Muallem, onetime Syrian ambassador to the United States, put it well when he stated that the Israeli conception of peace depended on the following formula: that in order to return the Golan, Syria must be disarmed. Syria, clearly, was not going to grant Israel its wish for the simple reason that the Syrians believed that the Israelis wanted domination. They had been unsuccessful at getting it through war; now they wanted that domination enshrined by means of the peace process. This was cogently put by Abdel Halim Khaddam, the Syrian vice president: "they want a peace based on security, that is, Israeli military power should dominate the region, which is out of the question."<sup>39</sup>

The defeat of Peres and the Labor Party in the Israeli elections of 1996 and the rise of the more hard-line Likud Party under Benjamin Netanyahu led to the virtual collapse of Israeli-Syrian peace negotiations and a reversion to heightened mutual animosity between Arabs and Israelis in general and between Damascus and Jerusalem specifically. The traditional war of words between the two sides erupted once again.

In the summer of 1996 the Syrian chief of staff, General Hikmat Shehabi, warned that if the Netanyahu government did not implement the Oslo agreements with the Palestinians, there would be no way to avoid war between Israel and Syria. As he put it "the Syrian military is now operating in a state of supreme readiness. It will be ready to conduct war after war on the

Palestinian issue.”<sup>40</sup> In late 1996 it was the turn of a senior Israeli defense official, Defense Minister Yitzhak Mordechai, to threaten Syria whom he accused of developing lethal nerve gas with Russian help. Mordechai began by saying

We are not threatening anyone, and certainly not the Syrians. But if someone dares carry out a threat against us, a missile threat, and certainly a threat of chemical weapons, they need to know that we have all the forces and capabilities to reply with a devastating war. If someone dares to use (chemical) weapons of this kind against us, it is clear that we will respond with all means at our disposal and we will inflict a hard blow on Syria, whose regime would probably be at risk.<sup>41</sup>

Both sides have had a tendency to succumb to hyperbole and dire verbal utterances that were never meant as indications of active hostile intent. This happened in 1986 when statements and counterstatements uttered by officials of both countries led to fears that the neighbors were sliding toward open warfare. In 1997, after yet another of the innumerable Syrian-Israeli verbal confrontations over the explosive situation in southern Lebanon, Abdel Halim Khaddam, the Syrian vice president, stated that while Syria was determined to restore the moribund peace process “. . . the Israeli side, it has—as we have seen—been escalating the media campaign here and there. However, I believe that resorting to detonating the military situation is liable to result in great dangers for all. A military detonation is not a comfortable vacation for anyone.”<sup>42</sup> Indeed, given the deterioration in the political situation many observers believed that the prospects for war between Israel on the one hand and Palestinian forces and Syria on the other were quite high in 1999.<sup>43</sup>

However, much of the tough talk from Syria in the later 1990s must be seen as designed for Arab and domestic consumption as its conventional military posture vis-à-vis Israel was quite weak, particularly in the air. At the end of the 1990s Syria sought to reestablish its conventional arms relationship with Russia when it tried to acquire \$2 billion of modern aircraft and tanks.<sup>44</sup>

The Arab world in general was well aware of the enormous technological advantages that Israel had over any one or combination of Arab countries. Moreover, they were also well aware of the tremendous strides that Israel—sometimes with U.S. help and sometimes relying on its own innovative and resourceful indigenous capabilities—was making in military research and the Science and Technology field.<sup>45</sup>

The worsening of the bilateral conventional military balance, particularly in the air, in the late 1990s explains the greater Syrian focus on accelerating the country’s offensive ballistic missile capability.<sup>46</sup>

Further complicating Syria’s weakening national security situation in the 1990s was the entry of Turkey into the strategic equation. The emergence of a Turco-Israeli axis in the mid-1990s was viewed as a dire threat by Syria,

which discounted the official statements out of Ankara and Jerusalem that the de facto alliance was not directed at anyone in particular. In the words of the former Syrian Defense Minister, Mustafa Tlas,

The Israeli–Turkish alliance came as the completion of the conspiracy against Syria and the Arab nation . . . the alliance is an attempt to undermine the principled and unwavering Syrian stands, serve the Israeli scheme, and force Syria to accept the Israeli conditions and dictates away from the foundations of a just and comprehensive peace which the peoples of the region aspire for.<sup>47</sup>

The military balance between Israel and Syria as the Middle East transitioned from the twentieth into the twenty-first century was probably best summed up objectively by the Israeli military’s chief of Intelligence, Major General Amos Malka.

The Syrian army is not in the best shape. Army to army the Israeli Defense Forces (IDF) stands out qualitatively over the Syrian Army and if war broke out between them the IDF would be victorious. But to jump to the extreme conclusion . . . that Syria doesn’t have any military option and that its army is collapsing is too far reaching and dangerous.<sup>48</sup>

## REGIME TRANSITION AND INCREASED INTERNAL AND EXTERNAL PRESSURES

The twentieth century ended on a gloomy note for Syria. The pressures it faced in the last decade of the twentieth century seem to pale in comparison with the pressures it faces in the first decade of the twenty-first century. Indeed, from the perspective of the Syrian political elite never has the regional strategic environment looked more threatening to their national security.<sup>49</sup>

### National Security Considerations vis-à-vis Israel

The emergence of Ehud Barak as prime minister under a new Labor government signaled renewed vigor in peace negotiations between the two neighbors; observers believed that the two countries were “on the brink of peace.”<sup>50</sup> The Syrian leadership even softened its consistently harsh views of Israel and of its leadership.<sup>51</sup> However, the whole process collapsed between January and March 2000.

From that date onward a number of dramatic events occurred that seemed to curse any progress in the Israeli–Syrian track. Syrian President Hafez al-Asad died in June 2000. His son, Bashhar, who had been groomed to succeed him, was quickly accepted as the new president by the Syrian political elite.<sup>52</sup> National security considerations began to take up much of the young Syrian president’s time from the end of 2000 onward. As the United States and Iraq moved toward confrontation, the Syrian leader returned to the time-honored Syrian approach of seeking solidarity with Arab and non-Arab states. He began building up bilateral ties with neighboring and regional

states.<sup>53</sup> This is not to say that domestic issues such as political and socio-economic reforms fell by the wayside; rather they began to be seen from the lens of national security considerations.

The second Palestinian *Intifada* broke out in September of that year and Ehud Barak was replaced by the hawkish Ariel Sharon as Israeli prime minister in February 2001. Following the Republican victory in the U.S. elections of November 2000, the solidly pro-Israeli U.S. administration of George W. Bush was completely unsympathetic to Syrian strategic concerns as it was dominated by officials who seemed determined to take Syria to task for its alleged support of terrorism, its occupation of Lebanon, and its quest for weapons of mass destruction.<sup>54</sup>

### **Operation Iraqi Freedom and Syrian National Security Considerations**

The U.S. war with Iraq worsened the bilateral relationship between Syria and the United States. The latter accused Syria of allowing foreign infiltrators into Iraq and of extending support to former regime elements by providing them with sanctuary. Syria feared that if the United States succeeded in imposing its will in Iraq that it would be next in line for regime change; ambiguous statements by senior U.S. officials did nothing to allay that fear. For example when U.S. Secretary of Defense Donald Rumsfeld was asked if other countries in the region were potential targets of U.S. military action, he replied: "It depends on people's behavior. Certainly I have nothing to announce."<sup>55</sup>

A senior Syrian Foreign Ministry spokesperson, Buthaina Sha'ban expressed Syria's fear that military action against her country was part of the Bush administration's design to reconfigure the Middle East in accordance with U.S. and Israeli strategic interests: "This war is part of an effort to reshape the region. They [the United States] want acceptable types of behavior . . ."<sup>56</sup> Syria professed not to be worried by U.S. threats that were uttered at the height of U.S. success in Iraq. Indeed, its leadership predicted that the United States would face problems in occupied Iraq in the aftermath of the conclusion of conventional military operations.<sup>57</sup> In this context, it is not surprising that Syria was secretly relieved and indeed, relatively happy that the United States found itself in a quagmire in Iraq, because the situation in Iraq eased direct military pressure on Syria.

But the pressure by the United States did not end. Even though direct threats about regime change declined as the Bush administration focused its attention on the precarious situation in Iraq, the United States and Israel brought up the issue of Syrian possession of WMD. Bashhar made it plain that there would be no negotiation over Syria's quest for a balance of power.

Do not forget that we are at a time of war and in a state of war . . . with Israel and we cannot give up any weapon in defending ourselves . . . We know that Israel is backed by the United States and all the arsenals are open to it. There is

no longer a Soviet Union. The balance in the world is different . . . A single state in the Arab region cannot achieve a balance, not even a political balance. The issue is no longer of military balance only. I believe the more serious problem is political balance and balance of power in the general meaning—economic, technological, social and other powers. This what we should strive for on the Arab level, and Syria alone cannot achieve this.<sup>58</sup>

For the Syrians in general the West's focus on its small arsenal of WMD while Israel continues to modernize its military capabilities across the border is baffling.

Zionist officials of the US Administration seek to maintain and develop Israel's military superiority and justify Israel's right to enjoy this superiority on the pretext that it is targeted and it has the right to possess weapons to protect and defend itself . . . Observers watch with great astonishment Israel's continuous hostility, military preparedness, and possession of all types of weapons of mass destruction . . . This at a time when "democratic states" deliberately diverted their attention away from this destructive state.<sup>59</sup>

### IMPACT OF DOMESTIC POLITICS/PRESSURES ON EVOLUTION OF SYRIAN NATIONAL SECURITY

Syria may be an authoritarian state, it definitely is not a totalitarian one.<sup>60</sup> Like any normal regional state set up as a republic, Syria has the formal power structures that include the presidency, the cabinet, the people's assembly, and the ruling party, the Baath Party. The president needs to take into consideration the views of several, sometimes competing, core groups. The key group, composed of senior personalities known as the "Alawi Barons," has always been in charge of the top echelons of the formal power structure.<sup>61</sup> Moreover, they have developed an extensive economic patronage system that made many of them quite wealthy.<sup>62</sup>

Bashhar came into power taking into greater consideration the views of the Syrian intellectual, middle and merchant classes—the reformers—for whom the present state of Syria's political and socioeconomic system is a massive obstacle in the way of the country's economic progress and modernization.<sup>63</sup> At the time of Bashhar's accession to power, Syria was stagnating in socioeconomic terms.<sup>64</sup> For some reformers Israel's huge military advantage is not the only thing that worries them. So do Syria's internal weaknesses, which help magnify Israel's advantages.<sup>65</sup>

But their putative alternate vision of national security did not have a chance to germinate. By the end of 2001 Bashhar found himself faced with pressures on the domestic front from the "old guard" or the conservative political elite that frowned upon his support for reformists, whose vocal calls for reform the conservatives have attempted to stifle, and with external pressures from the United States.<sup>66</sup> With the devastating terrorist attacks of 9/11 on the U.S. homeland, this lack of sympathy turned to hostility despite the fact that the relatively new regime of Bashhar al-Asad had

rendered considerable support in the struggle against terrorism by Islamic extremists.<sup>67</sup>

The Damascus Spring of 2001 when reform seemed to be in the air was stamped out.<sup>68</sup> The traditional national security complex flexed its muscles and reasserted its influence over the direction of the country as early as 2002, even before the heightened pressures exerted by external forces.<sup>69</sup> For this group politics is not only about maintaining privileges and positions, it is about warding off threats, whether domestic or foreign in the only way they know—by military means.

## NOTES

\* The views expressed in this chapter are those of the author and do not represent the views of the Naval War College or the Departments of the Navy and Defense. This study is based entirely on open source materials.

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2. *Washington Post*, April 17, 2003, p. 30.
3. Robert Novak, "Israel Wants Strike on Syria while Iron's Hot," *Chicago Sun-Times*, April 17, 2003 (accessed online).
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5. *Ibid.* The idea that seems to be suggested by the Western diplomat quoted above that nonconventional capability makes no difference to the balance of power is simply not true. Syria's WMD capabilities are not for show and they introduce a major element of uncertainty in the Israeli war calculus.
6. Moreover, for many Arabs it seems that the United States and Israel are putting pressure on other countries to deny the Arab states' conventional weapons. Israel complained to Russia about a proposed deal to sell Syria the S-300 anti-aircraft missile system and to the Ukraine about a shipment of tanks. In 1992 Germany intercepted a shipment of T-72 tanks from the Czech Republic to Syria; see "Gunboat Diplomacy," *Mideast Mirror*, January 31, 1992, p. 10.
7. *Ibid.*
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# A.Q. KHAN, PROLIFERATION NETWORKS, AND THE NUCLEAR SLIPPERY SLOPE

*Christopher Clary*

## INTRODUCTION

Dr. Abdul Qadeer Khan appeared on television screens across Pakistan on February 4, 2004. The tone of his highly choreographed presentation was immediately clear to the audience at home and around the world. Khan announced that, “It is with the deepest sense of sorrow, anguish, and regret that I have chosen to appear before you in order to atone for some of the anguish and pain that has been suffered by the people of Pakistan on account of the extremely unfortunate events of the last two months.” His speech was strangely detached and passive. He acknowledged that a Pakistani government investigation “has established that many of the reported [proliferation] activities did occur, and that these were inevitably initiated at my behest.” Having been “confronted with the evidence and the findings,” Khan said he had “voluntarily admitted that much of it is true and accurate.” Though Khan offered his “deepest regrets and unqualified apologies,” he said that all of his activities “were based in good faith, but on errors on [*sic*] judgment related to unauthorized proliferation activities.”<sup>1</sup> There is no explanation for how Pakistan’s sensitive nuclear technology could have been transferred “in good faith,” while saying later in the speech that “there was never any kind of authorization for these activities by the government.”<sup>2</sup> Where did the confusion come from? His subordinates apparently were not responsible. Khan claimed they were also “acting in good faith” and on Khan’s instructions. Nevertheless, Khan took full responsibility for his actions and asked for a pardon. The pardon was approved, conditional on Khan’s continued cooperation with the probe—cooperation the government of Pakistan has said might not have occurred if Khan had not been pardoned.<sup>3</sup>

The decision to blame Khan publicly was a difficult one: even with a public apology and even after months of international news stories pointing toward his complicity. In a speech the next day, defending his decision, Musharraf noted, “He has committed mistakes, but he is our hero.”<sup>4</sup> This reference was one of over a dozen times in which Musharraf referred to Khan as a “hero,” even if a flawed one.

The Pakistani investigation had revealed the flaws of the national celebrity. Khan had, Pakistan admitted, provided nuclear technology, designs, and components to Iran, North Korea, and Libya. In doing so, he raised grave questions over Pakistan's nuclear stewardship. This chapter explores the conditions that allowed A.Q. Khan, director of one of the most prestigious strategic laboratories in Pakistan, to be the hub of a truly global proliferation network. It will present the best available information on what Khan transferred to whom, when the transaction occurred, and what motivations there might have been. It is difficult if not impossible to determine whether Pakistani leaders authorized Khan's nuclear assistance to Iran, Iraq, North Korea, and Libya. Instead, it is possible to make assumptions about probabilities and likelihoods. It appears that some sort of official consent was likely given in the Iranian and North Korean cases, less likely in the Iraqi case, and least likely in the Libyan case.

### NUCLEAR MOONLIGHTING

From around 1987 to 2003, Dr. Abdul Qadeer Khan was moonlighting. During the day, he was the venerated head of Khan Research Laboratories (KRL) and self-styled "father" of the Pakistani nuclear bomb. At night, he was dispensing nuclear technology and information to both Pakistan's friends and enemies. For these 16 years, Khan—as either sanctioned head of KRL or unsanctioned head of an illegal proliferation network—ticked his way down the list of states of proliferation concern, making contact with Iran, Iraq, North Korea, Libya, Syria, and Saudi Arabia.

Khan did not create the world marketplace for dual-use and proscribed goods, but he may be the most successful individual ever to tap into it. Khan had been enmeshed in the European nuclear scene during the 1960s and 1970s.<sup>5</sup> He studied briefly in Germany at West Berlin's *Technische Universität*, received a master's in metallurgical engineering at the *Technische Hogeschool* in Delft, the Netherlands, and received his doctorate in metallurgy from the Catholic University of Leuven in Belgium.

From May 1972 to December 1975, he worked for Fysisch Dynamisch Onderzoekslaboratorium (FDO, or Physical Dynamic Research Laboratory), a subsidiary of Verenigde Machinefabrieken (VMF, or United Machine Factory). FDO was, in turn, a major subcontractor to Ultra-Centrifuge Nederland (UCN), which itself was the Almelo-based contractor to the Anglo-Dutch-German uranium enrichment consortium, URENCO.

By late 1975 Dutch authorities had grown concerned about a number of suspicious incidents involving Khan. He was removed from work on gas centrifuge development in October and, shortly thereafter, went home to Pakistan on vacation. He never returned to work, and resigned his position in March 1976. Khan had been asked by Pakistan Prime Minister Zulfikar Ali Bhutto to stay and assist in the nuclear weapons effort.<sup>6</sup> He brought with him stolen centrifuge designs and, perhaps more importantly, a list of dozens of companies that supplied centrifuge parts and materials. After a brief stint

within the Pakistan Atomic Energy Commission structure, he moved to the Engineering Research Laboratories, setting up a uranium enrichment plant in Kahuta. Within 4 years of returning home, his progress was significant enough that President Muhammad Zia ul-Haq renamed the facility. Khan Research Laboratories (KRL) was born.

Almost immediately upon his return, Khan began to gather as many components and as much information as he could from the network he had established during his years abroad. He contacted former coworkers, inquiring about difficult technical processes and urging them to visit Pakistan, where he could arrange for technical consulting.<sup>7</sup> One FDO employee reportedly did travel to Pakistan in 1976.<sup>8</sup>

Pakistani firms or embassy personnel contacted several European firms about purchasing specialized components. Many of these goods were shipped to Pakistan, slipping through the porous export controls of several European countries. Even as the Dutch government was investigating the A.Q. Khan affair, one Dutch company was manufacturing and shipping thousands of tubes made of a "special hard type of steel."<sup>9</sup> The frustration and impotence of the Dutch authorities is evident in the government report to the national legislature: "The great majority of it has been exported . . . despite repeated oral and written warnings not to do so."<sup>10</sup> Other Dutch firms sold more tubes to Pakistani firms. Some were made out of aluminum. More blatantly, a large order was made for high-carbon, low-corrosion martensitic steel, an alloy used almost exclusively for jet engines and gas centrifuges.

This was part of a broader and clear Pakistani strategy. Khan later said, "I took full advantage of the willingness of western companies to do business and decided to make purchases from the open market."<sup>11</sup> In Switzerland, Pakistan purchased key components for a uranium enrichment capability, including a massive unit to gasify and solidify uranium hexafluoride so it could be fed into the centrifuges as well as high-vacuum valves. In Germany, Pakistani diplomats purchased vacuum pumps and gas purification equipment, along with rolled rods and thousands of specially welded aluminum parts. In France, Pakistani buyers may have been able to buy bellows for ultracentrifuges by routing the shipment through Belgium and away from stricter French customs officials. In Britain, Pakistan purchased high-frequency inverters through a British front company, sometimes using a West German commission agent.<sup>12</sup>

Khan's timing could hardly have been better. Khan Research Laboratories was just one portion of a much larger Pakistani nuclear effort. When Zulfikar Ali Bhutto initiated the nuclear weapons program in 1972, he also appointed a new head for the Pakistan Atomic Energy Commission (PAEC), Dr. Munir Ahmad Khan, who had worked for the International Atomic Energy Agency (IAEA) on nuclear power. Munir Ahmad Khan's PAEC began taking Pakistan down a plutonium route for nuclear weapons production. But after India's nuclear test in 1974, the international community took decisive action to ensure that Pakistan would not follow India's lead. Canada refused to supply nuclear fuel, heavy water, or spare parts for the Karachi Nuclear

Power Plant.<sup>13</sup> The Gerald Ford administration put intense pressure on Germany and France to stop cooperation with Pakistan, leading quickly to a German agreement to halt construction of a heavy-water production facility. France also abandoned an agreement to build a plutonium reprocessing facility for Pakistan in 1978.

These three body blows to the PAEC occurred in conjunction with A.Q. Khan's return to Pakistan with centrifuge designs and connections. As Ashok Kapur has noted,

A.Q. Khan's approach was innovative. In the reprocessing route, Pakistan's approach was to acquire a major facility, e. g. a reprocessing plant, and to deal with the major nuclear suppliers. A.Q. Khan's approach was entirely different—viz. to get bits and pieces (components) of enrichment technology and equipment from small, high technology Western firms who deal with individual components; to bring the components together so as to achieve mastery over the enrichment cycle—from acquisition of yellowcake, gasification/solidification units and centrifuges to their operation; and to do the design work and the assembly of imported components in Pakistan by Pakistanis with some foreign technological assistance by selected foreign personnel from Europe and North America.<sup>14</sup>

Martin J. Brabers, Khan's old professor from the University of Leuven, explained Khan's success when he stated, "in buying equipment, he knew all the companies, he knew so many people abroad in many countries. . . . Why, he knew so many languages, and he is so charming [that] he managed to buy many things that other Pakistanis would not manage to buy."<sup>15</sup>

Khan and his network were working against time. The export control system was initially ignorant of the threat and then lethargic in reacting against it. From the beginning of Pakistan's buying spree, the red flags were raised one by one. In Switzerland, the Pakistani buyers asked specifically for high-vacuum valves for a centrifuge enrichment plant. There was no attempt to hide the intent, but the London Club of nuclear exporters had not placed such high-vacuum valves on the "trigger list" of restricted exports, and so their sale proceeded. The gasification and solidification unit—again with a clear nuclear intent and again not controlled by the supplier cartel—also left Switzerland, without even the requirement of an export permit. The unit was so large it had to be hauled away in three specially chartered C-130 transport planes. The Dutch government attempted to stop a large order of hardened steel tubes, only to be ignored by the Dutch supplying firm. After the first shipment of British high-frequency inverters, Pakistani engineers sent an extended message requesting extensive and complex modifications to the finished product. This sophistication only further undermined Pakistan's cover story that the inverters were for a textile factory.<sup>16</sup> Upon reflection, Khan noted the eagerness of European firms to do business with the Pakistani program and to respond to its needs, as he noted, "They literally begged us to buy their equipment. We bought what we considered suitable for our plant and very often asked them to make changes and modifications according to our requirements."<sup>17</sup>

Pakistan's luck, however, was not limitless. People were starting to notice. As governments were pressed from inside and out to control this trade in nuclear sensitive goods, they slowly roused themselves to the task. A British member of parliament, Frann Allaun, raised the issue of inverters in the press and on the floor of parliament. He noted, "These converters are of the same kind, and have the same frequency, as those ordered by the British Atomic Energy Authority. . . . They are unsuitable as a control system in a textile factory."<sup>18</sup> The shipment of inverters, however, took place anyway. The British government could not reexamine its export controls in time to stop the shipment.

The doors were closing for Pakistani procurement agents. While British inverters were on their way to Pakistan, the American branch of the same company denied the sale of similar inverters to a Pakistani buyer. A Pakistani request to a German firm to purchase 10 to 15 tons of uranium yellowcake from South Africa was turned down by Germany and South Africa. The Dutch government launched an investigation into Khan's employment with FDO and the selling practices of Dutch companies to Pakistani buyers. They recommended strengthening security in the nuclear industry, refashioning export controls, and launching a criminal prosecution against Khan. The British launched an extensive investigation, and reported their findings to the other URENCO partners (France and the Netherlands) and to the London Group of nuclear supplying countries. The United States reexamined its own export controls and also put pressure on other Western countries, and started applying mild pressure directly on Pakistan.<sup>19</sup>

The supplier cartels were battling horizontally and vertically. Bilaterally and through multilateral organizations, states slowly harmonized export controls to prevent Pakistan and others from seeking and exploiting the weakest national regulations. Simultaneously, state regulators sought to establish control at the lower levels of the chain of production. Initially, Pakistanis were buying entire systems (as in the massive Swiss gasification and solidification unit), then they began buying subsystems, then major components, and then finally materials useful in engineering the components themselves. As U.S. journalists Steve Weissman and Herbert Krosney observed, "The clever Pakistanis were staying a step ahead of the game by buying the individual parts and assembling more and more of the equipment themselves in Pakistan itself."<sup>20</sup>

Khan's procurement network was paying important dividends. By the mid-1980s, within a decade of Khan leaving his URENCO offices, Pakistan had enough highly enriched uranium for a weapon.<sup>21</sup> Further, Khan had created a network of middlemen, financiers, importers, and front companies that would remain largely intact until recently.

### KHAN'S FIRST CUSTOMER: IRAN

At some point in the mid-to-late 1980s, Khan appears to have altered his procurement methods. He was still bringing in material and components for

his nuclear enrichment process, but he seems to have ordered more than what Pakistan needed.<sup>22</sup> At the same time, Khan Research Laboratories was maturing. Starting in 1987, KRL scientists published papers on constructing more difficult centrifuges of maraging steel, rather than the earlier aluminum-based designs. In 1991, KRL scientists published details of how to etch special grooves into the bottom bearing of the centrifuge to incorporate lubricants.<sup>23</sup> Both trends—over-ordering and technological innovation—left Khan with excess inventory. An anonymous American official marveled at the accomplishment: “First, he exploits a fragmented market and develops a quite advanced nuclear arsenal. Then he throws the switch, reverses the flow and figures out how to sell the whole kit, right down to the bomb designs, to some of the world’s worst governments.”<sup>24</sup>

The first nation to receive material from Khan was Iran. Reportedly, in 1987, three Iranian officials met several members of Khan’s network in Dubai, perhaps including an uncle–nephew team of Sri Lankan businessmen, Mohamed Farouq and Buhary Syed Ali Tahir, and a German engineer named Heinz Mebus.<sup>25</sup> Tahir would gain international notoriety in 2003 when President George W. Bush called him the Khan network’s chief financial officer.<sup>26</sup> Khan’s intermediaries apparently presented a one-page document outlining a five-point, phased nuclear weapons development plan. Though this was Khan’s first offer, he apparently hit the ground running. According to the IAEA,

This document suggests that the offer included the delivery of: a disassembled sample machine (including drawings, descriptions, and specifications for production); drawings, specifications and calculations for a “complete plant”; and materials for 2000 centrifuge machines. The document also reflects an offer to provide auxiliary vacuum and electric drive equipment and uranium re-conversion and casting capabilities.<sup>27</sup>

The Iranians may have outsmarted Khan, however. Using Khan’s document as a shopping list, IAEA employees believe that Iran instead went to European, Russian, and Chinese firms to purchase the equipment and technology at lower prices.<sup>28</sup> Iran’s ability to continue to purchase from Western companies is a key indicator that efforts to improve export controls were only partially successful.<sup>29</sup>

Even if the Iranians did not purchase Khan’s “package deal,” they apparently did buy centrifuges, designs, and centrifuge technology. Cooperation began in 1987,<sup>30</sup> though Khan reportedly visited the Bushehr nuclear facility in February 1986.<sup>31</sup> At that time, in addition to inadvertently providing a shopping list, Khan apparently provided Iran with designs for the P-1 aluminum rotor centrifuge and sample components for that centrifuge.<sup>32</sup> Between 1994 and 1996, Iran received an apparently duplicate set of P-1 designs along with components for 500 centrifuges.<sup>33</sup> It seems that these components were from models that Pakistan had previously used to enrich uranium, perhaps explaining most—if not all—of the enriched uranium

contamination found on Iran equipment.<sup>34</sup> Additionally, between 1994 and 1996, Iran received designs for the more advanced P-2 centrifuge, though Iran claims it did not work on this design until early 2002.<sup>35</sup> Anonymous IAEA officials have been quoted in the press saying they also suspect Iran received a nuclear weapons design from the Khan network.<sup>36</sup>

Why would Khan sell nuclear technology to the western neighbor of Pakistan? The Iranian case appears to be an odd and ambiguous confluence of a misguided sense of national interest, an ideological opposition to the Western export control regime, and the personal greed of Khan and his cronies. First, Khan may have received permission from Pakistan's national leadership to begin nuclear cooperation with Iran. Once the door for limited nuclear collaboration was open, even a crack, Khan may have used such policy approval to barge through it.

Pakistani journalist Kamran Khan has quoted retired Pakistani scientists saying that President and Army chief Zia ul-Haq had opened the door to both peaceful and "non-peaceful" nuclear cooperation before his death in 1988.<sup>37</sup> One anonymous scientist described Zia's intent as "to play around but not to yield anything substantial at any cost."<sup>38</sup> This seems somewhat dubious given Zia's pro-Sunni, anti-Shia credentials.

Khan's opening to Iran does seem to coincide with the elevation of Mirza Aslam Beg to the position of Vice Chief of Army Staff in March of 1987 and his subsequent tenure as Army chief from 1988 to 1991. Beg held peculiar views of a Pakistani-Afghan-Iranian (and possibly Turkish) alliance that could act in "strategic defiance" of the West.<sup>39</sup> Strategic defiance was never a very clear notion, but it seemed to involve "strengthening collective defenses of regional Muslim countries" through joint training, defense production, and perhaps formal agreements.<sup>40</sup> In particular, Beg seemed to hold particular regard for Iranian thinking on matters of international security.<sup>41</sup>

There are more reasons than just old security views to implicate Beg. Former U.S. assistant secretary of defense for International Security Affairs, Henry Rowen, has claimed that in January 1990 Beg presented Rowen with a very clear threat: "if Pakistan was cut off [from U.S. military assistance] it might be forced to share nuclear technology with Iran."<sup>42</sup> An unnamed "Pakistani investigator" has claimed that Beg was "in the picture" regarding Khan's assistance to Iran, though he most likely did not know how extensive such cooperation was. Pakistani investigators have reportedly found evidence that Khan informed Beg of the transfer of outdated equipment to Iran in 1991.<sup>43</sup> More recently, Beg wrote an op-ed in one of Pakistan's leading English newspapers floating the bizarre notion that Pakistan and India should jointly provide nuclear weapons to Iran under some sort of custodial arrangement similar to that used within the North Atlantic Treaty Organization (NATO).<sup>44</sup> Beg has denied any wrongdoing, but his denials have focused more on the lack of evidence against him than in denying support for such a policy. In fact, he pointedly refused to say that what occurred was illegal.<sup>45</sup>

Other Pakistani press accounts have noted the important role of Ghulam Ishaq Khan, chairman of Pakistan's Senate from 1985 to 1988 and president



from 1988 to 1993. As one anonymous Pakistani official put it, “If A.Q. Khan is the father of Pakistan’s nuclear bomb, Ghulam Ishaq Khan was the grandfather.”<sup>46</sup> Ghulam Ishaq Khan worked closely with A.Q. Khan in the 1970s, 1980s, and early 1990s.<sup>47</sup> For instance, as finance minister in 1981, Ghulam Ishaq Khan gave tax-free status to the Bank of Credit and Commerce International (BCCI) Foundation, the nonprofit branch of a particularly complex and corrupt financial empire. In the late 1980s, BCCI returned the favor by funneling \$10 million worth of grants into the Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, which at that time was directed by A.Q. Khan and widely considered to be a front for Khan Research Laboratories.<sup>48</sup>

Finally, at least one press account placed blame on the now deceased Major General Imtiaz Ali for pressuring Khan into supplying enrichment equipment and designs to Iran.<sup>49</sup> Imtiaz, who is referred to by his first name, was military secretary to Zulfikar Ali Bhutto’s government when A.Q. Khan returned to Pakistan and had a key role in liaising with Khan as he set up Pakistan’s enrichment facility.<sup>50</sup> Later, he was military advisor to Benazir Bhutto during her first term as civilian prime minister from December 1988 to August 1990.

This unique constellation of political personalities—Beg, Ghulam Ishaq Khan, and Imtiaz—may all have been inclined to give Khan permission to proceed with some sort of cooperation with Iran. While there is no definitive evidence, it seems plausible that Zia, perhaps at Beg’s behest, allowed for very limited, non-substantive nuclear cooperation with Iran in 1987 or 1988. It also seems likely that Beg permitted or ordered expanded cooperation with Iran as part of a broader policy of strategic defiance. It seems unlikely that either Ghulam Ishaq Khan or Maj. Gen. Imtiaz, both having worked intimately with Khan for over a decade, would have opposed such cooperation if they had learned about it. Additionally, there is at least one press report that Imtiaz actually encouraged such cooperation.

### Analysis of the Iranian Case

A number of things do not make sense about the cooperation with Iran. First, why was Khan’s opening bid so large—essentially offering the Iranians a “turnkey” nuclear program? It seems unlikely, though not impossible, that even this group of policymakers would want a fourth nuclear-armed neighbor on Pakistan’s border.<sup>51</sup> If the scale of the cooperation was not approved by top officials, then Khan’s nuclear moonlighting began almost the moment he had an opportunity to sell. This may explain the second incongruity with the Pakistani–Iranian cooperation: its more than decade-long persistence. Iran admits to meeting 13 times with “the clandestine supply network” between 1994 and 1999.<sup>52</sup> Strategic defiance was never a national policy; it was more of a fuzzy idea being hawked by Beg and his close associates. After Beg, Ghulam Ishaq Khan, and Imtiaz left the scene one would have expected the cooperation to whither away. Instead, starting in 1994, it was reinvented, with another set of P-1 designs and components as well as

designs for the P-2. This expanded relationship occurred precisely as the Pakistani–Iranian relationship was growing more troubled over the conduct of the Afghan civil war.<sup>53</sup>

The 1990s were a tumultuous time for Pakistan as it experimented with varying levels of democratic rule. Khan, an adroit bureaucratic operator, may have been able to use the infighting amongst political leaders to create space in which his burgeoning nuclear enterprise could expand and prosper.<sup>54</sup> It seems that while the initial opening to Iran may have had the approval or acquiescence of a few key policymakers, Khan went dramatically beyond his mandate in his cooperation with Iran.

Khan may have continued his nuclear dealings with Iran for money and, to a lesser extent, ideology. Khan’s “money man,” B.S.A. Tahir, has admitted that he was paid \$3 million for two containers of used centrifuges, and that he then delivered two briefcases full of money to A.Q. Khan’s guest house in Dubai.<sup>55</sup> The international investigations of the Khan network have reportedly demonstrated that millions of dollars went from Iran into the bank accounts of Pakistani nuclear scientists and that these nuclear scientists, including Khan, held tens of millions of dollars of undisclosed assets in Pakistan and abroad.<sup>56</sup> Khan’s lavish home, regular foreign travel, and extensive charitable giving were well known around Islamabad.<sup>57</sup> However, Pakistanis say with some credibility that they expected Khan earned his extra income from corruption, and many are still upset that he was not content with skimming from the top of KRL’s books and instead supplemented his income with nuclear smuggling that damaged Pakistani security.

Khan also had lesser ideological motivations. He was intensely opposed to the Western export control regime. He sought to pierce the “clouds of so-called secrecy” that such a regime sought to create.<sup>58</sup> These views appeared to have been amplified as they related to Muslim countries. In a 1995 speech, Khan lamented Western “efforts to curtail the development of the Muslim World which the Western powers unjustifiably see as a potential threat to their monopoly. Development made by certain Muslim states in the restricted technologies does not trickle down to others because of international pressure and lack of coordination and cooperation among the Muslim countries.”<sup>59</sup> Khan continued by calling for greater collective efforts amongst Muslim countries, and in particular for increased joint defense research and development. Together, Khan’s greed and ideological inclinations may have pushed him to assist other countries, with or without formal approval from policymakers.

## OTHER KHAN CUSTOMERS: IRAQ, NORTH KOREA, AND LIBYA

### Iraq

As A.Q. Khan’s nuclear enterprise was making opening entreaties to Iran, it may well have also been trying to sell to Iran’s western neighbor. According to an October 6, 1990 memo obtained by IAEA investigators in 1995, an intermediary of A.Q. Khan contacted Iraq “regarding the possibility of

helping Iraq establish a project to enrich uranium and manufacture a nuclear weapon.”<sup>60</sup> According to the memo

1. He is prepared to give us project designs for a nuclear bomb.
2. Ensure any requirements or materials from Western European countries via a company he owns in [Dubai].
3. Request a preliminary technical meeting to consult on the documents that he will present to us. . . . There is a possibility of a meeting with the intermediary we have connections and good relations with in Greece.
4. The motive behind this proposal is gaining profits for him and the intermediary.<sup>61</sup>

The same personalities that may have played a critical role in the Iranian decision—Beg, Imtiaz, Ghulam Ishaq Khan—were largely in place in October of 1990. Only Imtiaz had left the scene, when the Benazir Bhutto government was replaced by a new Nawaz Sharif-led coalition. In fact, it was during this time that Beg made public statements of admiration for Saddam Hussein’s defiance of the West. However, Khan portrayed the potential sales in terms of personal benefit. In related documents, Iraq notes that there was an up-front cost of \$5 million as well as a 10 percent overhead on all materials acquired by the proliferation network.<sup>62</sup> Iraq apparently thought the opportunity was too good to be true and that it was an elaborate trap by the United States using its sometimes ally Pakistan.<sup>63</sup>

### North Korea

Pakistani–North Korean cooperation on ballistic missile technology began perhaps as early as 1992. Benazir Bhutto has admitted publicly that she obtained guarantees for missile technology during her December 1993 visit to Pyongyang.<sup>64</sup> However, she has denied that any formal missile-for-nuclear technology swap occurred, as when she stated, “We did not obtain missiles in exchange for nuclear technology. Whatever the technology was, we bought it with money.”<sup>65</sup> More interestingly, Bhutto also said that individuals around her were suggesting nuclear-technology sales as a means to generate “a huge amount of money” and escape from the dictates of the international financial system.<sup>66</sup> Bhutto is a savvy and self-serving politician, whose statements should be taken with a grain of salt. Nevertheless, there is scant evidence to contradict her version of events. One anonymous Bush administration official described the nuclear-for-missile technology swap as a proliferation “urban legend.”<sup>67</sup> In fact, Bhutto’s narrative is somewhat bolstered by her willingness to admit that Pakistan acquired Nodong missile technology from North Korea, while Pakistan maintains that the Ghauri missile relies only on indigenous technology.

Analysts suspect a swap rather than just Khan’s malfeasance for three reasons, none wholly convincing. First, it is intuitive. North Korean–Pakistani cooperation on missiles was well known by every key Pakistani

policymaker—several of whom traveled to Pyongyang to ensure its continuation. It seems likely, analysts reason, that if nuclear cooperation was occurring it would also occur with the approval of the Pakistani civilian and military leadership. Second, perhaps Pakistan could not pay outright for the nuclear missiles. Third, Khan and his friends have reportedly said that the Pakistan military was aware of the nuclear assistance. Khan has claimed, according to the anonymous “investigators” and “friends of Khan” that dot the press reports out of Islamabad, that three different Army chiefs were aware of his nuclear deals with Pyongyang: Gen. Abdul Waheed (1994–1996), Gen. Jehangir Karamat (1996–1998), and Gen. Pervez Musharraf (1998–present).<sup>68</sup>

It is impossible to say with certainty whether decision-makers in Islamabad and Rawalpindi knew of the nuclear cooperation with Pyongyang. There are three reasons to think that they did not. First, as noted above, Benazir Bhutto has claimed that the missile cooperation was based on cash payment, rather than nuclear barter. Second, while it is true that foreign reserves sank to dire levels in 1996, it is a long leap to assume that Pakistan could find no other way to finance missile acquisitions than by a technology exchange. After all, in 1997, the Pakistani defense budget was nearly \$3 billion, much of which was destined to purchase foreign goods of one sort or another. Third, Pakistan’s Inter-Services Intelligence agency did apparently raid a North Korea-bound chartered aircraft in 2000 and did not find anything proving Khan’s malfeasance.<sup>69</sup> This seems to be a strange exercise to go through if authorities were well aware of Khan’s cooperation with North Korea. If one were going to have a staged raid to find evidence, it would be best if one actually found evidence.

Pakistan has been surprisingly open, however, about the nature of its nuclear cooperation with North Korea. A.Q. Khan, in a signed statement, reportedly accepted responsibility for “supplying old and discarded centrifuge and enrichment machines together with sets of drawings, sketches, technical data and depleted Hexafluoride (UF<sub>6</sub>) gas to North Korea.”<sup>70</sup> Khan may also have provided North Korea with the “shopping list” of all of the equipment necessary to produce the machines.<sup>71</sup> One can wonder whether it is the same list that Iran used to avoid paying the high prices in Khan’s package deal and go directly to the European, Chinese, and Russian suppliers. The timing of the cooperation between Khan and Pyongyang is uncertain. Third-hand reports—Khan supposedly tells Pakistani investigators who then inform U.S. officials who then leak it to the press—have said that Khan first approached North Korea in the late 1980s, but did not begin major shipments until the late 1990s. This coincides with Pakistani statements that the first “orders were placed for the production of components for centrifuge machines” starting in 1999.<sup>72</sup>

### Libya

Starting in 1997, Khan launched his most ambitious program of cooperation with Libya. Unlike Iran, Iraq, or North Korea, Libya had a limited indigenous

nuclear infrastructure. In the early to mid-1980s, Libya had shopped around European, Soviet, and Japanese suppliers for a uranium conversion facility, and eventually received a modular pilot-scale facility from a Japanese firm in 1986. From the late 1970s until the mid-1980s, Libya also received nuclear material, including over 2000 metric tons of uranium yellowcake and relatively small quantities of uranium hexafluoride, as well as equipment and training from European firms and the Soviet Union. The program lay relatively dormant throughout the late 1980s, but in July 1995, according to the IAEA, “Libya made the strategic decision to reinvigorate its nuclear activities, including gas centrifuge enrichment.”<sup>73</sup>

In 1997, two Libyans met with Khan and Tahir in Istanbul to ask Khan to supply centrifuge units to the Libyan nuclear program.<sup>74</sup> Starting that year, Libya imported 20 complete L-1 aluminum centrifuges from Khan’s network, along with most of the components for an additional 200 L-1 centrifuges. Significantly, the network apparently was unable or unwilling to provide the aluminum rotors and magnets necessary for these 200 unassembled units. Pakistan had used at least one of these centrifuges until 1987. In 2000, Libya imported two test L-2 maraging steel centrifuges from Pakistan. Both of these centrifuges had been used in the Pakistani nuclear program, and were contaminated with highly enriched uranium particles. Libya placed an order for 10,000 additional L-2 centrifuges, with the first deliveries of the order arriving in December 2002.<sup>75</sup> The complexity—and audacity—of this order has been captured by David Albright, who notes that 10,000 centrifuges with 100 components each, means that a supplier network would have to procure or manufacture over a million components and ship them all to Libya.<sup>76</sup>

Some of these components must have been difficult for Khan to procure through his traditional means. After all, in the Iranian, Iraqi, and North Korean cases, Khan had only supplied designs, a few hundred used components, and perhaps quantities of uranium hexafluoride. The Libyan enterprise was literally orders of magnitude more difficult. Khan and Tahir responded by turning the existing front companies and procurement vehicles into more robust organizations with a capability to train foreign scientists and manufacture certain products. In Libya, Peter Griffin and his son Paul were implicated in the establishment of a workshop, called Project Machine Shop 1001. They were accused of purchasing and delivering furnaces and lathes to assist in the manufacturing of centrifuge components and arranging training in Europe for Libyan personnel.<sup>77</sup>

Khan’s biggest innovation—and his downfall—was to establish factories in third-party states. Workshops in Turkey served as European mini-hubs, from which they could procure and supply centrifuge motors, power supplies, and ring magnets, some of these from inside the web of pan-European export controls. In South Africa, firms and individuals with connections to the now-defunct South African nuclear program attempted and failed to produce maraging steel rotors for the L-2 centrifuge.<sup>78</sup>

The most publicized facility, however, was located in Shah Alam, Malaysia. The factory, established in 2001, employed about 30 people. The plant was

operated by Scomi Precision Engineering (SCOPE), a subsidiary of Scomi Group Berhad, a Malaysian oil and gas firm. Scomi claims with some credibility that they were unaware they had become part of the nuclear black market.<sup>79</sup> Starting in April 2002, Urs Tinner, son of a longtime Khan associate Friedrich Tinner, began consulting for SCOPE's factory at Tahir's request. Tinner arranged for the import of lathes as well as cutting, turning, and grinding machines. The company made progress in machining some of the components necessary for a centrifuge. Between December 2002 and August 2003, 14 types of components were manufactured and shipped to Dubai. However, one should not overstate the capabilities of the plant. After all, only 14 of the approximately one hundred types of components in a centrifuge were manufactured in the plant. As the Malaysian police bluntly state, "As of now, no factory in Malaysia is capable of manufacturing a complete centrifuge unit, what more, the construction of hundreds or thousands of centrifuges."<sup>80</sup>

Why Libya? In Iran and Iraq, we could point to a doctrine—strategic defiance—to which influential policymakers subscribed, which might explain state approval for limited cooperation. In North Korea, there was a multi-year strategic relationship on ballistic missile development that could perhaps justify nuclear bartering. But in Libya, analysts were able to come up with few reasons the Pakistani state would want to assist Tripoli. Estimates of Libyan payments to KRL of between \$50 and \$100 million seem insufficient for the risk the Pakistani government would be taking.<sup>81</sup> Instead, it appears that Khan was primarily motivated by personal greed, and perhaps to a lesser extent out of some misguided desire by Khan for pan-Muslim comity. His Swiss, South African, Turkish, and British partners, however, seem to have been squarely and solely motivated by a desire for financial gain.

## THE PROLIFERATION SLIPPERY SLOPE

The Pakistani state hoped to provide A.Q. Khan with as much flexibility and autonomy as possible, so that it could quickly secure a nuclear deterrent in its intense security competition with India. Pakistani authorities felt that Khan, a man who had devoted his entire life to Pakistan, could be trusted with independence and power. Pakistan made a tremendous and profound mistake. In the words of one mid-level government spokesman, "his devious and inimical mercenary behavior" abused "the great honor and trust the Pakistani nation had bestowed on him."<sup>82</sup>

It appears that most—but perhaps not all—of A.Q. Khan's proliferation activity was nuclear freelancing. There are two primary reasons to suspect Khan was a dangerous rogue actor within the Pakistani system, rather than an unwitting fall guy for a broader Pakistani policy of proliferation profiteering. First, the problem was confined almost solely to Khan Research Laboratories and its various front companies and middlemen, only a sliver of Pakistan's overall nuclear effort. The Pakistani nuclear weapons complex is vast, with 62,000 employees, 6,500 of them scientists.<sup>83</sup> Only a handful of these

employees have been implicated by internal and international parties and all of these known cases involve KRL employees.<sup>84</sup> By the late 1990s, Pakistan had more to offer the international proliferation marketplace than just uranium enrichment technology. It had years of experience at converting uranium into uranium hexafluoride, it had worked on developing ballistic missiles with North Korean and Chinese assistance, and had done work on creating reentry vehicles for those missiles. There is no evidence from the Libyan, Iranian, or Iraqi cases that any of these other suites of technologies were being offered on the international market. Why? The most parsimonious answer is that KRL was the problem. KRL was responsible for uranium enrichment and KRL sold that technology abroad for the financial benefit of Khan and his close associates. All of the other technologies were the responsibility of the PAEC or the National Weapons Complex, distinct strategic organizations with stricter accountability.<sup>85</sup>

Second, the potential national interest does not neatly align with the level of cooperation, except perhaps in the North Korean relationship. For instance, in the Libyan relationship, Khan was receiving \$100 million, but it is difficult to gauge what benefit the Pakistani state achieved through the deal. By the time components were being delivered to Libya in 2002 and 2003, Pakistan's current account balance had righted itself and it was freshly afloat with aid from the global war on terror. Why would Pakistan endanger this aid "grave train" for a slow dribble of hard currency from Libya? The simple answer is that it would not knowingly do so and that Khan was the problem.

This analysis does not free Pakistan of blame. To miss some of the indicators of malfeasance—purchasing a hotel in West Africa and renaming it after one's wife for instance, as Khan did—requires that the regulatory regime to have bungled badly. There appears to be two reasons for the regulatory breakdown at Khan Research Laboratories: government autonomy, which led to a culture of impropriety, and a regulatory system that failed to capture top managers.

First, the Pakistani government gave Khan Research Laboratory wide-ranging government autonomy so that it could more rapidly and more secretly provide Pakistan with a nuclear deterrent force. Musharraf has emphasized the small number of individuals with knowledge of the program, rhetorically asking, "What is the best way of hiding things from the world and moving forward?"<sup>86</sup> Regulators would have slowed the operation down and would have endangered its secrecy. Musharraf still believes such an approach was necessary, as he remarked, "Security was under the organization itself. No one was monitoring them. Money, total financial; there was no external audit. They had their own local audit, internal audit. And this was the correct approach I tell you. Otherwise, we would have been unable to move ahead."<sup>87</sup> However, this diminishes the ability of the PAEC to operate in an environment with far less autonomy. Aslam Beg has noted, "The KRL had at its disposal funds which were not subject to auditing. The Atomic Energy Commission was given funds which were audited."<sup>88</sup> This difference in

flexibility is significant for it goes a long way in explaining why the problem appears to have been KRL-specific.

Second, in this environment relatively free of government oversight, it appears that a culture of impropriety developed. In defending KRL, Aslam Beg demonstrates this sort of moral slippery slope:

If a scientist is given 10 million dollars to get the equipment how would he do it? He will not carry the money in his bag. He will put the money in a foreign bank account in someone's name. The money lies in the account for some time, and the mark-up that fetches may probably have gone into his account. It is a fringe benefit. It is very logical that somebody contacts a scientist telling him that ARY Gold determines gold [prices] in the region, so why not invest a million dollars or have it invested on his behalf? This may have happened. Is it a crime? No.<sup>89</sup>

In this sort of environment, no one questioned when Khan's former son-in-law and Khan's uncle received profitable contracts to procure materials significantly over market rates.<sup>90</sup>

Third, the few oversight functions that did exist were largely beholden to Khan directly. While all those entering the nuclear establishment were rigorously screened by four different Pakistani agencies (Inter-Services Intelligence, Military Intelligence, the Intelligence Bureau, and the Strategic Plans Division), top officials were screened by their organizations alone. Khan, in effect, was in charge of vouching for his own activities and those of his closest deputies. The overseers faced problems endemic for regulators everywhere. For instance, they appointed military officers approaching retirement to watch over security at Khan Research Laboratories. These officers were already planning for their postretirement income, and were vulnerable to giving Khan autonomy in an attempt to secure follow-on employment. Khan was able to co-opt the few key officers that operated within KRL and convince them to look the other way.<sup>91</sup>

## CONCLUSION

New nuclear states are likely to value the flexibility and speed that comes with providing a wide-degree of autonomy to their nuclear-weapons establishment. During the early years, nuclear-weapons procurement networks need to have extensive and quick funding, and extensive auditing can be difficult when meeting with shady middlemen and corrupt businessmen in out-of-the-way hotels in Istanbul, Casablanca, or Athens. This programmatic insulation also helps safeguard the nuclear program from external and internal opponents during early years when the nuclear decision may be controversial. As Avner Cohen and Benjamin Frankel have noted, "This concealment of a nuclear weapons program behind the veil of R&D is a bureaucratic device to avoid hostile scrutiny by critics in the government."<sup>92</sup>

This flexibility both has benefits and costs. The KRL, particularly in the 1970s and 1980s, was able to get the job done, while the PAEC seemed



slower and less able to adapt to international policy shifts. But Pakistan now must face a western neighbor with a significantly more advanced centrifuge enrichment program, in no small part because of Dr. A.Q. Khan's actions. Its nuclear program has also undergone intense international scrutiny because of Khan's actions. Today, because of the flexibility they gave Khan in the past, the Pakistani government's freedom to maneuver on nuclear matters has been constrained. They are captive to Khan's past promiscuity and now must demonstrate exemplary nuclear stewardship.

More must be done in private, sensitive circles to learn the lessons of A.Q. Khan. The United States must also think of creative strategies to help new nuclear states avoid the mistakes that Pakistan made. Techniques for materials accountancy and personnel reliability may have prevented Khan's nuclear moonlighting, while still allowing for operational flexibility in young programs. The United States has difficulty, however, in sharing this sort of information with new states, out of understandable national security concerns and out of a desire to advance international nonproliferation norms. How do you assist a new nuclear weapons state secure its arsenal without condoning it? How do you secure a program's nuclear facilities and personnel without increasing risks that arsenals will be placed on higher states of readiness? How do nations talk about the most sensitive security matters without endangering their capabilities? The Khan fiasco has stimulated this discussion. We know now some of the questions. We do not yet know the answers.

## NOTES

1. "Text of Dr Abdul Qadeer Khan's Statement Seeking Public Apology," transcribed text from Pakistan TV 1 (Islamabad), February 4, 2004, *FBIS Report* no. SAP2004020400069. Also Rafaqat Ali, "Dr Khan Seeks Pardon," *Dawn* (Karachi), February 5, 2004.
2. Text of Speech from Pakistan TV.
3. See, for instance, Ambassador Ashraf Jehangir Qazi, "Address at the Carnegie International Nonproliferation Conference," Washington, DC, June 21–22, 2004, <[www.embassyofpakistan.org/news93.php](http://www.embassyofpakistan.org/news93.php)>
4. "Text of Musharraf's TV News Conference," translated text from PTV World (Islamabad), February 5, 2004, *FBIS Report* no. SAP20040209000072. Like most Pakistani speakers, Musharraf freely utilized English-origin words in his mostly Urdu news conference. The FBIS translation distinguishes English from Urdu. For readability, I have omitted such diacritical cues in my quotations.
5. This section of Khan's life is documented in Report of the Government of the Netherlands on the "Khan Affair," to the Tweede Kamer, reproduced in "Dutch Government Report," in *Pakistan's Bomb: A Documentary Study*, 2nd ed. (ed.) Sreedhar (New Delhi: ABC Publishing, 1987), pp. 114–157; Zahid Malik, *Dr. A.Q. Khan and the Islamic Bomb* (Islamabad: Hurmat, 1992), pp. 52–57; Steve Weissman and Herbert Krosney, *The Islamic Bomb* (Delhi: Vision Books, 1983), pp. 186–197; and Joop Boer et al., *A.Q. Khan, Urenco, and the Proliferation of Nuclear Weapons Technology* (Greenpeace International, May 2004), pp. 9–10.

6. Malik, *Dr. A.Q. Khan*, pp. 58–63; and “Unknown Facts about the Reprocessing Plant,” (Maulana Kausar Niazi, *Aur Line Kat Gayee*, trans. Samuel Baid [Pakistan: 1987], chapter 9) in Sreedhar, ed., *Pakistan’s Bomb*, pp. 358–362.
7. “Dutch Government Report,” *Pakistan’s Bomb*, p. 135.
8. Weissman and Krosney, *The Islamic Bomb*, p. 201.
9. “Dutch Government Report,” *Pakistan’s Bomb*, p. 136.
10. *Ibid.*
11. Malik, *Dr. A.Q. Khan*, p. 75.
12. Weissman and Krosney, *The Islamic Bomb*, pp. 199–206.
13. For a detailed description of the challenges this created, see Munir Ahmad Khan, “How Pakistan Made Nuclear Fuel,” parts 1 and 2, *The Nation* (Lahore), February 7 and 10, 1998, *FBIS Report* no. FTS19980211000724 (posted February 11, 1998).
14. Ashok Kapur, *Pakistan’s Nuclear Development* (New York: Croom Helm, 1987), p. 205.
15. Weissman and Krosney, *The Islamic Bomb*, p. 198.
16. *Ibid.*, pp. 199–206. Khan confirmed the inverter story. A.Q. Khan, “Uranium Enrichment at Kahuta, A Decade of Experience,” *Dawn*, August 1, 1986, reprinted in Malik, *Dr. A.Q. Khan and the Islamic Bomb*, p. 96.
17. Khan, “Uranium Enrichment at Kahuta,” in Malik, *Dr. A.Q. Khan and the Islamic Bomb*, p. 96.
18. Weissman and Krosney, *The Islamic Bomb*, p. 206.
19. *Ibid.*, pp. 205–212.
20. *Ibid.*, p. 207; also Khan, “Uranium Enrichment at Kahuta,” in Malik, *Dr. A.Q. Khan and the Islamic Bomb*, p. 96.
21. Owen Bennett Jones quotes Khan as saying that he had sufficient highly enriched uranium by 1982, just 6 years after he returned to Pakistan. Jones, *Pakistan: Eye of the Storm* (New Haven, CT: Yale University Press, 2002), p. 201.
22. William J. Broad, David E. Sanger, and Raymond Bonner, “A Tale of Nuclear Proliferation,” *New York Times*, February 12, 2004.
23. “From Rogue Nuclear Programs, Web of Trails Leads to Pakistan,” *New York Times*, January 4, 2004.
24. Broad, Sanger, and Bonner, “A Tale of Nuclear Proliferation,” *New York Times*, February 12, 2004.
25. There is clearly a great deal of uncertainty over the meeting, with reporters using equivocating adverbs before descriptions of locations, dates, and names. Most accounts name Farouq, but some are more equivocal on Tahir and / or Mebus’s presence. See Stephen Findler, “Fresh Clues on Smuggling Network Could Lift Lid on Tehran’s Secret Nuclear Program,” *Financial Times*, March 12, 2005; Dafna Linzer, “Iran Was Offered Nuclear Parts,” *Washington Post*, February 27, 2005. The IAEA has confirmed the outlines of the story: Pierre Goldschmidt, IAEA Deputy Director General, “Statement to the Board of Governors,” March 1, 2005 <[www.iaea.org/NewsCenter/Statements/DDGs/2005/goldschmidt01032005.html](http://www.iaea.org/NewsCenter/Statements/DDGs/2005/goldschmidt01032005.html)> The Goldschmidt statement is no longer available on the IAEA website, though excerpts are available at <[www.iranwatch.org/international/IAEA/iaea-goldschmidt-statement-030105.htm](http://www.iranwatch.org/international/IAEA/iaea-goldschmidt-statement-030105.htm)> (accessed April 5, 2005) Mohamed Farouq should not be confused for Muhammad Farooq, a centrifuge expert at KRL, who was involved extensively with Khan’s nuclear smuggling. Kamran Khan, “Dr. Qadeer’s Future Still Uncertain,” *The News* (Islamabad), January 31, 2004.

26. "President Announces New Measures to Counter the Threat of WMD," Remarks by the President to the National Defense University, Washington, DC, February 11, 2004 <[www.whitehouse.gov/news/releases/2004/02/20040211-4.html](http://www.whitehouse.gov/news/releases/2004/02/20040211-4.html)>
27. Goldschmidt, "Statement to the Board of Governors," March 1, 2005.
28. Linzer, "Iran Was Offered Nuclear Parts."
29. Jack Boureston has said that Iran was able to receive "high-strength aluminium, maraging steel, electron beam welders, balancing machines, vacuum pumps, computer-numerically controlled machine tools, and flow-forming machines for both aluminium and maraging steel from Europe, as well as training for the use of the equipment." Boureston, "Fuel Cycle: Tracking the Technology," *Nuclear Engineering International*, September 30, 2004.
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SAUDI ARABIA IN THE  
TWENTY-FIRST CENTURY: A NEW  
SECURITY CALCULUS?

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Throughout much of 2003, 2004, and 2005 the international community watched in morbid fascination as Iran and the International Atomic Energy Agency (IAEA) waltzed through a halting, reluctant slow-dance, with each side alternatively pushing the other away in response to unwanted entreaties, only to then re-embrace in the halting partnership. Chaperoning the encounter are the European Community, acting as a supportive partner, with the United States and Israel providing a more darkly threatening partner as part of the encounter. The song is still playing, though it remains unclear whether each side will decide to stay until the end of the dance. Many interested parties await the outcome: the Israelis, the United States, and indeed the entire Middle East wait in rapt anticipation.

While the international community remains rightfully transfixed on the prospect of a nuclear-armed Iran, another regional concern now shimmers on the radar screens of observers watching the unfolding specter of nuclear proliferation in the Middle East. Periodic press reporting throughout 2003–2005 assert that Saudi Arabia is also seriously considering the acquisition of nuclear weapons as part of a general reexamination of the assumptions that have driven the Kingdom's quest for security over the last 50 years. Reporting on this issue in April 2005 indicated that the Saudis had begun talks with the International Atomic Energy Agency (IAEA) about the agency's "Small Quantities Protocol." As it has for other states, the protocol would allow the Saudis to admit the possession of allowable quantities of uranium and plutonium and provide requisite assurances that the material was not stored in a nuclear facility. Under the protocol, the material would not be subjected to routine IAEA inspections.<sup>1</sup>

The prospect of a nuclear-armed Saudi Arabia has been dismissed by many observers. If realized, however, it would represent a profoundly unwelcome development for regional security. The fact that the Saudis appear interested



in a systematic look at the Kingdom's security strategy is in many ways a healthy and welcome development. During the 1990s, the United States unsuccessfully sought to build a structured dialogue with the Kingdom to address long-term security strategy and the role that the Saudis might play in a broader regional framework. The Persian Gulf and Middle East have remained largely impervious to any efforts to promote a more integrated framework of regional security. Indeed, today's system of regional security can be best described simply as American hegemony. In addition to American predominance, there are many reasons why the region's states have not organized themselves in an overarching regional security construct: continued interstate disputes, lack of a common threat perception, and simple inertia have to be at the top of any list. Outside halfhearted, but well-intentioned efforts by the Sultan of Oman, none of the region's states have assumed the mantle of leading the region toward military integration and collective security.<sup>2</sup>

Perhaps times are changing. Saudi Foreign Minister Saud Al-Faisal told an audience in Bahrain in December 2004 that a new regional security framework needed to be constructed around the following four pillars: (1) a strong, vibrant Gulf Cooperation Council (GCC) in which the members are integrated economically, politically, and militarily; (2) Yemen should be drawn into the regional framework; (3) a stable and unified Iraq; and (4) the inclusion of Iran in arrangements to maintain security.<sup>3</sup> Saud Al-Faisal noted that the security of the region should not depend on the United States, but should instead come from guarantees "... provided by the collective will of the international community through a unanimous declaration by the Security Council guaranteeing the sovereignty, independence, and territorial integrity of all the countries of the Gulf and promising to act forcefully against any external threats."<sup>4</sup> Whether or not such soaring rhetoric will be turned into meaningful action remains to be seen, but the past actions of the GCC and the Saudis provide little cause for optimism. Indeed, the speech was followed by a GCC summit notable for the Saudis' lack of high-level participation due to their reported unhappiness with Bahrain's free-trade agreement with the United States. The GCC, it seems, is the same as it ever was.

With the region's largest military boasting a large percentage of the most modern U.S. defense equipment sold to foreign customers, it seems logical that Saudi Arabia would seek to insert itself in a leadership role to work with the region's smaller and less populous states to fashion a more coherent security framework. Saud Al-Faisal's words notwithstanding, the Saudis' lack of enthusiasm for regional collective security has only been confirmed in persistent press reporting, which indicates that they are instead considering a route taken by other regional states: the acquisition of weapons of mass destruction (WMD) or nuclear weapons. One particularly interesting report indicates Saudi interest in three options for ensuring the Kingdom's security: (1) seeking the declaration of states in the region to forsake WMD, thus creating a WMD free zone; (2) acquiring nuclear weapons; and (3) aligning themselves with an existing nuclear power and placing themselves under that power's nuclear umbrella.<sup>5</sup>

## A CHANGING SECURITY ENVIRONMENT

The Kingdom's review of these issues—as evidenced by Saudi Al-Faisal's December 2004 speech and the related press reports over the previous 36 months—reflects the House of Saud's obvious reactions to fundamental changes in the regional security environment. While the Persian Gulf and wider Middle East has always been noted by strategists for their chronic instability, events over the last several years have made a bad situation worse. The Saudis, it seems, have noticed these changes and are taking stock.

Changes to the region's security environment flow from a variety of interrelated forces. First came the September 11 attacks, and the unwelcome attention (at least from the Saudi perspective) in the American press about alleged Saudi financial support for al Qaeda. At the same time, stories surfaced of Saudi sponsorship of religious extremism through the funding of *madrassas* in Pakistan and elsewhere preaching a “Wahhabi” fundamentalist version of Islam to receptive Muslim audiences. The situation seemed particularly acute in Pakistan, where Saudi financial support for the Madrassas and the Jihadists during the war in Afghanistan morphed into the Taliban, which eventually took over Afghanistan and provided al Qaeda with a geographic base to build an infrastructure to support terrorist operations around the world.<sup>6</sup> While the press and the public justifiably focused on the fact that 15 out of the 19 attackers on September 11 came from Saudi Arabia, this focus alone might not have been so serious but for the wider context of the U.S.-Saudi relationship. That wider context was framed by a decade of drift in the relationship, highlighted by the obvious discomfort of the House of Saud with the continued presence of U.S. operational forces operating out of Prince Sultan Air Base. With the presence of these forces seized upon by emerging domestic political forces in the Kingdom, the House of Saud found it could not quietly conduct business with the Americans as it had in the past. Moreover, despite various critics pointing to an alleged cozy relationship between the Bush family and the House of Saud, it seemed unclear after 9/11 whether the Bush administration was prepared to continue conducting the relationship on a “business as usual” basis. These strains converged to undermine the U.S.-Saudi relationship, although just how seriously remains to be seen.<sup>7</sup>

The March 2003 U.S. invasion of Iraq and the declaration by President Bush that one of the principal objectives of using force in Iraq is somehow to transform the region into more transparent societies with fundamentally different political and economic systems portends fundamental change that is anathema to the founding principles of the Kingdom. Rumors accompanied the Iraq invasion that the United States also sought to establish a military partnership with a reconfigured Iraq that would act as a potential alternative to the strained relationship with the House of Saud. Iraq and its 112 billion barrels of oil reserves could, some argued, replace Saudi Arabia as the United States' leading strategically vital partner in the region. The United States is reportedly developing a number of military facilities in Iraq that could serve as operational hubs similar to the facilities now in use in Kuwait, Bahrain,

Qatar, the United Arab Emirates, and Oman.<sup>8</sup> On the political front, Bush administration policy initiatives being advanced under the rubric of the Middle East Partnership Initiative (MEPI) seek to create new governmental, political, and economic institutions that will embrace transparency and accountability. The Saudis have not signed up for any of the MEPI programs and have not embraced the Bush administration's broader calls to transform the region. Perhaps not surprisingly, forcible regime change in Baghdad has not exactly been embraced in Riyadh. Indeed, a new Shiite government in Baghdad represents a potential threat to the Kingdom. While important in and of themselves, the limited municipal elections in February 2005 did not represent a rush to fundamentally alter the political status quo in the Kingdom in ways that meet the overarching U.S. goal of advancing the cause of freedom and democracy in the region.

Unfolding revelations by the IAEA that Iran is engaged in a comprehensive and systematic program to develop fissile material outside of international oversight had been long suspected by many. There appears little doubt in some quarters that Iran intends to develop its own nuclear weapons, going the route of other regional states—Pakistan, Israel, and India. This program, in conjunction with its development of long-range missile capabilities, provides Tehran with the means to hold a variety of regional capitals at risk, opening the door to a coercive political and military framework designed to support Tehran's regional objectives. The prospect of a nuclear-armed Iran with long-range missiles promises to establish a new strategic factor of concern for states throughout the region seeking to ensure their own security.

Last, but not least, is an emerging and complicated domestic political landscape within the Kingdom that is forcing the ruling family to play to its variegated "publics" at the same time it is waging an increasingly active war against an entrenched militant infrastructure. The impact of internal politics and the battle against al Qaeda are both factors that are difficult to gauge in the context of the House of Saud's decision-making process on how to ensure its long-term security. Western observers are often quick to dismiss Saudi domestic politics *per se*, which are indeed dominated by the House of Saud. But the House of Saud governs by consensus and has done so successfully since the inception of the Kingdom. The process of maintaining consensus—a process that is largely opaque to all but the best-informed observers—has become increasingly complicated for the Saudi leadership over the last decade. The impact of these domestic complications on security issues is difficult to discern, but can and should be subjected to some informed speculation by governments that are interested in trying to forestall the Saudis from acquiring new and threatening military capabilities—be they long-range missiles or nuclear weapons.

In short, strategic, regional and domestic factors are all combining and/or overlapping to create a profound security dilemma both for the regime and the nation. Seen within this framework, it is not surprising that the Saudis would be giving serious thought on the best and most appropriate way to ensure the security of the Kingdom in the new century.

## “SMOKE” AND FIRE?

Growing Saudi concern over its security dilemma can be discerned in the wafts of smoke surrounding this issue, which started appearing in the fall of 2003, with further wisps throughout the winter and spring of 2004. Following the September 18, 2003 story in *The Guardian* reporting on the different options under consideration to ensure Saudi security, the London-based Saudi daily *Al Sharq al-Awsat* published an editorial on October 8 titled “Yes, We Fear Iran’s Uranium.” The editorial, penned by editor Abd Al-Rahman Al-Rashad, dismissed the idea that the Iranian nuclear program was directed at threats from the United States and Israel: “The Iranians are enriching uranium to produce nuclear weapons aimed, essentially, at its neighbors, mainly Pakistan. However, the danger encompasses the other neighboring countries as well, such as Saudi Arabia, Oman, Iraq, Afghanistan, Turkmenistan and Azerbaijan.”<sup>9</sup> The editorial further opined that

We fear Iran’s intentions in producing nuclear weapons because we understand very well, given the history of conflicts in the region, that Iran will push us toward one of the two tragedies: The simpler tragedy is that Iran will ignite the spark of the nuclear arms race in our poverty-stricken region, whose governments will begin to purchase these ecologically dangerous toys at an unbelievably high price. The second tragedy is that the arms race will result in putting these insane weapons to use.”<sup>10</sup>

Following the *Al Sharq al-Awsat* editorial, UPI reported in October 2003 that Saudi Arabia and Pakistan had concluded a “secret agreement on nuclear cooperation” following a visit by Crown Prince Abdullah to Pakistan.<sup>11</sup> According to the report, Abdullah and Pakistani leader President Musharraf agreed to exchange Saudi oil for Pakistani nuclear “know how and expertise.”<sup>12</sup> The leaders also reportedly discussed the possibility of Pakistani troops deploying to the Kingdom, presumably to provide added assurance against external threats. Other reports went further, suggesting that agreement was reached during these meetings to station Pakistani nuclear weapons on Saudi soil.<sup>13</sup> During meetings in Islamabad in October 4, 2004, Pakistani and Saudi delegations were rumored to have discussed “ways to undertake a joint venture in the production of arms and ammunition, armored fighting vehicles, missiles and tanks.”<sup>14</sup> All recent activity seems consistent with previous Saudi support for an interest in Pakistan’s nuclear and missile programs, consisting of alleged Saudi royal family representation at a Pakistani ballistic missile test in May 2002 and a visit by Saudi Minister of Defense and Aviation Prince Sultan in May 1999 to the Pakistani uranium enrichment facility at Kahuta.<sup>15</sup> Some allege that Saudi Arabia provided Pakistan with critical funding and other support to help Pakistan absorb the substantial costs of building its nuclear capability.<sup>16</sup>

Further commentaries have emerged highlighting the Saudi–Pakistani connection, as well as a rumored Sino–Saudi connection, stemming in part from the \$3–3.5 billion Saudi acquisition of 40–50 Chinese CSS-2 missiles in

the late 1980s. Given China's past history of involvement with the Pakistani missile and nuclear programs, it is argued, a Sino-Saudi-Pakistani connection becomes even more plausible.<sup>17</sup> A further twist on this line of reasoning has been offered, noting that Saudi Arabia is now China's primary source of imported oil—a relationship that will only become more pronounced over the next 20 years, assuming the International Energy Information Administration's (EIA) projections provide an analytically sound baseline.<sup>18</sup> The president and chief executive of Saudi Aramco, Abdallah Jumah, in fact recently indicated that the world's largest oil company would work hard in the years ahead to increase exports to China.<sup>19</sup> The EIA projects that China may be importing up to 10 million barrels of oil per day by 2020, with most of this coming from Saudi Arabia and other Gulf producers, a significant increase from today's levels of approximately 500,000 barrels per day from Aramco.<sup>20</sup> These factors, in combination with Saudi Arabia's dangerous neighborhood, might combine to make a more robust military Sino-Saudi security relationship attractive to the Al Saud leadership in the years ahead.<sup>21</sup> Some analysts go further, suggesting that China aspires to replace the United States as the guarantor of Gulf security and wants to craft a strategic partnership with the Saudis as part of such a plan.<sup>22</sup>

So what is to be made of this reporting? Which of these issues constitute just smoke, and which are actual fires? Sorting through this flurry of analysis provides national security academics and professionals with a useful vehicle to analyze the Kingdom's security predicament in the new century. The task is admittedly difficult. There is no open public debate within the Kingdom about Saudi Arabia's security strategy, and senior House of Saud princes rarely talk about these issues in public except to repeat shop-worn statements of policy. The opaqueness of the issue makes it difficult for analysts to engage in anything but informed speculation when writing on this issue. Discerning and deducing Saudi signals and intentions is an at best haphazard process, but must be attempted nonetheless if the United States and the international community are to address what may be the next, and arguably most crucial, proliferation challenge in the region. As part of this process, the Kingdom's search for security needs to be framed in a broader context, which can guide analysts and policymakers to understand the interrelationships between various Saudi motivations and interests. Constructing such an analytical framework can then inform strategy and policy aimed at addressing the potential issue of Saudi proliferation.

The public Saudi position on proliferation and nuclear weapons is clear. High-ranking officials in the Kingdom have repeatedly renounced interest in acquiring nuclear weapons, pointing to Saudi Arabia's accession to the Nuclear Non-proliferation Treaty (NPT) in October 1988 and its consistent position calling for the creation of a WMD-free zone in the Middle East. A press release posted on the Saudi American Embassy website summarily states: "Reports that Saudi Arabia is considering acquiring nuclear weapons are baseless and totally false. Saudi Arabia has long advocated for a Middle East that is free of nuclear, biological and chemical weapons and there is no

basis to change current policies.”<sup>23</sup> Deciding to acquire nuclear weapons would clearly place Saudi Arabia outside its NPT commitments. Recent Saudi statements confirm these positions. Saud Al-Faisal flatly denied that the Kingdom would develop nuclear weapons in response to Iran acquiring such a capability, stating, “We do not believe that it gives any country security to build nuclear weapons.”<sup>24</sup> Such statements have not ended the speculation. In fact, they seem at odds with indications that the Saudis have expressed interest in the IAEA small quantities protocol, which would free the Saudis from reporting up to 10 tons of natural uranium, 20 tons of depleted uranium (depending on enrichment levels) and 2.2 pounds of plutonium.

### **Looming CSS-2 Replacement Decision**

The Saudis face a near-term “wedge” decision into the proliferation issue: whether to replace and/or upgrade CSS-2/DF-2 missiles bought from the Chinese in the late 1980s. The missiles are believed to number between 50 and 60 with conventional warheads, plus a dozen or so transporter erector launchers that are deployed at two sites with four to six launch pads per site. The Saudis purchased the missiles in the aftermath of the war of the cities in the Iran–Iraq war, when the world observed the protracted strategic bombardment of both Tehran and Baghdad. While of limited military utility, these attacks had a profound psychological impact on the leadership of both states. The missile purchase followed a decision by the United States not to sell the Kingdom surface-to-surface missiles. In going to the Chinese, the Kingdom demonstrated its interest in diversifying its arms sales relationships, also evidenced in the Saudi purchase of advanced Tornado aircraft from the British after repeated difficulties in acquiring F-15s from the United States in the 1980s. But while the Tornado purchase made sense in terms of Saudi security requirements (given the preeminent role of the Royal Saudi Air Force in defending the Kingdom), the link between the CSS-2 and legitimate military requirements always seemed more tenuous. With a 2,650 kilometer range and a reported circular error probable of nearly a kilometer, it was always difficult to identify the military utility of such a conventionally armed missile. This led various commentators to suggest that the missiles were meant to carry nuclear payloads.

Whatever the reason for the purchase, the Saudis face a looming decision on whether to replace this aging system. The Chinese are fielding a second generation, solid propellant missile (DF-21A), which means that training and support for the liquid-fueled CSS-2 will become increasingly more difficult and expensive.<sup>25</sup> The Saudis thus face a decision on whether to allow the CSS-2 lapse into obsolescence or replace it with a next-generation system. The Saudis face a number of different options: (1) phase out the CSS-2 from the force structure and abandon the long-range missile program; (2) upgrade to a new missile and conventional warhead; (3) upgrade to a new missile with a nuclear warhead; and (4) opt for a new missile with an unconventional warhead.

Choosing among these options forces the Saudis to confront the Kingdom's increasingly complicated security dilemma—the heart of which is arguably the state of the U.S.-Saudi partnership.

### **A Weakened U.S.-Saudi Partnership**

The relationship with the United States has remained at the heart of Saudi Arabia's quest for security since the Kingdom's founder, Ibn Abdul Aziz al Saud, met with President Franklin Roosevelt in the Great Bitter Lake in February 1945. That meeting placed a political face on the growing commercial relationship (dating to an oil concession granted to Standard Oil of California in 1932) and Saudi Arabia's gradual emergence as the dominant player in the world's oil markets.

As it evolved over the second half of the twentieth century, the U.S.-Saudi partnership became built around a number of critical political, economic, and military pillars. Some U.S. companies—the ARAMCO partners—would exploit Saudi oil reserves and build out the Saudi energy infrastructure. At the political level, the United States would regard the security of the Kingdom as a “vital” interest—a commitment conveyed to the House of Saud on a number of occasions in the post-World War II era—and would use force and / or deploy forces to the Kingdom if necessary on those occasions when the House of Saud and the U.S. political leadership agreed that the situation warranted. The United States would seek to develop Saudi internal and external security capabilities through sales of defense equipment and training, supported by the presence of advisory elements to help manage the complicated process of program management and day-to-day training activities. In return, the Saudis would use their influence as the dominant supplier within Organization of Petroleum Exporting Countries (OPEC) and world oil markets to ensure that crude reached the market in a relatively predictable stream. The Saudis would generally support U.S. interests in the region, such as the Middle East Peace process, though it would not take the lead publicly in supporting these interests. And the United States would not push the Kingdom to implement substantial internal political or economic reform, leaving the House of Saud to fill its part of the tacit bargain.

All the central elements of this partnership now appear in question. While one hears various high-level Bush administration officials make the usual supportive diplomatic statements about the U.S.-Saudi relationship, there is little doubt that various parts of the Bush Administration's national security bureaucracy—mostly located in the Defense Department—are now openly questioning the value of the Saudi partnership. Moreover, the constituency in the State Department's Near East Asia Bureau that provided important internal bureaucratic support for the relationship has eroded and been gradually subsumed by the bureaucratic constituency pushing the Arab-Israeli peace process.<sup>26</sup> Saudi Arabia now has few friends in Congress, and protection of Saudi territorial integrity and the maintenance of the House of Saud are no longer routinely described as it was in the past—as a “vital” U.S. interest.

To be sure, the U.S.-Saudi relationship has always been a marriage of partners that could not be more culturally and historically dissimilar. But both parties made a conscious decision to ignore these incongruencies and work around them to build a security partnership that has actually proven remarkably durable.<sup>27</sup> The partnership arguably reached its nadir in the 1980s when, backed by the CIA and the White House, both countries embarked on the war in Afghanistan and various other adventures around the globe to combat an illusory communist menace. Since then, however, the partnership has drifted into decline as the United States during the 1990s increasingly focused on solving the Arab-Israeli dispute and containing Iraq and Iran. This subjected the House of Saud to growing domestic political pressures stemming from the prolonged presence of operational forces in the Kingdom.

The September 11 attacks unleashed a torrent of unflattering stories about the Kingdom's alleged support for terrorists around the globe, stemming partly from the fact that most of the hijackers came from Saudi Arabia. But such stories also grew from the apparently unregulated financial support for charities suspected of links to al Qaeda. The formulation of these stories identifies the Saudis as the source of the extremist Wahhabi religious ideology, which has been aggressively exported throughout the world with active Saudi political and financial support. Thus, the Saudis, as supporters of extremism and terrorism, are now regarded as the enemy in the global war on terror.<sup>28</sup> The constant battering of the Saudis in the press has taken its toll on those within the Kingdom's leadership that would continue to support a strong U.S.-Saudi strategic partnership.

The Bush Administration's repeated and forceful enunciations of a strategy to transform the Middle East into a series of democratic states place additional pressures on the deteriorating Saudi-United States partnership.<sup>29</sup> Indeed, one of the implicit understandings of the partnership throughout the post-World War II era was that the United States would not overtly push the House of Saud to institute political and economic reforms. Clearly this understanding is no longer operative, and the Bush administration appears determined to actively push all countries in the region toward fundamental political and economic reforms. This places the absolutist monarchy on a long-term collision course with the United States.

## A DETERIORATING REGIONAL ENVIRONMENT

At the same time the U.S.-Saudi relationship has been drawn into question, regional developments have taken a dramatic turn for the worse—at least from the Saudi perspective. While the death of Yasir Arafat and the emergence of the democratically elected Abas is a welcome step, the last 4 years has seen the emergence of militant hard liners on both the Israeli and Palestinian sides that appear uninterested in reconciliation and accommodation. The sway of these groups, in combination with the United States' de facto abandonment of its policy of acting as an "honest broker" in the peace



process, has created a seemingly permanent landscape of conflict and bloodshed that feeds a radicalizing (and anti-U.S.) mass psychology that regimes throughout the region must deal with in their internal and foreign policies. This is as true in Saudi Arabia as it is in states throughout the region.

The U.S. invasion of Iraq represents another building block on this already troubled regional landscape. However much the Saudis may have disliked Saddam Hussein, the prospect of a Shia-led confederated pseudo-democracy in Iraq (a best-case scenario) can hardly be any less palatable in Riyadh. The Saudis would face the prospect of a potentially powerful neighbor representing a profound political and religious threat to the Kingdom. A politically successful Iraq that will inevitably be administered by the Shia majority would place the Saudi monarchy in a difficult position politically, putting them under pressure to speed up their own political reform process. The emergence of a Shia-dominated Iraq also promises to exacerbate the Saudi regime's strained relations with Shias throughout the region, but particularly in the Kingdom's Eastern Provinces.

Variations on other scenario in Iraq are hardly much better for the Saudis. The potential splintering of the country into a series of fiefdoms defined along ethnic, tribal, and sectarian lines creates the prospect of one massive headache along Riyadh's unpoliceable northern frontier. The prospect of an Iraq consumed with ethnic, tribal, and sectarian warfare that also provides a base of operations for money, men, and materiel that can be funneled into al Qaeda's infrastructure in the Kingdom is another facet of the potential negative outcome of regime change in Baghdad. In sum, it's difficult to see an outcome in Iraq that will reduce Saudi Arabia's threat perception and enhance the Kingdom's sense of security.

But if the day-to-day violent spiral in Iraq is cause for concern in Riyadh, Iran's apparently inexorable march toward developing its own nuclear capability represents an even more serious challenge. Iran's intentions seem clear to most observers. It has built a redundant and hardened nuclear infrastructure that is all but impervious to an Osirak-type attack, and its hard-line religious leadership has repeatedly stated it will neither abandon its nuclear program nor place it under meaningful international oversight. When placed in the context of Iran's mature and apparently successful long-range missile program, Iran appears positioned to eventually become the world's next nuclear power, with the ability to deliver a nuclear weapon out to a range of 1,250 miles. Iran's August 2004 test of an enhanced Shehab-3 medium-range missile capable of carrying a 2,250-pound warhead confirmed Tehran's capability to reach targets throughout the region, including Riyadh.<sup>30</sup> Iranian officials have repeatedly claimed that its nuclear program is intended to supply fuel for reactors that can generate up to 7,000 megawatts of electricity by 2020, when Iran's oil reserves will start to decline.

It is unlikely that the House of Saud would find any solace in the hollow-sounding claims by Iran's leadership that it is only developing nuclear power for peaceful purposes.

## POLITICAL REFORM AND INTERNAL SECURITY

The May 12, 2003 attacks in Riyadh on Western housing compounds and the ensuing violence over the next 2 years left no doubt that the House of Saud had finally awakened to the serious threat posed by al Qaeda. The extent of the al Qaeda network in the Kingdom, which apparently exists throughout the country from Riyadh, to Medina, to Qasim province as well as the Eastern Provinces, serves as a cruel reminder that al Qaeda continues to pursue one of its core missions as articulated by Osama bin Laden: to destabilize the Kingdom and remove the apostate House of Saud from power. The emergence of an activist militant infrastructure is a complicating factor for the regime as it contemplates growing uncertainties in the domestic political environment.

The fight against al Qaeda comes as the royal family is engaged in delicate negotiations with a variety of different stakeholders inside the Kingdom to determine the nature and pace of internal political and economic reform. Petitioners pushing a reform agenda met with Crown Prince Abdullah in January 2003 in a meeting that was widely publicized, and a copy of the petition was released to the press.<sup>31</sup> These petitioners called for a constitutional system of government with an elected legislature, an empowered and separate judiciary, and an acknowledgment by the government of a variety of different rights, including free speech and freedom to form associations, and an acknowledgement of the expanded role women could play in Saudi society. While attention within the Kingdom has undoubtedly been diverted by the internal security situation over the last 24 months, the issue of reform remains very much in play.

### Domestic Politics and National Defense

The complexities of the Saudi domestic political environment and the challenges facing Crown Prince Abdullah and the Saudi royal family cannot be underestimated as they mobilize the fight against al Qaeda while simultaneously preserving consensus within the royal family and negotiating among the important players on the political landscape to nudge the Kingdom toward meaningful reform.

Crown Prince Abdullah has cautiously initiated a domestic political process that seeks to address the many difficult issues facing the Kingdom: the role of women in society, a lack of economic diversification, the role of the religious establishment in governance and reform, and the Kingdom's role within the region and its relationship with outside powers. Internal discussions over the nation's external security issues are absent from the "national dialogue" forums held over the last 2 years. Interestingly, however, some of the "petitions" presented to Abdullah by so-called reformers have linked the necessity of internal reform with the changing external environment. In February 2003, petitioners presented Abdullah with a "National Reform Document"

that complimented the Crown Prince for stimulating an internal debate: "It is a commendable course that generated support among a score of your brothers and sons among the citizens, who are worried about the dangers facing their country since September 11, 2001. For instance, international and regional conditions, which its heart our country occupies, are threatened with military action, intervention in internal affairs and redrawing the whole regional map." The petitioners further stated their solidarity with the ruling family "in facing all dangers which threaten our country's present and future. And they see that those dangers require serious reforms to strengthen relations between the leadership and community."<sup>32</sup> Another related group of pro-reform petitioners reiterated their concern about the growing terrorist threat to the Kingdom in their September 24, 2003 letter to Abdullah called for a rejection of "all kinds of extremism and violence and terrorism" in the Kingdom.<sup>33</sup> It is clear from these and other passages in the petitions that certain parts of the Saudi domestic political Diaspora recognize the link between security (both internal and external) and governmental reform and want the issue openly discussed as part of the process of political reform.

The process of domestic political reform will place security issues as part of a broader domestic political bargaining framework as the House of Saud navigates between competing constituencies that include rumored internal schisms within the royal family itself. And while the regime may seek to limit treatment of an issue that has always been limited to dialogue between senior members of the House of Saud, it seems clear that the outcome of the struggle for domestic political reform—or retrenchment—could have a profound impact on the Kingdom's approach to security strategy.

While the removal of U.S. operational forces from Prince Sultan Air Base removed a domestic political irritant for the regime, broader treatment of the status of the U.S. relationship must logically appear at the top of any list of important domestic political issues. While Saudi Arabia has relied on U.S. protection for most of the twentieth century due to a conscious commitment by the royal family, it is unclear that the royal family retains consensus on this issue. Moreover, it is almost certainly the case that powerful domestic political constituencies do not want to continue the U.S.-Saudi relationship on the same basis. Public opinion forms a supporting backdrop on this issue, in which a variety of different opinion polls show overwhelming disapproval of U.S. policies and more generally of the United States. The religious establishment and dissident clerics seem united in this perspective. Consistent with doctrine of *Tawhid*, these actors are said to endorse the view that the United States must be ejected from the region as an apostate, infidel regime that is engaged in a war on Islam. There is much common ground here between al Qaeda's objectives and those of certain elements of the religious establishment. There are also rumored splits in the family on this issue, pitting Interior Minister Prince Nayef and others against Crown Prince Abdullah.<sup>34</sup>

Recent pronouncements by a collection of dissident clerics calling for the ejection of the United States from the region bring an added layer of

complexity to the domestic political landscape.<sup>35</sup> In November 2004, these clerics released a *fatwa* urging support for the jihadist forces in Iraq battling the U.S. occupation. The *fatwa* stated that resistance to the U.S. occupation in Iraq was legitimate: “. . . resistance is a legitimate right. In fact it is a religious duty.”<sup>36</sup> Several prominent Sunni scholars signed the *fatwa*, including Awad Al Qarni, Salman Al Awdah, and Safar Al Hawali. This *fatwa* followed a May 2004 pronouncement by Saudi dissident cleric, Nasser bin Hamed Al Fahad, that provided al Qaeda with a legal justification for using WMD, stating that “If the nonbelievers are not going to be pushed away from Muslims unless weapons like WMD are used then it legal to use such weapons to kill them all and destroy their crops and offspring.”<sup>37</sup>

These clerics represent new and powerful actors in the Kingdom’s domestic politics, and it is becoming increasingly difficult for the regime to simply throw these dissident clerics into jail, the regime’s preferred course of action over the last decade. Two of the main clerics, Saffar al-Hawali and Salman Al Audah have carved out a role for themselves at the national level. The clerics are said to represent certain strands of thought that resonate within the state-sponsored religious establishment and broader conservative elements in Saudi society.<sup>38</sup> While these clerics differ in terms of their support for the regime, they are more united in their pronounced xenophobic message, which is both strongly anti-Shia and anti-Western. If the clerics are not united on the outlines of domestic political reform, they are united in opposition both to the prospect of a Shia-dominated government in Baghdad and the United States’ presence in the region, which they believe is aiding and abetting the ascent of the Shias on their doorstep. The House of Saud eventually must address the contradictions between its partnership with the United States and the arguments for ending the relationship being advanced by a powerful domestic political constituency that has been a central pillar of the regime’s governing structure. The confluence of positions between the dissident clerics and the religious establishment restricts the House of Saud’s bargaining room on domestic and international issues, since the regime’s legitimacy stems from its historic pledge to uphold the conservative tenets of Wahhabi Islam in coordination with the religious establishment.

The shrinking domestic political maneuvering room may be playing a role in the caution being shown by the Saudis in placing new military orders with the United States, with no major arms sales since the 1997 purchase of F-15 fighter aircraft. The deteriorated U.S.-Saudi political partnership cannot but lead to the reemergence of the doubts frequently voiced by the Saudi leadership during the early 1980s, calling into question the reliability of the United States as a supplier of advanced weaponry. The issue of U.S. reliability becomes critical given the dependence of the Saudi Arabian Armed Forces (SAAF) on the continuous flow of spare parts and logistical support from the United States and the accompanying phalanx of U.S. contractors. Any disruption in the flow of spare parts and training from the United States will quickly lead to a deterioration of the Kingdom’s ability to defend itself with conventional military force.

The regime's dependence on the U.S.-supported and supplied Saudi National Guard (SANG) constitutes another difficult issue. The SANG's primary missions of providing regime security and protection of the oil fields may be even more important to the regime's survival than combat capabilities of the SAAF. Altering the U.S. security partnership in any way that leads to a deterioration in the conventional military capabilities provided by the Ministry of Defense and Aviation (MODA) and Office of Le Program Monage for Le Saudi Arabia National Guard (OPM-SANG) organizations only increases Saudi Arabia's vulnerability to external and internal threats, making asymmetric capabilities that much more cost effective as a potential tool to provide security.

House of Saud decision-making on issues related to external defense and national security traditionally have been exercised by a relatively few actors in the ruling family. It remains unclear how the senior leadership will address these new domestic political pressures and the plethora of emerging actors from across the political spectrum. But all these factors mitigate against a business-as-usual approach in the Saudi quest for security and suggest a new and more complicated set of factors that will shape the Kingdom's security strategy in the years ahead.

### **Policy Implications**

The opposition of the United States to WMD proliferation is unequivocal, and a decision to proliferate by Saudi Arabia obviously would have disastrous consequences for the U.S.-Saudi partnership and the security of the wider region. The critical question for policymakers and the international community must be to identify the instruments of national power that can usefully influence the House of Saud's decision-making calculus to prevent a decision to proliferate. At the outset of considering how to approach the issue, it is important that U.S. experts recognize a salient but vital issue: openly acknowledging the gaps in knowledge about the motivations and intentions of the members of the senior leadership (and other important domestic actors) that will play a role in shaping Saudi Arabia's approach to protecting the Kingdom. The difficulties of penetrating what is largely an opaque decision-making environment cannot be underestimated as the United States thinks about fashioning an effective counterproliferation policy. Nevertheless, a few obvious steps suggest themselves as starting point in shaping such a policy:

- Any approach must address both the internal and external security environments within the Kingdom to reduce its sense of insecurity.
- Coercive diplomacy and rhetoric directed at Saudi Arabia is likely to backfire, providing further ammunition to internal actors calling for a reduced U.S.-Saudi security partnership. Instead, the United States should quietly assist the regime's internal battle against al Qaeda, which can help provide the House of Saudi with the space to manage the process of internal political evolution while simultaneously battling the militants.

- Successfully forestalling Iranian acquisition of fissile material that could be used for nuclear weapons is obviously a central issue affecting the security of all regional states, including Saudi Arabia.
- Successful transition to a democratic Iraq must be carefully managed. The transition should include a no WMD pledge from the Iraqi regime as a confidence building measure for other regional states.

Placing the U.S.-Saudi partnership on a new footing, based on a realistic appraisal of the interests of each party, could see a healthier, long-term relationship emerge. As part of a partnership, the United States should engage the House of Saud in sustained dialogue on proliferation and security issues. Such a dialogue might help ease security concerns of the regime as one element in an integrated approach to discourage proliferation.

## CONCLUSION

Saudi Arabia has its own particular nuances that on some levels make it different from the other proliferation cases of the modern era: North Korea, Iran, Libya, Syria, and Iraq. These nuances stem from a variety of factors: the changed context of the U.S.-Saudi security relationship, a highly unstable regional security environment that could quickly deteriorate due to events in Iraq and Iran that are leading to a sense of insecurity in Riyadh, or an unfolding process of domestic political evolution that is making it more difficult for the House of Saud to govern by its traditional process of maintaining consensus. An appreciation for these nuances is central to crafting a mosaic of policy initiatives at the strategic, operational, and tactical levels. Integrating these levels, as opposed to a piecemeal-uncoordinated approach, offers the best chance of success and forestalling a decision by Saudi Arabia to acquire new unconventional capabilities.

## NOTES

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## SAUDI ARABIA: THE NUCLEAR CONUNDRUM

*Glen M. Segell*

### INTRODUCTION

Rumors that Saudi Arabia has acquired or is intending to acquire nuclear weapons pose a conundrum. Clearly, Saudi Arabia possesses latent nuclear capability through its nuclear energy program.<sup>1</sup> Approaching this conundrum through the traditional route of denying a rogue state capability is redundant because the Saudis can afford to procure a weapon off-the-shelf and, thus, do not necessarily need to engage in a protracted indigenous nuclear weapon program. However, no solid evidence has yet appeared that Saudi Arabia has acquired nuclear weapons.<sup>2</sup> To the best knowledge of Western intelligence, Saudi Arabia has not been a nuclear-armed state since its accession to the Nuclear Non-Proliferation Treaty (NPT) on October 3, 1988.<sup>3</sup> Saudi Arabia is also a proponent of a Middle East Nuclear Free Zone and is actively involved in the NPT 2005 Review Conference.<sup>4</sup> Moreover, the Saudis have been good to the West. They used their surplus oil capacity to break the Organization of the Petroleum Exporting Countries (OPEC) embargo in 1974, during the protracted Iran–Iraq war (1980–1988), during the Gulf War (1990–1991) to make up for the loss of Iraqi and Kuwait oil, and, most recently, in September, 2001 by sending 9 million barrels of oil to the United States over a period of two weeks to stabilize the financial markets against inflation. Despite this act, in 2002, the Defense Policy Board, which advises the Pentagon, named Saudi Arabia as the key element in the spread of terrorism from the Arab world, saying that “it is central to the self-destruction of the Arab world and the chief vector of the Arab crisis and its outwardly directed aggression.”<sup>5</sup>

Unsubstantiated rumors and hesitancy aggravate the conundrum since it is well known that Saudi Arabia has acquired delivery systems for nuclear weapons, such as CSS-2 missiles from China and F-15 aircraft from the United States.<sup>6</sup> Furthering the conundrum are rumors that Saudi Arabia was implicated in the funding of Pakistan’s nuclear program and the proliferation activities of Dr. Abdul Qadeer Khan, the former head of the Pakistani nuclear

weapons program.<sup>7</sup> Piecing together these rumors shows that Saudi Arabia could rapidly become a nuclear weapon state should either domestic or external factors, in the perception of Saudi rulers, necessitate such action.<sup>8</sup> It follows, then, that the conundrum is multifaceted for the West on whether Saudi Arabia has nuclear weapons, how to handle such a situation if it does, and how to prevent Saudi Arabia from obtaining nuclear weapons if it does not, and, also, for Saudi Arabia, the key question is whether or not to acquire nuclear weapons if it has not yet done so.

## SAUDI MOTIVES

Saudi Arabia could decide to go nuclear based on one of numerous motives. The most likely motive would be a deteriorating political and military situation throughout the Middle East. Clearly, arms control anywhere, including in the Middle East, is dependent upon the longevity of state leadership and political systems. A change in leadership either way in any state could change the status quo. Consequently, deliberations on state leadership are at the forefront of arms control initiatives. To place the Saudi nuclear conundrum in perspective of regional acceptance of arms control agreements is also to note that a nuclear option may be a response to other states' moves toward violating treaties. Such treaties reflect the notion of biological and chemical weapons as being the poor-man's option to nuclear weapons.<sup>9</sup> For example, Iran, Iraq, Kuwait, Oman, Qatar, and Yemen are parties to the Biological Weapons Convention (BWC), yet Iran, Iraq, and Yemen have contemplated violating or actually violated the Convention.<sup>10</sup>

A Saudi decision to go nuclear would be closely linked to its geopolitical location. Saudi Arabia sits close to the Indian-Pakistani conflict in Asia and is implicated in the rift in the Islamic world between the Shia and Sunni sects. Arguably, Asian nuclear instability promulgated Middle Eastern nuclear instability with the Pakistani nuclear tests of 1998, the creation of the "Islamic Bomb."<sup>11</sup> The bomb's existence generates a psychological strength to the Muslim Middle East that highlights how risks have increased in intensity.<sup>12</sup> The existence of such risks is heightened given that Saudi Arabia is in range of aircraft and missiles already in the arsenals of Iran, Syria, and Israel. Iran is especially threatening due to its failure to adhere to the numerous International Atomic Energy Agency (IAEA) requests to monitor its nuclear energy program.<sup>13</sup> If Iran were to acquire nuclear weapons or propose nuclear ambiguity, then the Saudis may perceive a need to establish a balance of deterrence through similar acquisition.<sup>14</sup> Such a policy decision would require a follow-on decision on targeting to bolster political/diplomatic signaling and negotiations. A positive note is that there currently are no plausible targets for Saudi nuclear weapons. Perceptions, misperceptions, and paranoia based on the inability to attain 100 percent deterrence and the inability to secure guaranteed target determination and destruction could lead to an arms race in the fashion of the Cold War second-strike philosophy. The United States has cited these developments as evidence of

the need to increase the salience of global arms control agreements and institutions.<sup>15</sup>

A more plausible, longer term Saudi perception of the necessity to acquire nuclear weapons may well emanate from a global shortage of oil and/or a dramatic increase in the price of oil due to volatility amongst other oil-producing states. Entities, whether state or terrorists sponsored by other states, may wish to seize control of Saudi oil. Although Saudi Arabia has more than 80 active oil and natural gas fields, and more than 1,000 working wells, half its proven oil reserves are contained in only 8 fields. Ghawar is the world's largest onshore oil field and Safaniya is the world's largest offshore oil field. Subversive attempts to gain control of these fields could fail, leaving simultaneous disruptions on a few sensitive points "downstream" in the oil system. This could effectively put the Saudis out of the oil business for a prolonged period and generate a negative effect on oil availability to the West. Such sensitive points exist on more than 10,000 miles of pipe, both onshore and offshore, through which oil moves from wells to refineries and from refineries to ports. Nuclear weapons clearly cannot defend a specific point but could be perceived as a means to deter a wide range of potential state or state-sponsored aggressors from even contemplating attacking the Saudi oil infrastructure.

Clearly, an oil-dependent United States is eager to assure Saudi Arabia of protection either directly, through the presence of American forces, or indirectly, through an American nuclear umbrella. Such protection, however, is a double-edged sword and may well be refused in the future. The domestic situation in Saudi Arabia is unstable due to the presence of al Qaeda terrorists, Islamic fundamentalists, and segments of the population that are anti-Western. The survival of the House of Saud as rulers of Saudi Arabia may thus rest on a nuclear conundrum. Saudi Arabia is apprehensive of an American offer of nuclear protection due to the lack of evident pressure from Washington directed against Israel's nuclear arsenal, even though there is no sign of planning for an Israeli attack on Saudi Arabia. The various ambiguities in the Israeli program and the strength of American forces may well force Saudi leaders to contemplate the futility of attempting to develop a nuclear option. There is clearly a lack of valid offense, defense, or deterrence roles for Saudi nuclear weapons. Hence, the Saudi case for nuclear weapons might revert to a matter of status and prestige. Such a scenario would pose a further conundrum, this time for Saudi leaders. The acquisition of nuclear weapons for regional or global prestige would no doubt invoke antagonism from the international community, particularly from the United States, which opposes nuclear proliferation and promotes a doctrine of preemption against rogue states. Saudi possession of nuclear weapons coupled with the intense presence of al Qaeda in Saudi Arabia would be tantamount to political suicide for the House of Saud. It was thus no surprise when Saudi Deputy Foreign Minister Prince Turki Bin-Muhammad dismissed such rumors, noting that Saudi Arabia has always been known for its position in support of making the Middle East free of weapons of mass destruction (WMD).<sup>16</sup>

### Domestic Challenges to the House of Saud

It would be possible to dismiss rumors of Saudi nuclear intent outright were it not for a singular plausible domestic rationale for the procurement of nuclear weapons and associated delivery systems. This rationale is based on the vulnerability and instability of the House of Saud that threatens the very continuity and stability of the Saudi sovereign state. Nuclear weapons would not be the first option for the House of Saud to retain control of the Saudi state, nor would they be the first and only option for succession within the House of Saud. Frustration and escalation, however, coupled with readily available resources, could rapidly lead a senior prince to procure a nuclear weapon off the shelf, perhaps from Pakistan or Russia.

The Saudi economy and its inherent corruption is institutionalized in the royal family. Rank and office are not the only things that matter within the House of Saud. Genealogical stratification plays a key role, as well, determining wealth, influence, and power. The younger and lesser princes tend to take bribes from construction firms (mostly the Bin Laden family) seeking government contracts, getting involved in arms deals, expropriating property from commoners, and selling Saudi visas to guest workers. This situation cannot continue indefinitely. Saudi Arabia is running a budget deficit for the 21st consecutive year, projecting for 2004 a deficit of \$15 billion—11 percent of its gross domestic product (GDP), a public debt of 150 percent of annual income, a \$5 billion aid package from Abu Dhabi, and a per capita income drop from \$28,600 in 1981 to \$6,800.<sup>17</sup>

Such a financial situation has exacerbated the anarchical nature of Saudi society, alienating Saudi's traditional merchant class and fledgling middle class. Thousands of Saudis joined the Fedayeen in Afghanistan and in Iraq. Furthermore, about a quarter of Saudi Arabia's population, and more than a third of all residents aged 15 to 64, are foreign nationals. In Saudi Arabia, 70 percent of all jobs and close to 90 percent of all private-sector jobs are filled by foreigners, some of whom have openly courted the fundamentalist Wahhabis and the Taliban and backed radical Islamic causes.<sup>18</sup> This population has contended that the country's leaders have failed to protect fellow Muslims in Palestine and elsewhere and that the House of Saud has let Islam be humiliated.<sup>19</sup>

Suspicious about the intent of the Saudi kingdom intensified in 2003 when the Bush administration blocked the release of a 28-page section of a congressional report on the 9/11 attacks believed to focus on terror funding in Saudi Arabia. The report identifies Saudi Arabia as the primary source of al Qaeda funding: "Al Qaeda found fertile fund-raising ground in the kingdom, where extreme religious views are common and charitable giving is essential to the culture and, until recently, subject to very limited oversight."<sup>20</sup> A conundrum will thus arise for the United States should dissidents in the House of Saud acquire nuclear weapons to serve as an umbrella for such dissidents.

In response to American pressure, the House of Saud started cracking down on terrorism. In retaliation, al Qaeda has carried out a concerted bombing

campaign since May 2003. One crucial, unanswered question is how many armed militants exist in Saudi Arabia. Authorities claim there are few and that they are increasingly successful in hunting them down. One Saudi cleric who claims links to the militants advances a different explanation, suggesting that there are thousands of militants and the police are being overwhelmed. He concludes that the Saudi royal family—far from crushing the militants with an iron fist as King Fahd has promised—will have no alternative but to negotiate.<sup>21</sup> Although the Saudis have rounded up more than 600 suspects and killed a number of men on a wanted list, attacks by al Qaeda supporters have continued. Officials say six terrorist cells were identified in the last year, consisting of about 25 to 30 members each. Perhaps the darkest aspect of these terrorist incidents is the suspicion of collusion between the attackers and Saudi security forces.<sup>22</sup>

Saudi Arabia is ripe for revolution. On June 14, 2004, U.S. Secretary of State Colin Powell said the recent killings of foreigners in Saudi Arabia were a direct attack against the Saudi regime and warned that terrorists “were coming after” the Saudi royal family, trying to destabilize the oil-rich country. He cautioned on NBC’s Meet the Press program that “It’s not unraveling, but it’s certainly a dangerous situation.”<sup>23</sup>

Disputes over succession within the House of Saud are exacerbating the country’s domestic instability. Similar to the Iranian situation in 1978, the Saudi government began to fall apart when its leader fell ill. Abdul Aziz ibn Saud’s son Fahd, who has been king since 1982, suffered a near fatal stroke in 1995. The royal family went into a panic since most lived off his largesse in the form of royal stipends. They feared that Crown Prince Abdullah, Fahd’s half brother, a 71-year-old reformer who was next in line for the throne, would cut back on their stipends or even eliminate them if Fahd died. Furthermore, Abdullah has called publicly for democratic reforms, the reining in of the conservative clergy, and military disengagement from the United States. For the moment, Fahd lives on with Abdullah in daily control and the rest of the royal family while financially stripping the country and any worthwhile private enterprise.

In any power struggle within the House of Saud, the prince that holds a nuclear weapon and/or missile is likely to be the next king. The lesson thus learnt is that in order to remain in power, the House of Saud needs protection and, to become king, a prince needs absolute power. Therefore, the notion that the House of Saud may seek nuclear weapons, the ultimate tool and symbol of power as a last resort measure, is not far-fetched. However, a nuclear device in the hands of the wrong type of prince, such as one who has close ties to al Qaeda, or even a newly-crowned king without such connections, would give the United States cause for concern. Hence, the United States must actively engage potential heirs to the throne and suggest to the Saudi royal family that a viable alternative to the ambiguity of a Saudi nuclear program is the maintenance of or entrance into an alliance with an existing nuclear state that would offer protection.

## DELIVERY SYSTEMS AND THE NUCLEAR WEAPON

The riddle of Saudi Arabia's Chinese-made CSS-2 missiles has exacerbated the nuclear conundrum and intensified the need to enforce arms control and cooperative security. The Chinese-made CSS-2s are the biggest (70 tons) and longest-range missiles deployed anywhere outside the known nuclear-armed nations.<sup>24</sup> Saudi Arabia may have obtained one or both CSS-2 versions,—the basic version with a 1,600-mile range or the improved, 2,200-mile model.<sup>25</sup> Either way, the missiles could reach Russia, India, the Balkans, and Israel. Although the CSS-2's accuracy is far from pinpoint, the fact that the warheads will not be conventional still presents cause for anxiety. However, these volatile, liquid-fuelled missiles have to be maintained to keep them from rotting and, indeed, will need replacement at some stage. On the one hand, the possession of such missiles coupled with the lack of information on their warheads and their whereabouts generates an ambiguity that helps deter others from threatening Saudi Arabia without necessitating that it actually possess nuclear weapons. On the other hand, the lack of information on the location, command, and functionality of these missiles generates a cause for concern in Washington and London. Neither is overtly optimistic about the presence of al Qaeda in Saudi Arabia, which could conceivably take control of any such missiles.

This missile procurement generates a real cause for concern, demonstrating that Saudi Arabia has the money and connections to purchase any form of weapon openly or on the black market. Part of the concern stems from the vulnerability of the House of Saud. This vulnerability may well have caused Saudi elites to contemplate that they could not trust air-force pilots to undertake certain missions and, therefore, chose to procure missiles that could not be recalled once launched and could well be unstoppable.<sup>26</sup> Similarly, another cause for concern is the possibility that the House of Saud lacks the command and control mechanism to communicate to the missile crews when to use the missiles. Unsubstantiated rumors that the missiles are still manned by Chinese missile crews further heighten concerns. Officials in Saudi Arabia are not providing any clues. In fact, they have said little since 1988, when they tersely confirmed reports they had bought CSS-2s from the Chinese, to help, they said, in "propagating peace."<sup>27</sup>

Washington was not overtly surprised at the deal to procure such missiles from China. The West knows full well of the idiosyncratic nature of weapons trade with Saudi Arabia, where arms merchants try to sell to the Saudi royal family, a limited company with 200 shareholders. The Chinese deal came as Washington procrastinated on a Saudi request to buy improved F-15 aircraft. A frustrated Prince Bandar bin Sultan, the Saudi ambassador in Washington, flew to Asia and reportedly handed over \$2.5–3.5 billion to the Chinese for 60 of the aging, relatively inaccurate "East Wind" missiles.<sup>28</sup> Clearly, the Saudi Prince was: (1) aiming at leverage over America; (2) taking out an insurance policy should such leverage not succeed; or (3) really convinced that missiles were a good alternative to manned aircraft. Foreign policy objectives and

diplomatic continuity with the United States seemed to be of secondary significance. Such reality provides rationale that the purpose of any nuclear weapon or delivery system procured by the House of Saud would be to retain power in the Saudi state—or by a prince who wished to become king.

These scenarios follow a typical Cold War policy of the United States, linking the defense capability of states in the region to the extra-regional provision of weapons, spare parts, components, and training. Such a supply of weapons is a traditionally powerful mechanism for the supplier country to control the military activities of countries in the Middle East and elsewhere. To be sure, at one stage Saudi Arabia had more fighter aircrafts than trained pilots. The technological sophistication of U.S. and British weapons has placed the United States and United Kingdom at the top of its list of suppliers.<sup>29</sup> This is of mutual benefit for the provider and recipient. For example, the BAE sale of Tornado fighter-bombers, known as the Al Yamamah agreement, could total close to £50 billion over its 20-year period.<sup>30</sup> However, the supply of weapons is a limited means of international control by a superpower over a lesser state. Indigenous manufacture and modifications are difficult to control, as is the propensity of states to turn to alternative suppliers.<sup>31</sup> Clearly, the lack of solid open-source evidence makes it difficult to draw decisive conclusions on the presence of any delivery systems.

Even where there is such evidence, there is no second source corroboration. This could negate the value of the information or it could generate an ambiguity. An example of this came from the Saudi defector Mohammed Khilevi, who was first secretary of the Saudi mission to the United Nations until July 1994. He has claimed that Riyadh has sought a bomb since 1975. Khilevi claimed that Saudi Arabia had provided financial contributions to the Pakistani nuclear program, and had signed a secret agreement that obligated the Pakistani government to provide positive security assurances to Saudi Arabia. Khilevi has also produced documents in support of his charges that, between 1985 and 1990, the Saudi government paid up to 5 billion dollars to Saddam Hussein to build a nuclear weapon.<sup>32</sup> According to Khilevi, these payments were made on the condition that some of the bombs be transferred to a Saudi arsenal if the Iraqi project were successful.<sup>33</sup>

Some credence to such a link between Saudi Arabia and Pakistan emerged in May 1999 when rumors surfaced that a Saudi defense team, headed by Defense Minister Prince Sultan Bin Abdul Aziz, visited Pakistan's highly restricted uranium enrichment and missile assembly factory.<sup>34</sup> Reportedly, Prince Sultan was also briefed by Dr. A.Q. Khan.<sup>35</sup> Khan subsequently visited Saudi Arabia in November 1999 to attend a symposium, "Information Sources on the Islamic World."<sup>36</sup> The following week, Dr. Saleh al-Athel, president of King Abdul Aziz City for Science and Technology, visited Pakistan to work out the details for cooperation in the fields of engineering, electronics, and computer science. In 2003, Pakistani President Pervez Musharraf paid a visit to Saudi Arabia, and Pakistani Prime Minister Mir Zafarullah Khan Jamali visited Saudi twice. Concerns over possible Saudi-Pakistani nuclear cooperation intensified after the October 22–23, 2003 visit of Saudi's de facto ruler,



Crown Prince Abdullah bin Abdulaziz, to Pakistan. Following this visit, *The Washington Times* reported that Pakistan and Saudi Arabia had concluded an agreement on nuclear cooperation that would provide the Saudis with nuclear-weapons technology in exchange for cheap oil. This led Major General Aharon Zeevi, a senior intelligence officer of the Israeli defense forces, to claim that the Saudis had gone to Islamabad with the intention of buying Pakistani warheads to be placed on Saudi land-based missiles.<sup>37</sup>

Such a Pakistani–Saudi link would fit well within an Israeli evaluation since Pakistan’s fears of an Israeli–Indian alliance are well known and out in the open. As India now has a modest nuclear arsenal, this theory posits that Pakistan is seeking an equalizer to deter India, and weapons located outside India’s targeting reach offer that possibility. At the same time, because Pakistan’s other oil sources are located in areas that might be unreliable, a deal with Saudi Arabia eases fears of an energy boycott or blockade in time of crisis. Another consideration is that a Saudi nuclear deterrent might also check Iran, with whom Pakistan has issues, especially over Afghanistan. Thus, a Riyadh–Islamabad axis would offer both countries a way to check India and its allies or partners. Furthermore, if one looks at the history of Pakistan’s nuclear program, there immediately arises the question of Pakistan’s assistance to North Korea. Adding Saudi Arabia to this chain of proliferators only extends the process of secondary or tertiary proliferation by which new nuclear powers assist other nuclear “wannabes” to reach that state. To close the circle, there is also the role of China to consider in Saudi’s nuclear conundrum. Beijing has been the main foreign supplier to Pakistan, in addition to supplying missiles to Saudi Arabia.

The various rumors of linkages between Saudi Arabia and Pakistan with side-links to China, North Korea, and even Iraq have prompted formal diplomatic complaints from the United States. Both the Saudi and Pakistani governments have denied these allegations. Ahmad Khan, spokesman for the Pakistani Foreign Ministry, responded by stating that Pakistan’s nuclear deterrent was for defensive purposes only and was directed toward India.<sup>38</sup>

## STEPS TOWARD ARMS CONTROL

Given the Saudi nuclear conundrum, the United State is actively pursuing steps toward regional arms control initiatives. This effort is linked to the ultimate purpose of international arms control regimes throughout the Middle East: to prevent the use of any form of WMD in the region, to restrict any regional conflict from escalating outside of the region (such as the launching of ballistic missiles against European or North American targets), and bringing about an amelioration of local conflicts.<sup>39</sup> Such international arms control regimes rest upon formal diplomacy for their success.<sup>40</sup> Saudi Arabia is participating in such efforts. It has signed the NPT Treat, it is a proponent of a Middle East Nuclear Free Zone, and it was actively involved in the 2005 NPT Review Conference. All other Muslim states in the Middle East have also signed the NPT.

Despite this positive step, there are also negative steps that could negate the positive ones and entail escalation toward nuclear weapon acquisition.<sup>41</sup> Saudi Arabia has signed the Chemical Weapons Convention (CWC) but has procrastinated on participation in the BWC. Saudi Arabia is not alone in these positions; few states in the Middle East are signatories to these conventions and treaties while even fewer have ratified and adhere to them.<sup>42</sup> Problematically, even if all Middle East states had signed and ratified all these global systems, their value could only be measured in relation to viable means for verification and monitoring and, indeed, the continuity of the regime that had signed them. Certain realities cannot be ignored. Equality in conventional capability has not led to mutual deterrence, nor have arms control initiatives within the region attained a level of cooperative security that would reduce the frequency and intensity of conflicts.<sup>43</sup> The UNSCOM experience in Iraq clearly demonstrated that, even with the most intrusive inspection and verification systems<sup>44</sup> in the history of arms control, closed totalitarian states are capable of concealing weapons and facilities for many years.<sup>45</sup> Hence, the dichotomies of mixed signals regarding participation in arms control of nuclear, biological, and chemical weapons and the rumors surrounding the Saudi nuclear conundrum pose several questions: Who is actually in control of Saudi Arabia? Does the right hand know what the left hand is doing? Is this ruler aware of the mixed signals received in the West? And, most importantly, does Saudi Arabia already possess nuclear weapons?

## CONCLUSION

Of paramount significance in answering these questions, is acceptance of the fact that Saudi Arabia and its neighbors are not at ease with each other and that there is not a clear succession in the House of Saud. On the one hand, the House of Saud could seek an external scapegoat to alleviate its domestic woes to unite its population. This could lead, on the other hand, to a regional arms race and escalation with or without actual conflict. In both cases, due to the necessity of Saudi oil, the seemingly oblivious West continues to prop up the House of Saud with increasingly sophisticated weaponry. This accentuates the conundrum in a vicious circle. The growing domestic religious fervor in Saudi Arabia mirrors that in prerevolutionary Iran. Part of the ill-content of the populace has been the nature of Western protection for the House of Saud. Saudi Arabia, for decades, has permitted the stationing of American forces on its soil to protect against other bellicose states in the region such as Iraq and Iran, and to prop up its internal regime. Saudi Arabia hosts thousands of popular preachers who call openly for a Holy War (Jihad) against the West. Although the House of Saud is the politically recognized government, such preachers are accorded popular governance. This places Saudi Arabia, as an irrationally governed state, on the same level as the Colombian government. The central government possesses little, if any, control over large stretches of land and population within its sovereign borders, yet it commands large amounts of American assistance.

There is a need to build upon successes and find methods to reverse failures and strengthen weaknesses. Approaching the 2005 NPT Review Conference, one sees an overwhelming desire for a Middle East Nuclear Free Zone. There is an overwhelming desire by certain elites in Saudi Arabia to participate in this process.<sup>46</sup> The failure to get Saudi Arabia to adhere to biological and chemical controls, and to restrictions and transparencies in these processes, remains a cause for concern. Understandably, hindering any turn-about on nuclear proliferation issues are the provocations by neighboring Iran and Syria, in addition to growing fundamentalist activity in Saudi Arabia and a dysfunctional House of Saud.

The Saudi nuclear conundrum rests on the following considerations: struggling arms control approaches by states within the region and by the global arms control regime; the geopolitical location of Saudi Arabia; such location vis-à-vis American military forces; the ability of Saudi Arabia to deliver and target nuclear weapons should it acquire them; the ability of America to negate such nuclear capability; the positive steps that Saudi Arabia has taken toward the NPT Treaty and a Middle East Nuclear Free Zone; the apprehensions of slow progress toward biological and chemical weapons prevention in the Middle East; the domestic vulnerability of the House of Saud; the threat of the Saudi State to global stability through the relevance of oil; and specific scenarios that need to be considered should Saudi Arabia decide to acquire nuclear weapons. If the Saudi oil spigot is shut off—by terrorism, by a political revolution, or by a regional conflict—the effect on the global economy, and particularly on the economy of the West, would be devastating.

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TRACKING AND ASSESSING NUCLEAR  
ISSUES IN OPEN SOURCES:  
THE CASE OF LIBYA

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Libya's announcement in December 2003 that it was giving up its weapons of mass destruction (WMD) and MTCR-class (Missile Technology Control Regime) missile programs took most nonproliferation practitioners and observers by surprise. The regime of Colonel Muammar al-Qadhafi had long been suspected of possessing chemical and, potentially, biological weapons capabilities. Moreover, the regime's desire to acquire nuclear weapons was well documented despite Libya's status as a nonnuclear weapon state signatory to the Nuclear Non-Proliferation Treaty (NPT) and its Safeguards Agreement with the International Atomic Energy Agency (IAEA). The government of King Idris had signed the NPT and joined the IAEA in 1968. The Qadhafi regime later ratified the treaty in 1975 and Libya's Safeguards Agreement with the IAEA took effect in 1980.<sup>1</sup>

Prior to Libya's announcement there had been a general consensus of opinion amongst governmental and nongovernmental assessments that—in the absence of significant injections of foreign technology and assistance—the country's technical and scientific capabilities were too underdeveloped to enable the development and production of nuclear weapons. However, investigations by the IAEA over the first 6 months of 2004 showed that Libya was much further advanced in the nuclear realm than previously thought.

The decision to disarm provides an interesting research opportunity. By comparing what was known about the country's nuclear program through open sources prior to December 2003 with the information that has since entered the public domain, this chapter seeks to cast some light on the value of open sources in tracking WMD-related issues in the Middle East. It begins with a brief consideration of open sources in the Libyan context. This is followed by an examination of pre-December 2003 assessments of both the intent and capability underlying the nuclear program. The chapter then proceeds with a summary of the main revelations that have emerged in the first 6 months of 2004 with the aim of offering a retrospective view of previous assessments.

## OPEN SOURCES AND LIBYA

The collection and analysis of open-source information can offer certain advantages to governments and international organizations that seek to prevent proliferation. In particular, open-source analysis can provide a resource-friendly means to provide contextual awareness, to respond quickly to unpredicted developments, and to guide to further investigation. However, the use of such sources also brings with it certain risks, including the potential for inaccuracy, bias, and disinformation. Obviously, this is a more significant issue in countries where the media is subject to state control, as in the case of Libya.

In the nuclear field, open sources can be useful in assessing both the intent and capability underlying national nuclear programs. In terms of intent, valuable light can be cast on a country's threat perception and strategic objectives, the context for nuclear decision-making, as well as relevant bureaucratic and economic issues. On the capability front, insights can be gained with regard to the nuclear fuel cycle (including nuclear-related research), weaponization, delivery options, and supporting industrial infrastructure.

Libya has long been a difficult target for open-source analysis because of the relatively closed and non-transparent nature of Libya's society. Historically, this has translated into a relative lack of English and Arabic sources with relevant and/or significant detail on nuclear-related issues, and a great deal of repetition across the available material. The dearth of open sources has been compounded by the fact that nuclear issues are treated with great sensitivity by governments in all countries regardless of their democratic credentials or otherwise.

### Peaks and Troughs

It is possible to discern peaks and troughs in available open sources from the 1970s through to 2003, and these appear to reflect different periods in the development of Libya's nuclear sector. From the mid-1970s through the 1980s, for example, a reasonable amount of information was available on Libyan intentions and capabilities in the civil nuclear sector. This is probably explained by the Qadhafi regime's significant efforts during this period to establish a civil nuclear program through importing the requisite technology and expertise from abroad. In the field of nuclear research, for example, the Soviet Union concluded an agreement with Libya in the mid-1970s to set up the Tajura Nuclear Research Centre (TNRC), including the installation of the IRT-1 research reactor.<sup>2</sup> The Soviet Union rapidly became the "major force determining the nature and extent of nuclear technology acquisition" by Libya.<sup>3</sup> For its part, the Soviet Union made the reactor deal conditional on Libya ratifying the NPT and concluding a Safeguards Agreement with the IAEA.<sup>4</sup> In addition to Tajura, Libya also sought the assistance of several companies and countries to construct a nuclear power plant during the 1970s and 1980s. Particular attention was focused on securing assistance

from the Soviet Union and companies in Belgium and West Germany.<sup>5</sup> Ultimately, Libya's efforts in the field of nuclear power generation proved to be unsuccessful.

From the late 1980s to 2003, open sources dried up somewhat in terms of specific information (although Libyan authors continued to write research-related papers for science and technology journals). One likely explanation is that Libya's nuclear activities went increasingly underground, and further out of sight, because foreign governments were not prepared to permit the transfer of ostensibly civilian technology and expertise due to Qadhafi's frequently stated desire to acquire nuclear weapons. Since Libya's decision to disarm in December 2003, a significant amount of highly pertinent material has entered the public domain due to the publication of findings from various investigations involving the IAEA and the Royal Malaysian Police.<sup>6</sup>

### PRE-DECEMBER 2003 OPEN-SOURCE ASSESSMENTS

Open sources provided some useful context for understanding the intent and underlying capabilities of Libya's nuclear program prior to December 2003. Although there was a general consensus of opinion that Libya was a "state of concern" in the WMD field, most assessments concurred that the country's ambitions had been hindered by a lack of the necessary industrial infrastructure.<sup>7</sup> A study by the Carnegie Endowment for International Peace published in 2002 stated that, "The true extent of Libya's nuclear ambitions remains unclear."<sup>8</sup> This assessment appears to have reflected the regime's occasional statements on the desirability of acquiring nuclear weapons, its contradictory position on nonproliferation and numerous reports that Libya was continuing to pursue the acquisition of nuclear weapons-related technology and expertise.

#### Assessments of "Intent"

Qadhafi began to pursue the acquisition of nuclear weapons almost immediately after he seized power from the government of King Idris in a military coup in September 1969. However, it was not until the mid-1970s that his regime began to make specific statements about the desirability of doing so. In 1976, for example, Qadhafi was reported to have said that, "[a]tomic weapons will be like traditional ones, possessed by every state according to its potential. We will have our share of this new weapon."<sup>9</sup>

Libya's pursuit of nuclear weapons was primarily driven by a perceived security imperative (deterrence), but also for influence and prestige within the Arab world and on the international stage. In terms of security, the regime identified Israel's nuclear weapons and long-range delivery capability as a significant threat. This was reflected by frequent references to a nuclear-armed Israel as justification for acquiring nuclear weapons. During a televised speech to Libyan university students in June 1987 Qadhafi said that,



“The Arabs must possess the atomic bomb to defend themselves until their numbers reach one billion, until they learn to desalinate seawater, and until they liberate Palestine.”<sup>10</sup> In November of the same year, the Libyan leader called for “the manufacture of an Arab atomic bomb, since the Israelis, with assistance of the United States, France, western nations, and Britain possess it and target it against every Arab country.”<sup>11</sup> The security imperative was bolstered following U.S. air strikes against Libyan targets in 1986. The regime became concerned about similar attacks further down the line and it appears that nuclear weapons were seen as one way to strengthen the country’s limited ability to deter external aggression.<sup>12</sup> In reference to the 1986 attacks, Qadhafi stated in April 1990 that “If we possess a deterrent—missiles that could reach New York—we would have hit it at the same moment. Consequently, we should build this force so that they and others will no longer think about an attack.”<sup>13</sup>

Libya’s interest in nuclear weapons, and Qadhafi’s frequent calls for the Arabs to acquire the atomic bomb, also demonstrated the regime’s desire to increase its influence both in Arab politics and more widely. Following his seizure of power in 1969, Qadhafi established a political system that has been described as a combination of socialism and Islam (“The Third International Theory”) and during the 1970s he began to use oil revenues to promote his ideology outside Libya.<sup>14</sup> Qadhafi promoted Libya as “a defender of Islamic ideals against Western imperialism” and as a champion of Pan-Arabism (although in more recent years the regime has increasingly promoted Pan-Africanism over Pan-Arabism).<sup>15</sup> During the 1970s and 1980s in particular, the Qadhafi regime pursued its ambitions by employing various belligerent means including regional destabilization.<sup>16</sup> The regime sponsored international terrorism against American and Western interests, including support for the Irish Republican Army and the Palestine Liberation Organisation, and the terrorist bombing of Pan Am 103 over Lockerbie, Scotland in 1988 (for which UN sanctions were imposed in 1992).<sup>17</sup> The regime also espoused anti-Israel policies and actions, and actively pursued the acquisition of WMD and ballistic missiles. In doing so, the regime sought to present itself as a defender of the Arab world against Israel.<sup>18</sup> Additionally, according to Cirincione et al., Libya espoused “the cause of radical Arab nationalism” in its pursuit of WMD.<sup>19</sup> In June 1995, for example, Qadhafi called for the acquisition of “Arab” nuclear weapons to counter U.S. hostility and Israel’s nuclear arsenal. Specifically Qadhafi said, “Peace will also be in danger as long as there is no balance and nuclear deterrence in the region, in that the Israelis possess more than 200 nuclear warheads while the Arabs do not have a single one. The Arabs should possess this weapon to defend themselves. It would be legitimate and for the sake of peace.”<sup>20</sup> This statement was made in response to the indefinite extension of the NPT and reflected similar views espoused by the Syrian regime.

From the late 1990s, the regime made very few specific statements about Libya acquiring nuclear weapons. This appeared to reflect the regime’s efforts to reintegrate Libya into the international community and to achieve

a rapprochement with the West by moving away from its belligerent past. However, at least one exception was an interview with Qadhafi in March 2002 on Al-Jazirah in which he said, "We demanded the dismantling of the weapons of mass destruction that the Israelis have; we must continue to demand that. Otherwise, the Arabs will have the right to possess that weapon."<sup>21</sup>

The most notable example of the regime's increasingly moderate approach on the international stage was its decision to give up the two suspects in the Pan Am bombing. This move resulted in the suspension of UN sanctions in April 1999. In September of the same year, Libya further demonstrated its desire to engage positively with the outside world by hosting the Organization of African Unity conference. The United States Department of Defense reported in January 2001 that Libya's moderation reflected the fact that Libya's economy "has suffered from the cumulative effects of years of socialist-oriented policies that allocate substantial resources to grandiose industrial schemes, low worker productivity, and a weak non-petroleum industrial base."<sup>22</sup> Following the terrorist attacks of September 11, 2001, Qadhafi made several antiterrorist statements and Libya has reportedly provided intelligence to the United States on al Qaeda.<sup>23</sup> By September 2003, Libya had sufficiently modified its behavior for the UN Security Council to lift UN sanctions against Libya, although France and the United States abstained from the vote. One of the final pieces in the jigsaw of Libya's rehabilitation had been the regime's recognition of responsibility for the Pan Am bombing and an agreement to pay compensation to the victim's families.<sup>24</sup>

The regime's efforts to reintegrate Libya into the international community help to explain the relatively few statements made by the regime on nuclear weapons since the late 1990s. In addition, two specific developments appeared to demonstrate that the regime might have begun to moderate its ways on WMD. In November 2002, Libya decided to join the International Code of Conduct Against Ballistic Missile Proliferation (ICOC), the only country of proliferation concern to do so. ICOC requires its signatories to provide annual declarations on ballistic missile and space-launch vehicle policies, as well as advance warning of rocket launches.<sup>25</sup> Moreover, during an interview with the American news network ABC in August 2003, Qadhafi invited inspections from international organizations, including the IAEA, to visit Libyan industrial sites that could be used to make biological or chemical weapons. Qadhafi said this was the "correct approach."<sup>26</sup>

### Assessments of "Capability"

Prior to December 2003, it was widely believed that Libya had not, despite more than three decades of effort, proceeded particularly far in acquiring a nuclear weapon capability. To a large extent, the country's relative lack of progress in developing a robust nuclear infrastructure—by importing technology from abroad—was a result of the regime's contradictory position on nuclear weapons possession.

While open sources provided some useful context on underlying capabilities, the illicit activities associated with the reinvigoration of Libya's nuclear program from 1995 onward were buried too deeply and did not register on the open-source radar screen, until revealed in 2004.<sup>27</sup> Nevertheless, pre-December assessments drew attention to Libya's two-track approach to nuclear-weapons acquisition pursued from 1969 to 2003.

The first track involved attempts to purchase a nuclear-weapon capability "off-the-shelf" from foreign governments as well as from the black market during the 1970s, 1980s, and 1990s. According to available open sources, Libya reportedly approached the following governments at various times: China (1969–1971),<sup>28</sup> France (1976),<sup>29</sup> India (1978)<sup>30</sup> and the Soviet Union (late 1970s). Other reports also drew attention to Libyan efforts to acquire nuclear weapons via the black market in 1976,<sup>31</sup> 1981,<sup>32</sup> 1992,<sup>33</sup> and 1994.<sup>34</sup>

The second and most significant track involved Libya's efforts to acquire the technology and assistance from overseas to build the domestic infrastructure required to develop a nuclear weapon indigenously. This approach was pursued from the mid-to-early 1970s through late 2003. It focused primarily on procuring key elements of the nuclear fuel cycle (notably uranium enrichment and plutonium separation/reprocessing capabilities) and the nonnuclear components required for weaponization and delivery. However, there was a general consensus of opinion among governmental and nongovernmental assessments that, in the absence of significant and sustained injections of technology and assistance from overseas, Libya's technical and scientific base was too underdeveloped to enable the development and production of nuclear weapons. There were numerous examples of such assessments.<sup>35</sup> For example, the U.S. Office of Technology Assessment noted in 1984 that,

Despite Libya's well-advertised intentions to acquire nuclear explosives and its willingness to use oil money to purchase any type of nuclear technology possible, its nuclear ambitions are severely limited by the weakness of its technical manpower base and lack of coherent planning and research programs.<sup>36</sup>

Over a decade later in 1997 the U.S. Department of Defense noted similarly that,

Libya's nuclear program remains in the embryonic stage . . . Since it is unlikely that Tripoli could produce a weapon without significant and sustained foreign technical assistance, Qadhafi reportedly is trying to recruit nuclear scientists to assist in developing nuclear weapons.<sup>37</sup>

In 2001, a report by the U.S. Defense Threat Reduction Agency noted that Libya fell into the ranks of

Countries that are believed to harbour interests in nuclear weapons but lack the necessary technical and/or financial resources to acquire or develop them . . . For Libya to acquire nuclear capabilities and build a nuclear infrastructure, it would take a great deal of foreign assistance.<sup>38</sup>

Numerous open source reports prior to December 2003 referred to various attempts by Libya to secure nuclear-related technology and expertise from abroad. Some pertinent examples from the available literature included procurement efforts targeted on the following countries: India (1977–1978),<sup>39</sup> Venezuela/Lebanon/Italy (1980),<sup>40</sup> Brazil (1984),<sup>41</sup> West Germany/Belgium (1988),<sup>42</sup> United States/West Germany/Italy (Late 1980s),<sup>43</sup> Greece/United Kingdom,<sup>44</sup> Germany (1991),<sup>45</sup> United States/Netherlands/Germany (1991–1992),<sup>46</sup> China (1992),<sup>47</sup> Tajikistan (1992),<sup>48</sup> Kazakhstan (1995),<sup>49</sup> Turkey/Switzerland (1996),<sup>50</sup> Malta (2000),<sup>51</sup> Iraq (1995, 1998, 2002),<sup>52</sup> North Korea (2002)<sup>53</sup> and Iraq/North Korea (2002).<sup>54</sup> There were also numerous reports on Libyan–Pakistani collaboration in the nuclear field.

Reports about Libyan–Pakistani interactions are particularly interesting given recent revelations about the role played by the proliferation network of Pakistani scientist A.Q. Khan in supplying Libya. It appears that the two countries began to discuss potential nuclear collaboration in the period 1973–1975. One source noted, for example, that Libya signed “some form of nuclear accord with Pakistan” in 1973.<sup>55</sup> However, another source claimed that talks between the two countries on nuclear cooperation began in 1974–1975.<sup>56</sup> There was a consensus of opinion about the nature of this cooperation in the second half of the 1970s. In short, it appeared that Libya wanted to obtain technology and expertise from Pakistan that was relevant to the development of nuclear weapons and, in exchange, Libya was prepared to provide financial assistance to Pakistan’s nuclear weapons program as well as quantities of yellowcake originating from Niger. Several open-source reports suggest that cooperation between the two countries during the mid-to-late 1970s was based on the solid relationship that developed between Qadhafi and then Pakistani President Ali Bhutto.<sup>57</sup> However, relations between the two countries deteriorated subsequently and nuclear cooperation reportedly stopped after President Bhutto was overthrown and executed in a military coup.<sup>58</sup> According to a study published in 1988, Libyan cooperation in the nuclear field lapsed after Bhutto’s execution although there were attempts to resurrect it afterward.<sup>59</sup> Writing in 1981, Rodney Jones noted that there may have been “a secret, personal agreement between Bhutto and Qadhafi, which expired with Bhutto.”<sup>60</sup>

It appears, then, that cooperation between Libya and Pakistan diminished significantly in the late 1970s or early 1980s. Moreover, it was unclear exactly what Libya actually received from Pakistan during this early period. According to one report, for example, Libya tried to secure Pakistani assistance in acquiring “hot cell technology and training in order to acquire a capability to extract plutonium from uranium that was irradiated in a reactor.”<sup>61</sup> Another source noted a steady increase in the number of Pakistani nuclear scientists visiting Libya from 1975 onward.<sup>62</sup> A subsequent agreement reached between Libya and Pakistan in 1989 reportedly covered exchanges of information and cooperation in the sphere of nuclear research. The agreement reportedly provided for Pakistani nuclear engineering

specialists to work at the TNRC and for Libyan personnel to be trained in Pakistan.<sup>63</sup> A later report referred to the training of 18 Libyan engineers at the Pakistan Institute of Nuclear Science and Technology.<sup>64</sup>

There was limited open-source information available prior to December 2003 on whether Libya was developing either a clandestine uranium enrichment capability or an illicit plutonium separation capability. Most of the information available related to reports about potential foreign assistance. In the enrichment field, reports focused on potential assistance from foreign countries including Pakistan (late 1970s to early 1980s),<sup>65</sup> Belgium (1982–1986),<sup>66</sup> Argentina (1983),<sup>67</sup> Tajikistan (1992)<sup>68</sup> and Iraq (1995).<sup>69</sup> In September 2002, information on an ongoing nuclear link between Libya and Pakistan and North Korea was leaked to the media by the Israeli government. It was reported in *Ha'aretz* on September 12 that Israeli “experts” believed Libya may be cooperating with Pakistan and North Korea in its effort to acquire fissionable material, for nuclear weapons purposes through, uranium enrichment using centrifuges.<sup>70</sup> A week earlier it had also been reported that Israeli Prime Minister Ariel Sharon had said, “[t]here might be Saudi money involved” in Libya’s nuclear [weapons] program, but this had not been confirmed.<sup>71</sup> Further, reports of Israeli-origin, in September 2002, noted that Libya and North Korea had signed an agreement for the “mutual development of nuclear weapons” at a meeting in Tripoli between North Korean representatives and Qadhafi in July.<sup>72</sup>

Similar to enrichment, there were very few open sources that drew attention to Libya’s potential interest in developing a plutonium separation capability, and the available information was dated and limited in scope. Some reports referred to the regime reportedly approaching several countries at different times to acquire technology and knowledge applicable to separation. These countries included Argentina (mid-1980s),<sup>73</sup> India (late 1970s)<sup>74</sup> and Pakistan (late 1970s to early 1980s).<sup>75</sup> While these particular reports were short on detail, it was known through open sources that the TNRC housed hot-cell facilities associated with the Soviet-supplied IRT-1 research reactor, which could potentially be used for plutonium separation.<sup>76</sup>

## A RETROSPECTIVE VIEW

Since Libya’s decision to disarm, a significant amount of very specific information has entered the public domain vis-à-vis the country’s nuclear program. The IAEA, the Royal Malaysian Police, and various national governments have released the majority of this information into the public domain as a result of investigations.

### Revelations since December 2003

In the first half of 2004, it emerged that Libya had been engaged in undeclared nuclear activities for over 20 years and that these activities were reinvigorated in July 1995. Libya has benefited substantially from the acquisition

of technology and expertise from the transnational proliferation network established by Pakistani scientist A.Q. Khan, although, other suppliers have also been implicated.

In the enrichment field, Libya had been pursuing the development of gas-centrifuge technology from the early 1980s. In 1997, thanks to the A.Q. Khan network, the country began importing 20 preassembled L1 centrifuges and components for an additional 200 L1 machines. In late 2000, Libya began progressively installing three L1 centrifuge cascades (comprised of 9, 19, and 64 units) at its Al Hashan facility. For security reasons, the cascades were dismantled in April 2002 and then boxed and moved for storage at Al Fallah. Subsequent testing identified low enriched and highly enriched uranium contamination on the floor of the L1 test area at Al Hashan, as well as on centrifuge parts and equipment. In September 2002, Libya also acquired two L2 centrifuges. Moreover, the initial components of an order for 10,000 L2 centrifuges began to arrive in Libya in December 2002. It has also been revealed that foreign experts had trained Libyans on centrifuges.<sup>77</sup> In addition, Libya had imported uranium hexafluoride from foreign countries, including North Korea.<sup>78</sup> On the plutonium front, it has emerged that between 1984 and 1990 Libya fabricated several dozen gram-scale uranium oxide and uranium metal targets and irradiated them in the IRT-1 research reactor at the TNRC. Thirty-eight of the targets with about 1 gram of uranium each were dissolved and radioisotopes extracted using ion-exchange methods, or solvent extraction, at hot cells in the radiochemical laboratory at TNRC. (Forty additional targets were irradiated but not processed.) Very small quantities of plutonium were separated from at least two of the targets.<sup>79</sup> It has also been revealed that Libya acquired in late 2001 or early 2002—via the A.Q. Khan network—documentation on nuclear weapons design and fabrication, including engineering drawings related to nuclear weapon components.<sup>80</sup>

With the revelations of the past 6 months, it is useful to compare what was known through open sources about Libya's nuclear program and ambitions prior to December 2003, and what has since entered the public domain. Prior to the decision to disarm, open sources certainly provided some useful context for understanding the intent and underlying capabilities of Libya's nuclear program. However, the illicit activities pursued primarily from 1995 onward were buried too deeply and did not register on the open-source radar screen. The only exceptions were in 2002, with limited reports of Israeli-origin on the potential role of Pakistan and North Korea in providing nuclear assistance to Libya.

Open-source indicators were somewhat contradictory in the 18 months prior to December 2003. On the intent side, there were relatively positive indicators in that the regime continued to pursue its policy of reducing Libya's international isolation, including the decision to join a security and confidence building measure in the form of the ICOC. However, recent revelations about Libya's procurement activities since the mid-1990s demonstrate that, while the regime was continuing to reengage with the

world, it was also seeking to move forward with the development of nuclear weapons.

Information on the A.Q. Khan network, which emerged in 2004, has validated the pre-December general assessment that Libya would have to receive significant and sustained injections of foreign technology and assistance to make real progress on the nuclear front. Indeed, it is now evident that Libya's procurement of technology via the network was enabling the country to begin initiating a step-change in its program to develop the capability to produce fissile material for nuclear weapons purposes.

Shortly after the decision to disarm was announced, a BBC report referred to Western diplomatic sources believing that Libya "had been trying to kick-start its nuclear program by gathering a team of nuclear experts from ex-communist states in Eastern Europe."<sup>81</sup> It is worth noting that several open sources had previously cast light on Libya's nuclear connections with such states. A 1984 report noted that because of its lack of facilities for advanced study in nuclear fields, Libya would be dependent on study programs abroad, particularly in East Bloc nations, for many years to come.<sup>82</sup> Moreover, a report in February 1986 said that a "group of East German nuclear engineers was reported to have arrived in Libya" to work at the TNRC.<sup>83</sup>

Relevant information on several of the organizations and facilities visited by the IAEA since December 2003—because of their actual or potential role in Libya's nuclear weapons program—was also previously available in open sources. Although this information did not indicate any illicit activities, it did provide some useful context for understanding Libya's potentially relevant scientific and technical infrastructure. Notably, open sources provided some information on the National Board for Scientific Research (NBSR), which the IAEA has recently identified as the "entity in charge of the nuclear weapons programme" in Libya.<sup>84</sup>

The NBSR was formerly known as the National Authority (Academy) for Scientific Research (NASR), which was set up in 1981 "to formulate and supervise" national research policy, to "fill in gaps in research not tackled by any existing research institutes and centres," and to "technically coordinate research carried out at research centres."<sup>85</sup> Several research centers established under NASR (NBSR) were also investigated by the IAEA: the Industrial Research Centre (IRC), the Centre for Remote Sensing and Space Science and, more obviously, the TNRC. Open-source information on all of these organizations was also available prior to December 2003. For example, the IRC was set up in 1984 to develop industrial research and to manage the country's mineral resources. The organization includes several laboratories and also has its own website.<sup>86</sup> Moreover, the website of the TNRC provided useful information on its scientific and technical capabilities.<sup>87</sup> Additionally, personnel based at the center also published relevant research in various journals.<sup>88</sup>

The NBSR also acts as the umbrella organization for the Arab Development Institute (ADI).<sup>89</sup> Although not mentioned in the recent IAEA reports on Libya, the regime reportedly focused much of its nuclear activities during the 1970s and 1980s on the ADI. According to one source published in 1983,

the ADI reportedly recruited scientists from Baghdad, Beirut, Damascus, Cairo, and other Arab science centers by attracting them with large salaries, housing, and excellent work conditions.<sup>90</sup> Another source noted that the “Libyan-funded” ADI of Beirut reportedly hosted a conference in October 1981 on nuclear technology in developing countries.<sup>91</sup>

## CONCLUSION

Prior to Libya’s announcement that it was giving up its WMD programs, there was a general consensus of opinion among open-source assessments that, in the absence of significant and sustained injections of foreign technology and assistance, the country’s technical and scientific capabilities were too underdeveloped to enable the development and production of nuclear weapons. This opinion was certainly validated as a result of IAEA investigations in Libya during the first 6 months of 2004. Indeed, Libya was much further advanced in the nuclear realm than previously thought. It can be concluded from this case study that, even in relatively closed and non-transparent societies, open sources can provide useful insights into the political, strategic, and economic context in which national decisions are taken on nuclear-related issues in both the civil and military sectors. Moreover, such insights can generate important knowledge and understanding of the various factors (security, military, economic, cultural, and regional) that can be addressed to reduce the threat posed by regional proliferators, such as Qadhafi’s Libya. However, care must also be taken not to take open sources at face value. For example, while it was evident in the open sources that Libya was moderating its ways vis-à-vis the international community from the late 1990s onward, this was also the period during which the regime was beginning to make significant progress in its nuclear weapons program.

The Libyan case also demonstrates that open sources are more limited in tracking and understanding activities related to the most sensitive aspects of nuclear-weapons programs including uranium enrichment, plutonium separation, and weaponization. While it is possible to generate pertinent information on legitimate civil capabilities and activities that may underlie a nuclear-weapons program (as in the case of Libya), most key proliferation-relevant transfers and activities are likely to be buried too deeply and therefore beyond the scope of open sources. In this respect, it seems that on-site verification and unrestricted access to all potentially relevant sites are the only ways to reach conclusive assessments of peaceful intent in the nuclear or broader WMD fields.

## NOTES

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## POLICY IMPLICATIONS

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## IRAQ AND LIBYA: NONPROLIFERATION THROUGH REGIME CHANGE OR CHANGE IN A REGIME?

*Robert S. Litwak*

The year 2003 was a watershed in which two important precedents for nonproliferation policy were set. In March, U.S. and British military forces invaded Iraq to coercively disarm that country of its presumed weapons of mass destruction (WMD) stockpiles. In undertaking this action after a bitterly contentious United Nations Security Council showdown, the George W. Bush administration made the explicit argument that nothing short of complete regime change could achieve this objective because of Saddam Hussein's unrelenting intention to acquire these unconventional capabilities. The Iraq war was the first historical instance in which regime change was employed as the means to achieve nonproliferation ends.

In the immediate aftermath of "major combat operations" in Iraq, administration statements suggested the possible continuation of this muscular approach in dealing with Iran and other "rogue states." But in December, only 8 months after the fall of Baghdad, the British and U.S. governments jointly announced a startling revelation: that secret negotiations had yielded a commitment by Libyan leader Mohammar Qadhafi to verifiably relinquish his country's covert WMD capabilities. President Bush stated that, by this commitment to conform to international nonproliferation norms, Libya had "begun the process of rejoining the community of nations."<sup>1</sup> Administration officials were quick to link the Libyan development to the Iraq war, arguing that the decisive use of force to topple the Hussein regime had precipitated Qadhafi's decision.

Two alternative nonproliferation models were manifested in these 2003 cases: in Iraq, a change *of* regime; in Libya, a change *in* a regime. What are the lessons and implications of these precedent-setting experiences for the future development of effective nonproliferation strategies—most immediately, to address the Middle East region's ongoing nuclear crisis in Iran? Such analysis must be grounded in a thorough understanding of two key concepts and the policies that have flowed from them. The first is the concept

of “rogue states” in U.S. post–Cold War foreign policy, a problematic category whose core group has included Iraq, Libya, and Iran. The second is the important, but nebulous concept of “regime change,”—a term that came into public prominence during the contentious debate leading up to the 2003 Iraq war.

## ROGUE STATES, REGIME CHANGES, AND PROLIFERATION

### Rogue States

Although the contemporary usage of the term “rogue state” gained currency in the 1990s, its conceptual and policy antecedents date to the Cold War era. Prior to 1980, the term, as well as its synonyms “outlaw” and “pariah” state, was used to denote those countries, such as Idi Amin’s Uganda and Pol Pot’s Cambodia, that violated international norms relating to the treatment of their own people. Thus, rogue status was rooted in *internal* behavioral criteria. A shift in these defining criteria began in 1980, however, when the State Department inaugurated its list of state sponsors of terrorism. In addition, the 1980s witnessed the increased proliferation of WMD and their means of delivery to third world countries, most notably in the Middle East, where Saddam Hussein’s Iraq used chemical weapons and ballistic missiles against Iran in its attritional 8-year war. These two factors relating to a country’s external behavior—the use of terrorism as an instrument of state policy and WMD acquisition—emerged in the 1980s as the key criteria defining “rogue state” status. After the Gulf War, a hot war that coincided with the end of the Cold War, Iraq was the archetypal “rogue state.”

With the demise of the Soviet threat, U.S. defense planning focused on “major regional contingencies” in the Persian Gulf and Northeast Asia involving rogue states. Moreover, the William Clinton administration elevated the concept by integrating it into its overarching foreign policy framework. That grand strategy was a classic Wilsonian policy, pursued under the rubric of “engagement and enlargement,” by which the United States would seek to forge a pacific international order through the global proliferation of democratic political systems with market economies. Within this framework, Clinton administration officials enunciated a four-tier typology of states in the post-Cold War international system: advanced industrial democracies, emerging democracies, failed states, and, finally, “rogue states.” Secretary of State Madeleine Albright stated that “dealing with the rogue states is one of the great challenges of our time . . . because they are there with the sole purpose of destroying the system.”<sup>2</sup>

The Clinton administration’s policy of lumping together and demonizing a disparate group of states was pursued primarily as a political mobilization strategy to build support both at home and abroad for tough measures against these regimes. But it suffered from three major liabilities. First, the term “rogue state” was an American political rubric without standing in

international law. Because it was analytically soft and quintessentially political, this pejorative label was applied selectively and inconsistently. Syria, for example, was a state that met all of the stated criteria for “rogue” status: it possessed WMD capabilities and was on the State Department’s terrorist list. Yet, Syria was pointedly not referred to as a rogue state because of its importance to the Middle East peace process. Second, the rogue state approach incurred significant political costs. During the second Clinton administration, the policy emerged as a major source of contention with America’s closest allies: Europe, Japan, and Canada. The focal point of this dispute was the use of extraterritorial sanctions in U.S. legislation, such as the Iran–Libya Sanctions Act (ILSA), against foreign firms doing business with “rogue states.” Third, the translation of the rogue state concept into policy sharply limited strategic flexibility. The assertion that these countries constituted a distinct class of states, and the use of this ambiguous term for political mobilization purposes, pushed policymakers toward a one-size-fits-all strategy of comprehensive containment and isolation. Once a country was branded a “rogue” or “outlaw” state and placed in that category, critics viewed any deviation from hard-line containment as tantamount to appeasement. In practice, however, the rogue state approach came up against hard political realities. In the case of Iran, for example, reformist President Mohammed Khatami’s surprise election in May 1997 transformed the political context within that country. Khatami proposed a “dialogue between civilizations” in January 1998, and Secretary Albright responded favorably the following June with a call for the two sides to develop a “road map” to improved relations. The designation of Iran as a rogue state reduced the Clinton administration’s political space to respond to developments in the country and alter its approach toward the Tehran regime from comprehensive containment and isolation.

On balance, the strategic liabilities of the rogue state policy outweighed whatever utility it had as an instrument of political mobilization. In June 2000, the State Department announced its decision to expunge the term “rogue state” from the U.S. foreign policy lexicon in favor of the infelicitous, but more diplomatically sounding “states of concern.”<sup>3</sup> In explaining this shift, spokesman Richard Boucher stated that “the [rogue state] category has outlived its usefulness. . . . It’s not really a change in behavior or policy or what we’re doing as much as it is finding a better description, or a better description because a single description, one size fits all, doesn’t really fit any more.”<sup>4</sup> The Clinton administration’s jettisoning of the concept as a basis for policy was intended to facilitate the development of an alternative approach: differentiated strategies of containment and engagement that would take into account the unique circumstances of each of these countries relegated to the rogue state category.<sup>5</sup>

The newly inaugurated Bush administration restored “rogue state” to the U.S. diplomatic lexicon in February 2001 in the context of its advocacy of national missile defense, but did so without specifying which particular states fell under that category.<sup>6</sup> In the Bush administration’s pre-9/11 policies, two important underlying assumptions, earlier articulated by Condoleezza Rice

in a 2000 *Foreign Affairs* article, were evident. The first was a political prognosis concerning their future trajectory and long-term prospects for survival. Rice observed that the historical process of democratization and the extension of market economies have unfolded, “some states have been left by the side of the road.” She argued that “[t]hese regimes are living on borrowed time, so there need be no sense of panic about them.” The second was that, in addressing the threat posed by rogue states, “the first line of defense should be a clear and classical statement of deterrence—if they do acquire WMD, their weapons will be unusable because any attempt to use them will bring national obliteration.”<sup>77</sup> After the September 11 terrorist attacks, these threshold assumptions about rogue states would be viewed differently—as Secretary Rumsfeld put it, “through the prism of 9/11.”<sup>78</sup> In his January 2002 State of the Union address, President Bush further upped the political ante when he identified Iraq, Iran, and North Korea as an “axis of evil.”<sup>79</sup> National Security Adviser Condoleezza Rice stated that, despite the grouping of these states under this emotive rubric, the United States did not have a “cookie cutter” policy in addressing their diverse challenges. But critics questioned whether the administration had a mindset that would preclude meaningful policy differentiation.

### Regime Change

At the heart of the debate over policy differentiation is the question whether the United States objective is regime change or behavior change vis-à-vis this disparate group of states. The policy tension between these two objectives has been evident in the U.S. debate over “rogue states” since the end of the Cold War. The Iraq war reinforced the widespread, but misleading connotation of regime change as representing a sharp split between old and new. Instead, for policy analysis, the term should be viewed as embodying a dynamic process that occurs along a continuum of change. Total change, whether through war (as with Germany and Japan in World War II) or revolution (as in China and Iran) that not only removes the regime leadership but also transforms governmental institutions is rare. More commonly, the degree of change is limited as when a newly elected political party undertakes a significant policy shift or when one leader supplants another in an authoritarian regime. Leadership is perhaps the key determinant of change, affecting its pace and extent, or indeed influencing whether it will be undertaken at all. Strikingly, the most important instance of regime change in the latter half of the twentieth century was accomplished through neither revolution nor war in the Soviet Union under President Mikhail Gorbachev. Gorbachev’s grand strategy, a form of regime change by internal evolution, was to integrate a transformed Soviet Union into the liberal international order forged after World War II from which the USSR had been substantially isolated.

This dynamic view of regime change in rogue states has important implications for strategy development. George Kennan’s containment strategy took for its premise a concept of political change in the Soviet Union: containment

was essentially a balance-of-power exercise to check Soviet power until the internal contradictions of that society precipitated internal change. Likewise, U.S. strategies toward “rogue states” must be informed by realistic assessments of the alternative political trajectories that these states might take and the probabilities of those trajectories. Is regime collapse imminent? Can it be externally induced? Is a “soft landing” to reintegrate a nation into the international system possible? These various concepts of societal change create a critical threshold assumption for strategy development and implementation. For U.S. policymakers, the dilemma is that the issue of WMD proliferation, which may require urgent near-term attention, is embedded in the broader one of the future evolution of those countries. The nonproliferation component must be consistent with that broader strategy for political change in the target state, but the two approaches are likely to be operating on different timelines.

The link between the issues of regime change and proliferation raises a fundamental question. Is the *character* of a rogue state regime the key determinant of proliferation? In the case of Iraq, the Bush administration made the explicit argument that the achievement of durable nonproliferation was contingent on the overthrow of the Saddam Hussein regime. But the proposition that proliferation is linked to the character or type of the target state’s regime is refuted by history. Proliferation is not unique to a particular type of regime, whether democratic, authoritarian, or military. The current roster of nuclear weapon states, as well as those seeking to acquire nuclear weapons, represents the full range of regime type. Democratization, which some have argued is a constraint on proliferation, can increase political transparency and accountability, as well as facilitating open debate and scrutiny of motivations, but will not, of itself, restrain proliferation. Indeed, a majority of the states in the nuclear club are established democracies. Proliferation arises not from regime character but from a range of domestic and international or systemic factors that affect a regime’s motivations and, thus, its intentions. Regime intention, not regime type, is the lead proliferation indicator.

### IRAQ: NONPROLIFERATION THROUGH REGIME CHANGE

After the “axis of evil” speech and the fall of the Taliban regime in Afghanistan, the Bush administration made the case for military action against Iraq. The President’s September 2002 speech to the UN General Assembly endeavored to make the case for war based on international law, specifically the Iraqi dictator’s flouting of multiple Security Council resolutions. But the war was eventually undertaken without the legitimacy that UN authorization would have provided because of political deadlock over the inherently contentious issue of regime change. Rather, the war was often framed in the public debate in terms of the Bush administration’s September 2002 *National Security Strategy* document, which had elevated military preemption against terrorist groups to official U.S. doctrine.<sup>10</sup>



Since the end of the 1991 Gulf War, which ejected Iraqi forces from Kuwait but left Saddam Hussein in power, the question of regime change had been at the heart of the U.S. debate over Iraq. The widespread belief was that the Iraqi dictator's defeat in Kuwait would lead to his ouster from internal forces, such as a military coup. Contrary to that threshold assumption about the post-Gulf War period, Saddam Hussein's unexpected political survival exacerbated over time the tension between the competing goals of regime change and policy change in U.S. strategy. The crux of this tension was UN Security Council Resolution (UNSCR) 687, which established a ceasefire and mandated Iraq's WMD disarmament, but did not authorize regime change. Both the Clinton and the Bush administrations believed that the achievement of the disarmament provision of UNSCR 687 would necessitate regime change, but knew that this ambitious objective went far beyond the international consensus. Their dilemma was how to reconcile the contradiction between the twin goals of UN-mandated behavior change and U.S.-preferred regime change in Iraq. The effort to do so led to tortured formulations such as the one offered by President Bush during the contentious UN debate preceding the 2003 Iraq war: "the policy of our government . . . is regime change—because we don't believe [Saddam Hussein] is going to change. However, if he were to meet all the conditions of the United Nations . . . that in itself will signal the regime has changed."<sup>11</sup>

The policy tension between the objectives of behavior and regime change turned on the core issues of state sovereignty and the legitimacy of external intervention, and is the key factor accounting for the profound differences between the 1990 and 2003 UN debates on Iraq. A broad international consensus within the Security Council and beyond to expel Iraqi forces from Kuwait was forged with relative ease because Saddam Hussein had trampled on the cardinal norm in international relations: protecting state sovereignty. In comparison, the notion that the Security Council would authorize military action in 2003 was highly problematic because the United States and Britain were arguing that the enforcement of Security Council resolutions would necessitate regime change. In short, the 1991 Gulf War was waged to restore Kuwaiti state sovereignty, while the 2003 war entailed the precedent-setting negation of Iraqi sovereignty. Viewing Iraq "through the prism of 9/11," the Bush administration made the contentious decision to shift U.S. strategy from comprehensive containment to rollback.

While the question whether Iraq's WMD disarmament necessitated regime change was a matter of major contention before the 2003 war, a consensus existed that Saddam Hussein would order the use of whatever WMD capabilities he possessed to counter a regime-change invasion by the United States. This thinking was informed by the 1991 experience, when Iraq deployed chemical munitions and Saddam Hussein, according to postwar information received by UNSCOM (the United Nations Special Commission), may have pre-delegated authority to commanders to use this unconventional capability in certain contingencies. In 1991, Saddam Hussein may well have concluded that his WMD capabilities had deterred the U.S.-led coalition

from marching on Baghdad to overthrow his regime.<sup>12</sup> In the 2002–2003 debate, this analysis of the Iraqi dictator’s decision-making, as well as UNSCOM’s final January 1999 report detailing WMD stocks whose destruction could not be verified, led to the conclusion that Saddam Hussein possessed unconventional weapons and would use them to preserve his regime. The assessment that Iraq possessed unaccounted WMD stocks was shared even by those states, including France and Russia, which opposed the war option. The twin surprises of the 2003 war were that Iraq did not use WMD against the U.S.–U.K. invasion, even in the defense of regime survival, and that, after Saddam Hussein’s ouster, no WMD caches were discovered. Among the various hypotheses offered to explain the absence of WMD stocks in Iraq, former UNSCOM chief Rolf Ekeus offered the highly plausible explanation that Saddam Hussein retained only a “breakout capacity” to permit rapid production of biological and chemical weapons, which are difficult to store for long periods.<sup>13</sup> This explanation is consistent with the interim report of the Iraq Survey Team, which offered a similar explanation. David Kay, then directing the team, concluded that Saddam Hussein never gave up his intention to acquire WMD and was attempting to circumvent UNSCR 1441, the Security Council’s final disarmament resolution, which had threatened “serious consequences” in the event of Iraqi non-compliance.<sup>14</sup> A related hypothesis, extrapolating from the 1991 experience, is that Saddam Hussein actively sought to maintain ambiguity about the state of his WMD capabilities, rather than fully comply with UNSCR 1441, because he believed that such uncertainty might provide deterrence against a U.S. attack.

Although WMD stocks were not discovered in Iraq after the 2003 war, no one seriously disputed that Saddam Hussein retained the intention to acquire unconventional weapons when circumstances permitted. The major question bearing on Iraq’s long-term disarmament is whether the ouster of the Iraqi dictator has likewise removed the motivations that might lead a successor regime to reconstitute that country’s WMD programs. In brief, were Iraq’s WMD programs a manifestation of Saddam Hussein’s megalomania (as manifested in his pervasive cult of personality), or did they arise from deeper sources embedded in Iraq’s strategic culture that might affect a successor regime’s calculus of decision? A strategy to achieve durable WMD disarmament in Iraq must distinguish between proliferation motivations specific to Saddam Hussein and broader factors derived from the country’s “strategic personality”—the long-term geographical, historical, and cultural forces that uniquely shape each state’s worldview.<sup>15</sup> Saddam Hussein’s ouster from power was therefore a necessary, but not sufficient condition for the achievement of durable nonproliferation in Iraq.

### **U.S. Policy Prescriptions**

The full panoply of policy instruments, which has historically played a vital role in stemming global proliferation, can be employed to prevent the reactivation of Iraq’s motivations to acquire WMD. A critical element of this

strategy, one that should accompany the appropriate reconstitution of Iraqi conventional military forces, would be U.S. security assurances. Such moves with Iraq to address the long-term proliferation challenge must also be complemented by efforts to positively shape the broader regional security environment. Most notably, Iran's acquisition of nuclear weapons would create "a regional prisoners' dilemma" that would compel a counterresponse from any Iraqi successor regime regardless of its political character. A new regional security framework will be needed to stem long-term proliferation pressures. An opening for a U.S. security dialogue was created by the overthrow of Saddam Hussein, whose regime long constituted Iran's proximate threat, but domestic political impediments on both sides have precluded that possibility. Washington continues to regard Iran's behavior as confirmation of its status as an "axis of evil" country while, for Iran's theocratic regime, the administration's demonizing rhetoric, in tandem with the major U.S. military deployments in the region, provides cause to maintain its clandestine nuclear-weapons program.

The war for regime change in Iraq was regarded by some Bush administration officials as a demonstration exemplifying the new National Security Strategy. That attitude was reflected in one official's assertion that "Iraq is not just about Iraq. . . . It is of a type."<sup>16</sup> But that begged the question as to what lessons others should draw from the conflict in Iraq.

The administration's message has been mixed because of the persistent internal policy divide over whether the U.S. objective toward "rogue states" should be regime change or behavior change. Hard-liners regarded the Iraq war as a stark example that could compel other "axis of evil" members to give up their WMD capabilities to avoid Saddam's fate. By contrast, administration pragmatists viewed this preventive war not as an application of the new National Security Strategy's preemption doctrine, but as an extraordinary remedy for a unique case. Their concern was the characterization of the Iraq war as "of a type" could create an incentive in Iran and North Korea to continue, and even accelerate, nuclear weapons production in order to deter a U.S. attack to achieve regime change.

In an important April 2003 speech just after the fall of Baghdad, President Bush continued to emphasize the regime change theme. "By a combination of creative strategies and advanced technology," he declared, "we are *redefining war* on our terms. . . . In this new era of warfare, we can target a regime, not a nation. . . . Terrorists and tyrants have now been put on notice, they can no longer feel safe hiding behind innocent lives."<sup>17</sup> The Bush administration's claim about "redefining war" was based upon a revolutionary military capability that can eliminate a state's ruling regime without inflicting major civilian casualties. Other administration statements to increase pressure on North Korea, Iran, and Syria accompanied Bush's speech. Syria was dubbed an "axis of evil aspirant," according to a senior State Department official, and was publicly accused by Secretary Rumsfeld of "hostile acts" for supporting the Saddam Hussein regime.<sup>18</sup>

In the aftermath of the 2003 war, administration hard-liners signaled their support for regime change strategies. One official told the *Los Angeles Times* that the message from Iraq for Iran's theocratic leadership was "Take a number." Yet despite this visceral preference, the administration faced serious practical constraints—military, geopolitical, economic, and domestic political—that preclude the replication of the Iraq model elsewhere. The failure to find WMD caches in Iraq triggered a profound credibility crisis for the U.S. intelligence community that will affect attitudes, particularly in the UN Security Council, in future crises. The hard reality of these constraints has prompted the Bush administration, reluctantly, to execute a pragmatic pivot in policy: a shift from its preferred strategy of regime change and preemption to the alternative of deterrence and reassurance of regime survival. The Iraq war set a precedent as the first instance of nonproliferation objectives being pursued through regime change, but may also well be the high water mark of the Bush administration's National Security Strategy.

### LIBYA: NONPROLIFERATION THROUGH CHANGE IN A REGIME

The surprise December 2003 announcement in Washington and London that Libya would disclose and dismantle its WMD programs has prompted debate over the contending explanations for Qadhafi's action. Realist proponents of the Iraq war, and the muscular approach to nonproliferation underlying it, pointed to the demonstration effect of the United States' regime-changing "shock and awe" military campaign that had "redefined war." Liberal internationalists emphasizing the importance of the nonproliferation treaty regime and traditional nonmilitary policy instruments attributed Qadhafi's move to a decade-long desire to end his pariah status and reap the tangible benefits of reintegrating Libya into the world community. Because Libya is an opaque society and decision-making resides in the hands of one man, the attribution of causality is inherently problematic. The analytical challenge is to employ the qualitative methods of target state analysis to gain a more thorough understanding of Libya's "strategic personality." In the particular context of the 2003 announcement, the identification of the key internal and external determinants can permit an assessment of the relative importance of specific external and internal factors, as well as their complex interaction, in Libyan decision-making.

After seizing power in a 1969 coup that abolished the Libyan monarchy, Qadhafi moved to consolidate unchallenged domestic political power, while pursuing an activist foreign policy that burnished his reputation as a third world firebrand. The United States imposed unilateral economic sanctions in 1973, and Libya became a charter member of the State Department's list of state sponsors of terrorism when it was inaugurated in 1979. During the 1980s, Libya continued activities in the two key areas—terrorism and WMD acquisition—that would later lead to its designation as a "rogue state." The

Ronald Reagan administration had a tough declaratory policy backed by strong action. President Reagan called Qadhafi "evil" and dubbed Libya and the other state sponsors of terrorism as an international version of "Murder Incorporated." Libyan complicity in a Berlin discotheque bombing that killed an American serviceman triggered a U.S. bombing strike against targets in Tripoli and Benghazi. Reagan administration claims that the Libyan raid would deter Qadhafi were dashed by the bombing of Pan Am 103 in December 1988, a terrorist action whose investigation took some time to link directly to Libya. Qadhafi's refusal to extradite two suspects in the bombing led to the imposition of limited UN economic sanctions to exert pressure. These multilateral sanctions had the advantage of political legitimacy and collective action, but did not go as far as the United States advocated. The Europeans and other states dependent on Libyan oil rebuffed the tougher U.S. proposal for a total oil embargo. The UN sanctions had a limited economic effect, but the ban on commercial air travel heightened Libya's isolation and tangibly symbolized the country's international pariah status. The UN sanctions regime took effect as Qadhafi was adjusting to another major external shock: the demise of the Soviet Union, Libya's superpower ally, and the emergence of the United States as a "hyperpower" in the post-Cold War era.

These systemic developments were unfolding as Qadhafi faced both religious and secular political opposition during the 1990s.<sup>19</sup> As in other Middle East countries, notably neighboring Algeria, Islamists, such as the Islamic Martyrs' Movement and the Libyan Islamic Fighting Group, mounted a destabilization campaign to topple the regime. The secular opposition was fueled in large measure by the economic downturn triggered by the sharp decrease in the global price of oil and by the regime's gross incompetence in delivering basic governmental services. This mismanagement was compounded by Qadhafi's major expenditures in support of various revolutionary and liberation movements around the world. The Libyan regime's financial inability to maintain adequate state support for core societal interest groups—the Army, young technocrats, and the urban poor—led to civil discontent, which occasionally manifested itself publicly (as during a 1996 soccer match and a 1993 military coup attempt). Qadhafi effectively utilized his internal security forces to brutally suppress the regime's opponents.

Libya's religious and secular opposition posed a significant challenge to the regime in the 1990s, but did not fundamentally threaten its ouster. Qadhafi recognized, however, that revitalizing the country's stagnant economy could dampen political opposition, at least from secular groups motivated by basic standard-of-living concerns, even if the Islamists remained the regime's implacable foes. Western analysts of Libyan foreign policy behavior widely attribute this domestic economic exigency, further exacerbated by the United States' adoption of additional unilateral sanctions under ILSA, as a basic motivation underlying Qadhafi's policy reevaluation. This process resulted in Libyan dictator's concerted diplomatic efforts in the late 1990s to resolve the Pan Am 103 case and, more broadly, end his regime's links to

international terrorism. In 1999, Libya expelled the Abu Nidal organization from Libya and accepted a deal negotiated by the UN Secretary General to turn over the two indicted suspects in the Pan Am 103 bombing for trial in The Hague that, in turn, led to the suspension of UN sanctions. Qadhafi had reportedly first offered to surrender the suspects in return for the normalization of relations with the United States, a condition rejected by the United States and Britain as falling outside the pertinent UN Security Council resolution. This linkage proposal apparently reflected a fundamental concern on Qadhafi's part, perhaps exacerbated by the "rogue state" rhetoric, with respect to the United States' basic objective vis-à-vis Libya: behavior change or regime change?

### Libya's Change of Heart

The 9/11 attacks offered an opportunity for Qadhafi to further improve relations with the United States on the basis of their shared interest in opposing al Qaeda and other Islamic extremist groups. A month after the attacks, U.S. and Libyan officials met in London to explore possible cooperation on counterterrorism. The post-9/11 thaw created a favorable political environment in which the Pan Am 103 case could move to resolution. In August 2003, the Libyan government told the United Nations it "accept[ed] responsibility for the actions of its officials," one of whom had been convicted in The Hague, and offered \$2.7 billion in compensation to the victims' families. This move led to the lifting of UN sanctions, but the U.S. and British governments retained some bilateral sanctions that affected the Libyan oil sector. The Pan Am 103 resolution occurred against the backdrop of secret negotiations in London over Libya's WMD programs, which had begun in March 2003 following the invasion of Iraq.<sup>20</sup> Qadhafi seized the opening to improve relations, and Libya's WMD programs were an impediment to that process coming to fruition.

Libya's compliance with terrorism and nonproliferation norms was a prerequisite for that country's full reintegration into the international system. Those tangible economic carrots for compliance contrasted starkly with the stick of regime change employed in the Iraq war. According to Italian Prime Minister Silvio Berlusconi, Qadhafi admitted in a phone conversation, "I will do whatever the Americans want, because I saw what happened in Iraq, and I was afraid."<sup>21</sup> Additional pressure came from the Bush administration's Proliferation Security Initiative (PSI), which led to the interdiction of a ship, the *BBC China*, bound for Libya with nuclear components procured through rogue Pakistani physicist A.Q. Khan's smuggling network. This operation compelled Libyan officials to acknowledge the existence of a clandestine nuclear program, which they had previously denied in the London talks. In its December 19, 2003 announcement, Libya agreed to verifiably dismantle its chemical and nuclear program, to accede to International Atomic Energy Agency (IAEA) inspections, and to join the Chemical Weapons Convention (CWC). In March 2004, Prime Minister Tony Blair

visited Tripoli to meet Qadhafi and, a month later, the Bush administration lifted economic sanctions.

### Lessons from the Libyan Case

The Libyan agreement was noteworthy in four key respects. First, the negotiation was an example of “conditional reciprocity” in which a benefit or concession conferred by one party will be reciprocated by the other. But in this case, significantly, the process of implementation was completely front-loaded on the Libyan side. That is, Libya disclosed its WMD capabilities and completed the process of dismantling them before the United States and Britain responded with their promised reciprocal action.

Second, this nonproliferation decision, whether influenced by external events or not, was taken indigenously on the basis of a change of intention on Qadhafi’s part. He evidently concluded that the utility of relinquishing Libya’s WMD capabilities was greater than the benefits of other possible proliferation motivations, such as prestige or the need for a deterrent. It is difficult to envisage circumstances under which a Qadhafi successor regime would revisit this issue.

The central issue of proliferation intention leads to the third major point. The crux of the December 2003 agreement was an assurance of regime survival by the Bush administration to Qadhafi. One can logically posit that the accord could have unfolded in the absence of the demonstration effect of the Iraq war. Target state analysis of Libya reveals significant domestic factors that for several years had prompted Qadhafi to seek an exit from the sanctions regime. But one cannot logically argue that the breakthrough would have occurred in the absence of a U.S. security guarantee. The United States, in the words of one observer, was “willing to take yes for an answer” and eschew the objective of regime change in return for this profound change in the regime’s behavior. External pressure, such as sanctions and the PSI, which raised the costs of Libyan noncompliance with nonproliferation and terrorism norms, were a necessary but not sufficient condition for change. Indeed, if the Bush administration had rejected the provision of a security guarantee to Qadhafi, his incentive would have cut precisely in the opposite direction, toward the retention and perhaps even acceleration of his nuclear program to deter a U.S. attack.

Fourth, a key component of strategy development is the concept of social change in the target state upon which it is based. So, in the transformed context of U.S.-Libyan relations, what is that concept of social change anchoring current strategy? The answer has not been explicitly stated by administration officials, but is implicit in President Bush’s statement about Libya having “begun the process of rejoining the community of nations.” That implicit strategy to promote social change in Libya is classic engagement. In this conception, the very process of reintegration (or, in Alexander George’s term, “resocialization”) will entail economic interaction with the outside world, necessitating the extension of the rule of law and modes of political

transparency, which will promote a positive societal evolution. In the case of Libya, a successor generation, which includes Qadhafi's own son (who reportedly played a supportive role in Libya's recent diplomatic turn) and a rising cadre of young technocrats, could lead this change in the country's civil society. Qadhafi will no doubt attempt to manage this process in order to attain the economic benefits of reintegration while attempting to control its political consequences. A "soft landing" for Libyan society could well mean a "hard landing" for the Qadhafi regime and those associated with it.

## POLICY IMPLICATIONS

The Iraq and Libya cases set important nonproliferation precedents. Whether they lead to durable outcomes remains to be seen. History indicates that regime intention rather than regime type is the leading proliferation indicator. Thus, the overthrow of the Saddam Hussein will not necessarily yield long-term nonproliferation if other non-regime-specific motivations are not addressed. Indeed, one could make the argument that those non-regime-specific factors are more likely to affect a successor regime in Iraq, which is situated in a rough regional neighborhood, than in Libya, which faces no proximate regional threat.

The Iraq model of coerced disarmament through externally imposed regime change does not resolve the issue of long-term intention. Despite the muscular rhetoric from some quarters of the Bush administration immediately after the fall of Baghdad, major military and political constraints on the United States' ability to employ this approach in other hard cases, notably Iran and North Korea, soon became evident. Those constraints have led to the pragmatic pivot in Bush administration policy from a strategy of preemption and regime change to the alternative of deterrence and reassurance of regime survival.

The Libyan case is an example of that approach and may have lessons applicable in other cases. Perhaps the most important lesson Libya could provide is that successful reintegration is possible. The United States' willingness "to take yes for an answer"—to forego the objective of overt regime change in the face of meaningful behavioral change—could affect the calculus of decisions with other "rogue" regimes watching this process play out. The Libyan breakthrough has been followed by a dichotomized public policy debate in which that outcome has been attributed either to the Iraq war or to domestic factors affecting the Qadhafi regime. The central importance of the U.S. carrot in the form of a security assurance is logically unassailable. The Iraqi dictator would have had no incentive to forego his WMD programs in its absence. But, such analysis should not dismiss the importance of U.S. coercive instruments in the form of multilateral sanctions and WMD interdiction through the PSI, which significantly raised the costs for Qadhafi to persist in behavior contravening international norms.

The twin Iraq and Libyan cases have important implications for how U.S. policymakers implement strategies of coercive diplomacy in the post-9/11 era.



Since nonproliferation challenges are embedded in the broader question of the long-term political trajectories of the target states, those strategies must be informed by sound concepts of societal change. Those concepts constitute critical threshold assumptions for strategy development.

In the case of Iran, for example, the Bush administration has given up on President Khatami as an agent of change and has focused instead on the country's energized civil society. Some officials even suggest that Iran is in a proto-revolutionary state comparable to Eastern Europe in 1989 or Iran itself in 1979. But Iraq in the 1990s is a cautionary counterexample where a regime managed to retain political power despite predictions of its overthrow or collapse. An alternative strategy for Iran is premised on target state analysis concluding that the reformers may eventually gain the political upper hand or that "pragmatic hard-liners" within the theocratic regime may be willing to cut a deal to ensure regime survival. In short, strategy must be premised on a hard analysis of the target state's plausible future trajectory, not on the vain hope of regime collapse.

In addressing Iran's nuclear challenge, because the Iraq model is not a practical option and regime collapse is not imminent, the Tehran regime should be presented with a structured choice and not be pushed into a choice through U.S. rhetoric and actions. That choice is between the tangible benefits of behavior change and the penalties for noncompliance. This mix of incentives and penalties for noncompliance with international norms should be used to induce Iran to choose the option of behavior change. Leaving the regime a political exit by providing a security guarantee of nonaggression and noninterference would be a central element of this strategy. The remaining open questions are whether the United States could win multilateral support for punitive measures in the event of Iranian noncompliance and whether the Tehran regime, as a member of the "axis of evil," would find credible a U.S. assurance of regime survival.

## NOTES

1. "Remarks on the Decision by Colonel Muammar Abu Minyar al-Qadhafi of Libya to Disclose and Dismantle Weapons of Mass Destruction," *Weekly Compilation of Presidential Documents*, vol. 39, no. 52, p. 1835.
2. Department of State, Office of the Spokesman, "Secretary of State Madeleine K. Albright Address before the Council on Foreign Relations," September 30, 1997 <<http://secretary.state.gov/www/statements/970930.html>>
3. Steven Mufson, "A 'Rogue' Is a 'Rogue' is a 'State of Concern,'" *Washington Post*, June 20, 2000, p. A16.
4. For the transcript, see Department of State, Daily Press Briefing, Spokesman Richard Boucher, June 19, 2000 <<http://secretary.state.gov/www/briefings/0006/000619db.html>>
5. The strategy of "differentiated containment" was first advanced by Zbigniew Brzezinski, Brent Scowcroft, and Richard Murphy as an alternative to "dual containment" toward Iran and Iraq; see Zbigniew Brzezinski, Richard Murphy, Brent Scowcroft, "Differentiated Containment," *Foreign Affairs*, vol. 76, no. 3 (May/June 1997), pp. 20–30.

6. For example, National Security Adviser Condoleezza Rice told CNN on February 4, 2001: "The President is committed to restructuring the nuclear relationship and making defenses against limited threats from rogue states or accidental launch a part of the new, restructured relationship [with Russia]." <[www.cnn.com/2001/ALLPOLITICS/stories/02/04/missile.defense/index.html](http://www.cnn.com/2001/ALLPOLITICS/stories/02/04/missile.defense/index.html)>. When White House press secretary Ari Fleischer was asked to specify the "rogue states" underpinning President Bush's advocacy of ballistic missile defense, Fleischer responded, "I am not going to go down and start delineating states. The President's concern is general." White House, Office of the Press Secretary, "Press Briefing by Ari Fleischer," February 5, 2001 <[www.whitehouse.gov/news/briefings/20010205.html#NationalMissileDefense](http://www.whitehouse.gov/news/briefings/20010205.html#NationalMissileDefense)>
7. Condoleezza Rice, "Promoting the National Interest," *Foreign Affairs*, vol. 79, no. 1 (January/February 2000), pp. 60–61.
8. Secretary Rumsfeld told the Senate Foreign Relations Committee in July 9, 2003: "The coalition did not act in Iraq because we had discovered dramatic new evidence of Iraq's pursuit of weapons of mass destruction. We acted because we saw the evidence in a dramatic new light—through the prism of our experience on 9/11." Steve Schifferes, "Rumsfeld brushes aside WMD fears," *BBC News Online*, July 9, 2003 <<http://news.bbc.co.uk/2/hi/americas/3054423.stm>>
9. White House, Office of the Press Secretary, "President Delivers the State of the Union Address," January 29, 2002 <[www.whitehouse.gov/news/releases/2002/01/print/2002012911.html](http://www.whitehouse.gov/news/releases/2002/01/print/2002012911.html)>
10. White House, "The National Security Strategy of the United States of America," September 2002 <[www.whitehouse.gov/nsc/nss.html](http://www.whitehouse.gov/nsc/nss.html)>
11. White House, Office of the Press Secretary, "President Discusses Foreign Policy Matters with NATO Secretary," October 21, 2002 <[www.whitehouse.gov/news/releases/2002/10/20021021-8.html](http://www.whitehouse.gov/news/releases/2002/10/20021021-8.html)>
12. Amatzia Baram, "An Analysis of Iraqi WMD Strategy," *Nonproliferation Review*, vol. 8, no. 2 (Summer 2001), pp. 34–35; see also Timothy V. McCarthy and Jonathan B. Tucker, "Saddam's Toxic Arsenal: Chemical and Biological Weapons in the Gulf Wars" in *Planning the Unthinkable: How New Powers Will Use Nuclear, Biological, and Chemical Weapons* ed. Peter R. Lavoy, Scott D. Sagan, and James J. Wirtz (Ithaca, NY: Cornell University Press, 2000), p. 73.
13. Rolf Ekeus, "Iraq's Real Weapons Threat," *Washington Post*, June 29, 2003, p. B7; see also Jonathan Tucker, summary of remarks in "Proliferation Challenges after Iraq" conference report on a U.S. Army Eisenhower National Security Series workshop co-organized by the Division of International Studies, Woodrow Wilson Center and the Reves Center for International Studies, The College of William and Mary, June 24, 2003 <[www.eisenhowerseries.com](http://www.eisenhowerseries.com)>
14. United Nations Security Council, Resolution 1441 S/RES/1441 (2002) 02-68224(E) 8 November, 2002.
15. According to Caroline F. Ziemke, Philippe Loustaunau, and Amy Alrich, strategic personality "focuses on broad historical and cultural patterns that evolve over the whole course of a state's history (its historical plot) and identifies the fundamental consistencies in its long-term strategic conduct in order to shed light on how they might shape its current and future strategic decisions. The methodology is not deterministic and, hence, not precisely predictive." See *Strategic Personality and the Effectiveness of Nuclear Deterrence* (Alexandria, VA: Institute for Defense Analyses, November 2000), ES-1.
16. Quoted by David E. Sanger, "Viewing the War as a Lesson to the World," *New York Times*, April 6, 2003, p. B1.

17. White House, Office of the Press Secretary, "President Bush Outlines Progress in Operation Iraqi Freedom," April 16, 2003 <[www.whitehouse.gov/news/releases/2003/04/iraq/20030416-9.html](http://www.whitehouse.gov/news/releases/2003/04/iraq/20030416-9.html)> (emphasis added); see also Jim Hoagland, "War's Tailor Made," *Washington Post*, April 27, 2003, p. 7.
18. Guy Dinmore, "Rogue States: One down, six to go in US terror Battle," *Financial Times*, June 20, 2003, p. 3.
19. Mary Jane Deeb, "Qadhafi's changed policy: causes and consequences," *Middle East Policy*, vol. 7, no. 2 (February 2000), pp. 146–153.
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21. Quoted in Robin Gedye, "UN Should Fight for Rights, says Berlusconi," *Daily Telegraph* (London), April 9, 2003 <[www.telegraph.co.uk/news/main.jhtml?xml=/news/2003/09/04/wun04.xml](http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2003/09/04/wun04.xml)>

COUNTERPROLIFERATION VERSUS  
NONPROLIFERATION IN THE  
MIDDLE EAST AFTER SADDAM: LESSONS  
FROM IRAQ AND LIBYA

*Michael Friend*

While the formal treaty-based nonproliferation regime has been in effect in the Middle East since its inception—Iran, Iraq, Syria, and Libya, for example, all signed the NPT in 1968—efforts to deal with the growing threat of the proliferation of weapons of mass destruction (WMD) in the Middle East were considerably intensified after the Iran–Iraq War of 1980–1988 and the Gulf War of 1991. Only a few years later, however, frustrations with the limitations inherent in multilateral and diplomatic approaches to the problem led the William Clinton administration to develop the set of policies and programs dubbed “counterproliferation.” Both nonproliferation and counterproliferation techniques have been tested recently, most obviously in Iraq. However, the lessons of Iraq should not be analyzed in isolation. Muammar Qadhafi’s extraordinary and welcome decision to end Libya’s WMD programs voluntarily and the alarming revelations about undeclared Iranian nuclear activities require that this extraordinarily complex set of developments be examined comparatively. Are Iraq and Libya two entirely different cases? What can they tell us about the relative utility of counterproliferation measures and the classic nonproliferation regime?<sup>1</sup> How can they assist us in dealing with the challenge posed by the alarming progress of the Iranian nuclear program and the potential Syrian WMD threat?

Counterproliferation seeks to find proactive ways to achieve what the diplomatic and international legal means, afforded by classic nonproliferation instruments, do not or cannot. The 1996 Department of Defense (DoD) policy directive, which largely remains in effect today, covers a spectrum of activities ranging from bolstering the effectiveness of existing nonproliferation activities to measures that would be necessary in the event of actual use of WMD by an adversary state or terrorist group. In spirit, counterproliferation seeks solutions outside the multilateral diplomatic framework of

nonproliferation treaties and export control regimes. Originally, however, counterproliferation was seen as complementing and strengthening classic nonproliferation measures. Yet, given the frustrations and failures of the nonproliferation regime over the last 15 years, an understandable temptation arose to rely heavily on counterproliferation and to deemphasize the importance of classical nonproliferation measures. Thus, current U.S. national strategy to combat WMD, as outlined in NSPD-17, is premised on a view that “traditional nonproliferation has failed,” and that we are now “going into active interdiction.”<sup>2</sup> More recently, however, the Bush Administration has begun to pay greater lip service to “the diplomatic track.” It is placing counterproliferation efforts, such as interdiction, in the broader context of a “comprehensive nonproliferation strategy.”<sup>3</sup>

## IRAQ

Iraq is perhaps the most important case study for the purposes of this argument. This is because efforts to control Iraq’s WMD program have, over time, seen the use of nearly the full range of nonproliferation and counterproliferation techniques. Long viewed as exhibit A in the case against the efficacy of the purely nonproliferation approach to the problem of WMD, the discovery of Saddam’s Hussein clandestine chemical, biological, and nuclear weapons programs, after the first Gulf War, was probably the single most important factor behind the Clinton Administration’s development of counterproliferation policy. Moreover, the bitter experience of United Nations Special Commission (UNSCOM), pointed incontrovertibly to the conclusion that classic nonproliferation regime-based norm building and inspections were not the real answer to the global WMD proliferation problem. This conclusion was drawn because of discord among UN Security Council members whose unity was essential for effective management of the Iraqi disarmament effort and the frustrations experienced on the ground with Iraqi noncooperation and dissembling. If real disarmament could not be fully achieved under the exceptional circumstances afforded by Iraq’s military defeat in 1991, how could conventional voluntary treaty-based nonproliferation measures be relied upon? At that time, no one with experience and knowledge of the Iraqi WMD program seriously doubted that after UNSCOM inspectors left in 1998 Saddam would rebuild his weapons capabilities, likely in ways designed to be much harder to detect.<sup>4</sup> The limitations of diplomatic and multilateral approaches to threat reduction were very clear. Even if one believed that the containment regime, designed to keep Saddam “in his box,” was proving reasonably effective, the long-term political unsustainability of these arrangements coupled with the logical near-certainty that Saddam was using his post-UNSCOM grace period to rebuild WMD capabilities made a compelling rationale for the threat to use force. This force was indented to, at a minimum, compel compliance with UN disarmament resolutions and Iraq’s NPT obligations, if not to “roll back proliferation where it has occurred.”

With the publication of the final report of the Iraq Survey Group, it is now clear that prewar assessments were almost completely inaccurate and that the 1991–1998 UNSCOM and International Atomic Energy Agency (IAEA) and 2002 UN Monitoring and Verification Commission (UNMOVIC) inspection teams, coupled with international sanctions, were astonishingly effective in preventing Saddam from reestablishing his WMD programs.<sup>5</sup> The colossal intelligence failure—due, in large extent, to a classic case of worst-case estimation on the part of Western intelligence analysts, exacerbated by a lack of reliable reporting after UNSCOM left Iraq in 1998—underscores the need for improved intelligence. This need is cited in the National Strategy to Combat Weapons of Mass Destruction as one of the elements critical to a successfully integrated approach to combating WMD.<sup>6</sup> The strategy's precience on this point could hardly have been more starkly underscored by the Iraq experience.

The final report of the Iraq Survey Group does, however, provide considerable support for the argument that the sanctions regime was politically unsustainable over the long run and that Saddam intended to reconstitute his WMD programs eventually. Following this logic, the use of force was necessary precisely because sanctions and inspections, however effective, could only be temporary. However, it is highly noteworthy that the George W. Bush administration started by attempting to use the broader nonproliferation regime to set up its goal of disarming Iraq by force. Even if one believes that at no time was the administration interested in making the UNMOVIC work, they felt it necessary to pay lip service to nonproliferation norms and UN resolutions in order to marshal international support for the use of force. At the same time, UNMOVIC would never have been allowed into the country absent the direct threat of military force from the United States and Great Britain. The fact that Saddam bowed to international pressure and accepted UNMOVIC, seen at the time in some circles in Washington as yet another case of his typical “cheat and retreat” tactics can also be seen as a perfect example of U.S. unilateralism coming to the rescue of the multilateral system. In other words, the highly credible threat of muscular counterproliferation was effective in restoring the nonproliferation system to functioning status.

Iraq was, at least initially, a case where U.S. willingness to threaten the use of force—applying a counterproliferation approach to the problem—brought immediate results in restoring the effectiveness of nonproliferation instruments. That this was possible was due not only to the credibility of the threat by the United States, but also to its widely accepted legitimacy. Unfortunately, the United States chose to move too rapidly to military operations, and the turmoil in Iraq today and the failure to find the WMD have further obscured the real lessons of this highly significant accomplishment.

Another counterproliferation success may be discerned in the demonstration of the United States' willingness to attack Iraq despite what U.S. commanders believed was a real probability that Saddam might order the use of chemical weapons against coalition troops.<sup>7</sup> Thus, the potential for states to asymmetrically deter the use of ground troops by the United States, via the

presumed possession of chemical weapons, was successfully met by DoD counterproliferation programs intended to equip and train U.S. (and allied) troops to fight in a nuclear, biological, or chemical (NBC) environment. While procurement of the most modern equipment under these programs had not been fully implemented by early 2002, U.S. officials were assured that available suits and systems were sufficient to protect against any use of chemical and biological weapons (CBW) agents.<sup>8</sup> In addition, warnings were issued to Baghdad against the use of WMD, as in the first Gulf War.<sup>9</sup> However, given the apparent absence of any WMD in Saddam's 2003 arsenal, it is difficult to call this threat a counterproliferation success, although its first Gulf War predecessor undoubtedly was. Nevertheless, that Iraq does not appear to actually have had deployed chemical weapons in the spring of 2003 does not alter the fact that the coalition was prepared to proceed despite what no one doubted was a real threat from chemical weapons and possibly bacteriological weapons as well.<sup>10</sup> This demonstration should have a positive impact on other states' calculations as to the utility of acquiring chemical (and bacteriological) weapons, although it will likely also spur more interest in weapons agents capable of defeating current NBC protection.

On balance, counterproliferation achieved a success in Iraq, albeit one that may prove to be self-limiting. Iraq's potential for future reconstitution of its full-scale program was eliminated by force, while a useful lesson was sent to other states. This lesson demonstrated that Saddam's tactics might not, in all cases, be a defense against sanctions under the multilateral nonproliferation regime.

On the other hand, the political, financial, and diplomatic cost, coupled with the loss of credibility in U.S. intelligence, will tend to have a limiting effect on future employment of this kind of robust counterproliferation. At the same time, Iraq has been revealed to be far more of a nonproliferation success than previously imagined. It shows that under certain circumstances, robust inspections can be extremely effective in containing and limiting the progress of clandestine WMD programs and even more so in conjunction with sanctions that have the effect of limiting the universe of legitimate imports. Here the experience of Iraq is clear—when the international community is prepared to enforce nonproliferation norms, by force, if necessary, they can be highly effective in restraining proliferators. Unfortunately, the Iraq experience also points to the difficulty of reproducing these conditions elsewhere.<sup>11</sup>

## LIBYA

No sooner had a surprised world received the news in December 2003 that Libya had promised to renounce its clandestine weapons programs and open key facilities to inspection than the proverbial thousand fathers of victory began to claim their child. President Bush strongly implied that U.S. demonstration of resolve against Saddam had been essential in dissuading Libya's mercurial leader from the pursuit of WMD.<sup>12</sup> Others have made this claim

more explicitly. Some claimed Libya's decision as a clear validation of the effectiveness of patient diplomacy.<sup>13</sup>

In analyzing the respective roles for classic nonproliferation and counterproliferation in the case of Libya, it is clear that the show of force in Iraq was at best an added inducement for Muammar Qadhafi to follow through on a decision on which he had already made. In fact, Libya started to seek normalized relations with the United States in the late 1990s, and by early 2003—before hostilities in Iraq commenced—Libya, the United States, and Britain were engaged in negotiations to have all sanctions removed in exchange for a complete renunciation of terrorism and Libya's WMD programs.<sup>14</sup> Thus the credible use of diplomatic persuasion—the carrot and the stick—anchored in multilateral and bilateral sanctions was the driving force in helping Qadhafi make up his mind. But along with the crippling economic effect of sanctions, the importance of international norms against the use or possession of WMD in the Libyan case should not be underestimated. Libyan Prime Minister Shukri Ghanem observed that

For a small country like Libya, with limited resources and big power opponents, your thinking is to defend yourself by all means . . . But then you find out that they're eating all your money. Israel is pampered by different countries; (North) Korea went into starvation. So economically it's not wise to develop it. Guns are costing you more every day and you find out that in this international atmosphere, this is taken against you. So economically and politically it becomes a burden. Then you find out you can't use these weapons. Even the US used them only once, so it doesn't make any sense. It gives you a false sense of power. Can Israel use this arsenal? And there are internal problems of how to guard them: if someone steals them or misuses them. They make you even more crippled. Logically they are not useful.<sup>15</sup>

Another factor that may have played an important part in Qadhafi's decision to renounce both terror and WMD is the very force that is moving to make the Islamic world a breeding ground of anti-American terror—Islamist fundamentalism. Qadhafi has seen the ideology of his youth—secular Nasserite Arab nationalism—all but totally eclipsed in the Arab world by a pan-Islamic religious fundamentalism that is intensely hostile to secular Islamic rulers and that, given the continued stagnation of the Libyan economy, threatened to be very attractive to Libya's youth. Given the choice, Qadhafi chose to take a chance on renewing links to secular Arab regimes and opening up his economy to the West.<sup>16</sup>

While it is difficult to say to what degree the growing evidence of U.S. determination to use force against Iraq might have influenced Qadhafi, some credit must be given on the counterproliferation side of the ledger to the use of interdiction. One of the few successful instances of naval interdiction under the Proliferation Security Initiative (PSI) in operation, British and American ships intercepted a German ship heading to Libya from Dubai carrying a cargo of centrifuge parts that were reportedly based on Pakistani designs and manufactured in Malaysia. The interception of the ship seems to



have been, if not the decisive factor, at least a turning point in negotiations, helping to convince Libya that it could not achieve its goals of improved relations and ending sanctions without completely abandoning its WMD program.<sup>17</sup>

Despite this undoubted success, however, Libya's disclosures over the past year and the revelations about the extent of the Pakistani nuclear supply network under A.Q. Khan have made it abundantly evident that interdiction must be given much greater political priority, material resources, and international cooperation if it is to play a major role in preventing other states in the future from acquiring significant weapons-making capacity.

On balance, Libya appears to be a case where a comprehensive nonproliferation strategy was successfully employed, albeit one where the balance of the credit must go to classic diplomatic and multilateral tools. The effectiveness of counterproliferation tools such as interdiction rests on solid multilateral foundations, such as international norms banning certain weapons and the superstructure of international law necessary to marshal international support for robust action. Contrary to considerable skepticism from both liberals and conservatives about the utility of sanctions in general, Libya shows that effective sanctions and economic pressures can have highly beneficial results if applied consistently and multilaterally.<sup>18</sup> Finally, the Libyan program showed that despite Libya's ability to acquire large amounts of sophisticated equipment, uranium feed stocks, and even a bomb design, all their WMD programs were reportedly plagued with technical problems due to sanctions.<sup>19</sup> In a world newly awakened to the dangers of WMD proliferation, the necessity of maintaining a unified front in enforcing sanctions should be obvious.

Finally, the likelihood that Qadhafi's calculations were affected by the threat posed to regimes such as his from Islamic fundamentalism raises an interesting question: can the tension between secular Islam and fundamentalist Islamism in the Middle East be exploited to promote positive outcomes in countries such as Syria and Iran?

### THREAT REDUCTION LESSONS FOR IRAN AND SYRIA: ANALYTIC FRAMEWORK

In attempting to derive policy conclusions from the examples of Iraq and Libya, much depends on how one frames the basic question: What is the threat to the United States and the West? Clearly, the old model—if it was a model—of the “unstable dictator fires off missile with WMD warhead at the U.S.” is not among the most imminent threats. More realistic concerns remain:

1. WMD will provide these states the ability to deter U.S. regional action in support of U.S. interests or of friends and allies.
2. Terrorist acquisition of WMD either via deliberate assistance or inadvertent acquisition.

3. Sales to others (as with Pakistan or North Korea).
4. Neighboring states' worsening threat perceptions will lead to further proliferation and a spiraling regional arms race along with major instability.
5. Further regional proliferation could so damage the nonproliferation regime that broader efforts to restrain proliferation are gravely impaired.

For some of these concerns, the Iraqi and Libyan cases demonstrate the real value of counterproliferation tools. Interdiction stands out most clearly in helping to control WMD exports and imports, for example. But all of them demonstrate the necessity of a truly comprehensive nonproliferation strategy.

Another key factor for analysis must clearly be the internal political context. What might work on true dictatorships, such as Iraq or Libya, may not be as effective with states—like Iran—where the relationship between leadership and populace is more complex. The proliferating state's security perceptions will be critical. Among the factors in Qadhafi's decision appears to have been the realization that WMD was not ultimately necessary for Libya's security. Despite the very different circumstances in states such as Syria or Iran, finding ways to affect these states' security self-perceptions must be an essential part of any successful nonproliferation strategy.

### IRAN AND THREAT REDUCTION

With the exception of interdiction, Iran would seem to be a case where counterproliferation methods have limited applicability. Iraq has shown that preemption is highly problematic and that intelligence can be maddeningly imprecise, not to mention the potential for willful misinterpretation. Even as a useful object lesson for other states, the Iraqi example is problematic. The North Korean case leads to different conclusions. One can draw two opposite conclusions from this case: either proliferation must be stopped early or it will be too late to stop it at all, or on the contrary, overly aggressive attempts to stop proliferation will result in the very result it sought to avoid.

One of most serious threats posed by Iran's nuclear program is that long-term inability by the international community to rein it in could lead Israel to take matters into their own hands, with the potential for extremely grave consequences in terms of stability in the Middle East and U.S. anti-terror efforts. Not least of these is the potential that Israeli preemption would spur other states to accelerate their WMD weapons acquisition programs, or even withdraw from key treaties such as the Nuclear (Non-Proliferation Treaty) NPT, and gravely damaging the global nonproliferation regime.<sup>20</sup> Jerusalem is on record that it will not allow Iran to become a nuclear weapons state.<sup>21</sup>

If counterproliferation has limited applicability, nonproliferation too has demonstrated weaknesses, particularly given that under the NPT, Iran has a right to nuclear energy for peaceful purposes. The Iranian mistake was, in a technical sense, not in building the capability to produce weapons-grade plutonium and highly enriched uranium, but in not having declared these

inherently dual-use facilities to the IAEA. Teheran has pursued a course of bluff, denial, and partial cooperation in an attempt to buy time and in the hope that the international community will lose focus and cohesion, a strategy for which the multilateral nonproliferation regime provides numerous opportunities. At the same time, Iran appears to be a case where international pressure can have a positive effect, given Iran's self-perception as an ancient culture deserving of respect and its desire not to be treated as an international pariah like North Korea.

Given the difficulties of a pure counterproliferation approach, the current involvement in Iraq and recognizing the potential utility of multilateral pressure, the Bush administration has adopted a pragmatic strategy of working within the IAEA and with Russia, the UK, France, and Germany to put pressure on Teheran.<sup>22</sup> As Iran saw that its key outside partners and interlocutors were more united than expected, this strategy bore fruit, as Teheran signed the IAEA's additional protocol on strengthened safeguards in December 2003 and agreed voluntarily to suspend uranium enrichment. Hopes were further raised in May 2004 when Iran signaled it might be prepared to compromise on retaining a national uranium enrichment capability.<sup>23</sup> Unfortunately, Iran subsequently threatened to suspend cooperation unless the IAEA's "nuclear file" was swiftly closed, which the IAEA has refused to do. Dark warnings that Iran might withdraw from the NPT have also emerged from hard-line members of Iran's parliament, warnings that the United States and others have thus far treated as bluff.<sup>24</sup> Subsequently, the June 2004 IAEA Board meeting produced a compromise document that was far more critical of Teheran than Iran had hoped or expected, but did not call for UN sanctions, as the United States had urged. Iran reacted with more bluster, threatening not to ratify the additional protocol and declaring it had resumed production of centrifuges and commenced large-scale production of uranium hexafluoride feedstocks while proclaiming its commitment to exclusively peaceful uses of the atom.<sup>25</sup> Teheran continued in its pattern of alternating conciliation and provocation until the September 2004 IAEA board meeting, offering to suspend centrifuge production. Since then, despite continued diplomatic efforts by the European Union (EU), Teheran appears to have hardened its position, declaring that it will never give up its "right" to enrich.<sup>26</sup> Even so, conflicting signals continue to emerge from Teheran in response to EU overtures and also Russian pressure, indicating that a negotiated way out of the impasse remains possible.<sup>27</sup>

It is difficult to see what else can be done, given the practical impossibility of a more muscular approach while Iraq remains in turmoil and with U.S. credibility in disrepair after the failure to find WMD there. Moreover, a global perception that Iran has been given more than a reasonable doubt will make it easier to marshal support for tough sanctions and, in the longer term, any tougher measures that may be necessary. In effect, this may be the Iraq model reapplied with due regard for multilateral and diplomatic niceties. Given the likelihood that Iran's theocratic government will attempt to continue its game of alternating overtures to the West with bluff and nationalistic

bluster, this might be a reasonable strategy. Certainly, if Teheran came to believe that U.S. military action had become practically and diplomatically possible, one outcome might be more thorough cooperation with the IAEA, just as Saddam allowed UNMOVIC into Iraq. But Iran is a long way from having Iraq's unique post-1991 pariah status, without which a multilateral coalition would be extraordinarily difficult to assemble. Moreover, unlike Iraq, public opinion in Iran is a factor that cannot be ignored. An aggressive counterproliferation strategy that appears to validate the Teheran hard-liners' appeals to nationalism could easily backfire, and carries the risk that Iran will go further down the road toward NPT breakout and popular alienation. Absent major provocation, the mullahs know that there would be little support for radical steps. In 2002, for example, an Islamic Republic News Agency poll in Teheran showed 74.7 percent of people aged 15 and over favored negotiations with the United States, and 17.5 percent opposed. This embarrassing result caused the polling organization to be closed.<sup>28</sup>

### Changing the Internal Debate

Beyond the kinds of trade-offs outlined above, some observers believe that Iran is a state whose long-term proliferation motivations—unlike those of Libya—must be addressed. They note that Iran's nuclear ambitions go back to the Shah's regime and that they might well continue even in the event of regime change in Teheran. As then-CIA Director George Tenet observed "No Iranian government, regardless of its ideological leanings, is likely to willingly abandon WMD programs that are seen as guaranteeing Iran's security."<sup>29</sup> This line of thinking leads to the conclusion that security guarantees or assurances would be necessary to change Iranian threat perceptions. Some have argued for such assurances in the context of a larger resolution of the Middle East problem.<sup>30</sup> Others have argued that Iran's implicit claim to need nuclear weapons has all but vanished with the end of Saddam Hussein and that fostering an informed debate in Iranian society about the validity of Iran's energy claim for the full range of nuclear facilities will be vital to help undermine the hard-liners' position.<sup>31</sup>

There are indications reinforcing the view that the best approach to the nuclear issue is to encourage a change in the terms of political debate within Iran. Strikingly, Iran's former IAEA ambassador Ali Akhbar Salehi has remarked

I am not among those who believe that nuclear weapons bring prestige. I mean we have to assess the situation of a country. A country like Iran cannot have prestige by acquiring nuclear weapons. I think a country like Iran would raise more threats against it, not get security, by having nuclear weapons. We cannot buy more security with nuclear weapons; only invite more threats against ourselves.<sup>32</sup>

To dismiss such statements as intended purely for Western consumption is a mistake. Such views are also reflective of a genuine debate within Iran's elites

as to the utility of nuclear weapons is made clear by the hard-liners' efforts to remove and silence those holding such views. Even though reformers are now largely absent from positions of power in Teheran, the combination of diplomatic pressure and renewed and visible efforts to offer Iran a way out of isolation has real potential to help Iranians to come to the conclusion that nuclear weapons are not in their long-term security interests.<sup>33</sup>

Nonproliferation approaches to the Iranian problem thus look to be moderately promising. Unfortunately, a strategy of patient diplomacy, while buying time for change within Iranian society, also buys time for the hardliners to string along the international community and press forward to achieve a nuclear breakout capability. The other risk of such a policy is that even in the apparently unlikely event that the mullahs are thrust aside by a populace eager for social and economic change, the country may be so far along the path to nuclear weapons status that it will be difficult to change. Simple national pride may make it extremely difficult for even a post-Khamenei Iran to abandon nuclear weapons given the almost nonexistent pressure on Israel to do the same.

If, however, continuing to pressure Iran through sanctions and the IAEA and reaching out to the Iranian public's desire to move beyond their country's current image doesn't lead to Iranian nuclear disarmament in the near term, the United States and its allies will then be in a better position to take stronger action—even if it means that Iran in the meantime moves farther toward acquiring a nuclear weapons capability. Here the Iraqi example is illustrative of how firm application of both nonproliferation and counterproliferation approaches can be mutually reinforcing. The threat of force made against Iraq, by the United States, mobilized a previously torpid international community into taking the Iraqi WMD threat seriously and today, despite the international ill-will engendered by the Iraq experience, the necessity of enforcing multilateral nonproliferation norms has been strengthened. While some in Teheran argue for taking the North Korean option, others who may ultimately not wish to alienate the Europeans, are willing to test the waters to see if they can be bluffed into backing away from a confrontation over the nuclear issue. It is to the great credit of the three European states concerned (France, Britain, and Germany) that they have not done so and have instead played an extremely valuable role in providing pressure that cannot be dismissed as American strong-arm tactics.<sup>34</sup> The case against Iran rests not on American intelligence but on the impartial evidence of NPT noncompliance unearthed by IAEA inspectors.

Initially, the Iraq experience has had a perversely positive effect: for the countries who doubted the necessity of the use of force against Iraq, the onus rested all the more strongly to demonstrate the effectiveness of multilateral mechanisms and the need for Western unity in the face of a real proliferation threat. Sadly, the results of the diplomatic efforts in Iran have, to date, not met European expectations. At some point greater pressure in the form of diplomatic isolation, economic sanctions, and possibly even the threat of force will have to be applied, if nonproliferation norms are to be upheld and

this emerging threat contained. Now more than ever, the ability of the international community to remain united in the face of this crisis will depend greatly on the perception that every opportunity for diplomacy has been thoroughly explored.

The time is ripe for the United States and the EU to switch the roles of “good cop” and “bad cop,” with the Europeans taking a harder line about the commercial and diplomatic consequences of continued Iranian intransigence and the United States offering credible carrots.<sup>35</sup> Such an approach would help increase the credibility of any future sanctions or other necessary pressure. Teheran knows it risks isolation and pariah status if it goes too far, so it is unlikely to openly declare itself a nuclear weapons state. But without some sharp change in the current dynamic, Teheran is equally likely to conclude that it can play the game indefinitely. Properly managed, the mullahs and the Iranian people can be shown that if they continue down the path of nuclear intransigence, Iran risks becoming a Libya or a North Korea.

## SYRIA

Syria appears to be a case where the Libyan model, with some important differences, would be applicable. Since the rout of the Syrian army by Israel in 1973, Syria’s rulers have limited their foreign ambitions to asserting control of Lebanon and supporting anti-Israeli terrorist organizations such as Hezbollah. Despite Syrian WMD programs, there is no evidence or reason to believe that Hezbollah or other terror groups linked to Syria have or will obtain WMD from Damascus. The only reason why the status quo, with respect to Syrian-backed terrorists, might change is if the Baath regime of Bashar Assad felt immediately threatened. Moreover, Assad must expect that were any Syrian-affiliated group to be suspected of the possession of WMD, much less their use, the barriers to retaliation would be very low. Of course, as with any WMD-possessing state, the failed state scenario is a potential problem, but one that is more likely in the event of deliberate destabilization. Thus there is little reason to believe that continued isolation and containment, coupled with strong incentives against transfer, would not suffice to contain the problem. Interdiction to prevent imports or exports of materials or weapons will of course be an important part of this equation.

As with Libya, a sanctions regime is in place. Syria is already under U.S. sanctions pursuant to the Syria Accountability and Lebanese Sovereignty Restoration Act of 2003. Syria is also under pressure from Europe, which, for example, accounted for 60 percent of its total exports in 2002. To offset the impact of U.S. trade sanctions, Syria has tried unsuccessfully, due to an EU policy linking trade agreements to nonproliferation behavior, to conclude negotiations with the European Union to join the Euro-Mediterranean Partnership. This status would have given Syria reduced tariffs and duties and greater access to European financial markets.<sup>36</sup>

Many of the sticks are already in place. It is the carrots that are missing. Is Syria a good candidate for the Libyan approach? According to former

National Security Council (NSC) official Flynt Leverett, the Syrians have made overtures in this direction:

senior Syrian officials—including President Bashar Assad himself . . . have told me that they want a better strategic understanding with the United States. To achieve this, however, Washington needs to be willing to spell out what Syria would get in return for giving up its ties to terrorists and its chemical weapons and ballistic missiles. As Assad told me, Syria is “a state, not a charity”—if it gives up something, it must know what it will gain in return.<sup>37</sup>

Little harm will come from testing the potential of a Libya-like deal, even if Assad is insincere. Moreover, there are few alternatives. Unlike Iran, Syria has no real civil society to appeal to in the hopes of moderating the regime’s behavior. Either Assad must change his mind or Assad must go and forcing the latter militarily would seem an unpalatable option in the aftermath of Iraq.

In helping Assad to change his mind, the other factor that cannot be ignored is that of Israel. Addressing the Syrian WMD issue is greatly complicated by the question of Israeli weapons and the Golan Heights issue. In April 2003, Syria renewed Arab proposals for a nuclear free Middle East, which were of course not taken seriously by either Israel or the United States. The longstanding U.S.- and Israeli position is that the Middle East can only become free of WMD in the context of overall resolution of broader security issues. While correct, if the United States is not also seen to be promoting that outcome more vigorously its position against Syrian WMD vis-à-vis Israel’s is all too easily dismissed as hypocrisy. Where Qadhafi had little tacit claim to need his WMD as an Israeli deterrent. Assad’s claims are more plausible, which in turn raises the political costs of giving them up. Without underestimating the difficulties involved, a successful U.S. policy should work to undermine sympathy in the Arab world for Assad’s security claim to require WMD.

### NEW U.S. NUCLEAR WEAPONS: A USEFUL COUNTERPROLIFERATION TOOL?

A deterrent against acquisition (as opposed to use) might conceivably be more credible if the United States deployed new weapons specifically designed for the counterproliferation role. The Libyans suspended work on the underground chemical weapons facility at Tarhuna in 1996 after Clinton administration officials suggested that they would not rule out bombing it—perhaps with the B-61 variable-yield nuclear weapon newly modified for earth penetration.<sup>38</sup> This apparent nuclear threat-based counterproliferation success does indeed raise the question as to whether other proliferating states might be deterred from pursuing WMD programs by more capable bunker busters than the weapons currently available along with other dedicated counterproliferation weapons and a more forthright declaratory policy.

On the one hand, the Tarhuna example would seem to validate the potential utility of this strategy. There are reasons, however, to doubt whether it is applicable elsewhere. The United States' threat to destroy Tarhuna was inherently more credible than it would be elsewhere for several reasons: (1) conventional bombs could have, if not destroyed it, then rendered it unusable; (2) having been bombed by the United States in 1983 Qadhafi had reason to believe the United States would not shy away from doing so again; and (3) Libya is a dictatorship where public opinion is irrelevant to national security decisions.<sup>39</sup> Thus Qadhafi could not count on nuclear self-restraint by the United States to preserve Tarhuna. Whether U.S. officials considered the collateral damage issue in making the nuclear threats, given Tarhuna's location only 40 km away from Tripoli, is not clear. Nevertheless, the Bush administration initially stated it needed a low-yield weapon to destroy deeply buried or hardened facilities located near population centers with minimal fallout. Given the technical difficulties, however, the administration now envisions its robust nuclear earth penetrator (RNEP) as a high-yield weapon of as much as one megaton.<sup>40</sup> Unless the United States is willing to make clear that it no longer regards nuclear collateral damage as a moral impediment to action, the RNEP does not appear to offer a technical solution to the credibility problem for deterring construction of deeply buried or hardened underground facilities.

Leaving aside for a moment the broader debate, it is worth examining whether such weapons might be of use in the specific cases of Iran and Syria. How, for example, would new nuclear bunker busters aid in countering Iran's nuclear weapons program? The Iranian problem that we are aware of today is either above ground or not deeply buried and presumably could have been preemptively destroyed with conventional weapons at any time.<sup>41</sup> The conclusion is that the mere fact that a state like the United States has the capability to destroy suspected WMD facilities is not enough to deter construction—more or less specific and credible threats are required, as with Tarhuna. Thus if Iran or Syria is building or already has deeply buried or hardened WMD facilities, beyond the presumed reach of U.S. conventional bunker buster munitions and the B61-11 nuclear bunker buster, then in order to deter further construction the United States would have to declare its willingness, indeed, readiness to attack such facilities preemptively with the new more capable weapons. Such a declaratory policy inevitably entails the risk of what has been called the “commitment trap,” in which use of these weapons would seem to be necessary to avoid undermining the policy's future credibility.<sup>42</sup> In an Iranian context, even if collateral damage could be reduced—no small task given the location of many of these facilities near population centers—it is hard to imagine how the counterproliferation gains of such a preemptive strike would be worth earning the hatred of a nation of 69 million people. Moreover, the potential for any preemptive attack that achieved anything less than complete destruction of Iran's WMD arsenal to prompt a decision to distribute any remaining weapons or materials to terrorists cannot be ignored. On the other hand, multilateral diplomatic



pressure is making some headway, and unlike the Libyan case, a successful rollback campaign in Iran must take public opinion into account. The explicit threats of preemption necessary to attempt credible acquisition deterrence against Iran would play into the mullahs' appeal to nationalism and destroy any possibility of success on the diplomatic front. For the price of a largely unusable new nuclear weapons capability the United States will have deprived itself of essential diplomatic tools. While Syria presents more political similarities with Libya, it would be extremely difficult to use nuclear threats against Damascus without knock-on consequences in Teheran.

Whether such weapons would have utility in enhancing deterrence against the use, as opposed to acquisition, of WMD by Iran or Syria, or their distribution to terrorists is another matter. It is conceivable that they would increase the options available to a president for credible, indeed, almost proportional retaliation. In this role they might also have some counterproliferation utility in clearing out suspected facilities, but this marginal benefit over existing capabilities must be weighed against the likelihood of increasing U.S. adversaries' motivation to obtain capabilities to deter U.S. action, and the undermining of nonnuclear use and nonproliferation norms that increased U.S. reliance on nuclear threats could foster.

## CONCLUSION

On balance, counterproliferation has had a decidedly mixed record in the Middle East. The forcible removal of Saddam must be counted a success for counterproliferation—unless the missing weapons turn up eventually in terrorist hands. The real potential for eventual reconstitution of the Iraqi program has been eliminated and the United States has demonstrated its resistance to asymmetric deterrence in the form of a chemical weapons threat. Unfortunately, the political, military, and economic cost of the Iraq operation is such that it will be extremely difficult to reproduce elsewhere. Additionally, the United States' credibility to lead future counterproliferation efforts of the military "roll-back" variety has been gravely weakened in the absence of an Iraqi WMD and the ongoing difficulties of the counterinsurgency effort there. As a result, U.S. ability to affect change by threatening "rogue states" with forcible regime change now looks weak. Moreover, not only will the United States be in a poor position to unilaterally make such threats in the future, the prospect of international coalitions of the willing doing so, much less of UN-sanctioned efforts, is at an all-time low. Iraq, sadly, may be doing for the use of military force to enforce nonproliferation norms what Somalia did for humanitarian intervention. The result could be the nonproliferation equivalent of Rwanda, where a far greater disaster is essentially ignored by an international community too divided and politically exhausted to countenance another effort. The obvious candidates are Iran and North Korea, where, to be sure, the options for a robust use of force were never as clear as they were in Iraq. At the same time, diplomatic efforts in Iran, and to a lesser extent North Korea, are now being undertaken with a greater sense of purpose and unity that would have otherwise have been the

case. This positive development does hold out the possibility for renewed multilateral cooperation in enforcing nonproliferation norms—but that outcome will require considerable diplomatic skill, patience, and a greater commitment to the spirit of the nonproliferation regime on the part of the United States.

On the positive side, Iraq and Libya both demonstrate that sanctions, when multilateral and effectively sustained, can play an important role in several ways. By limiting the technical progress of would-be proliferators and providing an incentive for negotiation they at least help to limit the problem and can both buy time and set the stage for a diplomatic resolution. The challenge is for an all too-often fractious international community to orchestrate them effectively.

The most promising new development in the counterproliferation toolbox is likely to be interdiction, where the PSI has already demonstrated its potential to help prevent illicit transfers of WMD materials and technology. However, to be more effective, the PSI will need strengthening and expanding. Since the PSI is by nature a cooperative international undertaking—indeed, one that explicitly seeks to achieve its aims within the confines of international law—this important counterproliferation initiative can only benefit from a greater attention to strengthening respect for international law. While interdiction measures such as the PSI must of necessity remain outside the multilateral nonproliferation framework, they gain immeasurably in effectiveness if they are seen to be the actions of countries acting in support of classic multilateral nonproliferation norms.

Nonproliferation, on its own, tends to fail in preventing determined cheaters from using diplomatic delaying tactics to obfuscate their clandestine activities. Counterproliferation on its own lacks any legitimizing principle other than the immediate national security interest of the state or states practicing it. A prime example would be the Israeli destruction of the Iraqi reactor at Osirak in 1981. However justified at the time, in terms of depriving Iraq of a nascent nuclear weapons capability, the Osirak attack had no legitimacy in international law and is highly problematic as a model for serious peacetime counterproliferation efforts. The United States' sole foray into this kind of preventive action, the cruise missile attack on the suspected chemical weapons plant in Khartoum in 1998, proved self-limiting as the doubts raised after the fact about whether the target was involved in any way in chemical weapons production point to the kind of intelligence problems posed by preventive/preemptive action seen much later in Iraq. By contrast, the United States had a legitimate claim on the international community to authorize the use of force in the face of long-term Iraqi intransigence. Iraq paradoxically shows this, as President Bush was able to justify a massive "roll-back" operation in Iraq on the grounds that Saddam had massively and consistently violated his international obligations under the NPT and under a number of UN Security Council resolutions. Had the Iraqi WMD been found, there would be little debate today about the validity of the United States contention that muscular counterproliferation can be necessary to impose international will. Counterproliferation efforts thus stand only to gain in effectiveness and

legitimacy if the United States acts to strengthen multilateral nonproliferation instruments. Traditional nonproliferation has not failed, but it does need serious attention from the international community. Such commitment is also the best way to make “active interdiction” a success.

## NOTES

1. The Global Nonproliferation regime, according to a commonly accepted definition, is “a network of interlocking treaties, organizations, unilateral and bilateral undertakings, and multilateral inspections aimed at halting the spread of nuclear chemical and biological weapons.” Cirioncione et al., *Deadly Arsenals* (Washington: Carnegie Endowment for International Peace, 2002), p. 25.
2. *National Strategy to Combat Weapons of Mass Destruction*, White House, December 2002. Quoted in Mike Allen and Barton Gellman, “Preemptive Strikes Part Of U.S. Strategic Doctrine: ‘All Options’ Open for Countering Unconventional Arms,” *The Washington Post*, December 11, 2002.
3. Under Secretary of State John Bolton, testimony before the House Committee on International Relations, September 16, 2003. “While we pursue the diplomatic track whenever possible, the United States and its allies must be willing to deploy more robust techniques, such as economic sanctions, as well as interdiction and seizure, or other means . . .”
4. See, for example, former nuclear inspector David Albright, “Masters of Deception” in *Bulletin of the Atomic Scientists*, vol. 54, no. 3 (May/June 1998).
5. Comprehensive Report of the Special Advisor to the DCI on Iraq’s WMD, September 30, 2004, [http://www.cia.gov/cia/reports/iraq\\_wmd\\_2004/](http://www.cia.gov/cia/reports/iraq_wmd_2004/). The previous ISG Chief, and former IAEA/UNSCOM Chief Nuclear Weapons Inspector David Kay, acknowledging his surprise in not finding the anticipated evidence of a clandestine weapons program, noted that “when you’re on the inside and you have freedom to look at both what went on, as well as to interview the Iraqis who were involved, it’s hard not to come away with the impression that they greatly feared inspections and monitoring. And they clearly took steps in the 1990s based on their belief that certain things would be found by the inspectors as they continued. And generally most inspectors . . . focused on the limitations that the Iraqis were imposing on the inspections. And so we were looking at the difficulty that the inspectors had in operating, whereas the Iraqis, we now understand, were looking at the effectiveness the inspectors were achieving even with those limitations.” Interview with David Kay, *Arms Control Today*, March 2004.
6. *National WMD Strategy*, “Preemptive Strikes,” p. 5.
7. DoD News Briefing – Secretary Rumsfeld and Gen. Myers, Tuesday, March 25, 2003. <[www.dod.mil/transcripts/2003](http://www.dod.mil/transcripts/2003)>
8. In response to charges that U.S. troops lacked the latest NBC combat gear, Anna Johnson-Winegar, deputy assistant secretary for chemical and biological defense, said she “believed the Pentagon would be able to reach a ‘goal’ for providing all troops sent to the Gulf with the new protective suits, officially named the Joint Service Lightweight Integrated Suit Technology, or JSLIST, suits. Johnson-Winegar also said recent tests had given defense officials ‘complete confidence’ in the protective capabilities of the JSLIST suits and the older garments.” “Safety Against Chemical, Biological Arms Doubted,” *Washington Post Saturday*, November 30, 2002.

9. US warns Iraq against using nuclear, biological and chemical arms, Washington (*AFP*) December 11, 2002.
10. Lt. Gen. James Conway, commander of the U.S. 1st Marine Expeditionary Force, stated, “we’ve been to virtually every ammunition supply point between the Kuwaiti border and Baghdad, but they’re simply not there.” “US Intel ‘Simply Wrong’ on Chemical Attack—General,” Reuters, May 31, 2003.
11. For a fuller discussion of the implications of not finding Iraqi WMD for the non-proliferation regime, see Michael Friend, *After Non-Detection, What? What Iraq’s Unfound WMD Mean for the Future of Nonproliferation*. UN Institute for Disarmament Research, December 2003.
12. “Nine months of intense negotiations involving the United States and Great Britain succeeded with Libya, while 12 years of diplomacy with Iraq did not. And one reason is clear: For diplomacy to be effective, words must be credible, and no one can now doubt the word of America.” President’s State of the Union Address, White House transcript January 20, 2004.
13. Flynt Leverett, “More than threats led to Qaddafi’s reversal,” *New York Times*, January 24, 2004.
14. *Ibid.*
15. Quoted in Stephen Fidler, Mark Huband, and Roula Khalaf, “Return to the Fold: How Gadaffi Was Persuaded to Give Up His Nuclear Goals,” *Financial Times*, January 17, 2004.
16. See Thomas E. McNamara, “Why Qaddafi turned his back on terror,” *International Herald Tribune*, May 6, 2004.
17. See Fidler et al., “Return to the Fold.”
18. For just one take on this widespread view, see Richard N. Haass, “Economic Sanctions: Too Much of a Bad Thing,” Policy Brief No. 34, Brookings Institution, and “Sanctions Almost Never Work,” *Wall Street Journal*, June 19, 1998.
19. In one example, a nuclear weapon built from Libya’s Chinese blueprints would have been too big to fit on any of Scud-C missiles in its arsenal. “It was interesting to see the effects of sanctions,” said one senior State Department official familiar with the U.S.-led investigation of Libya’s weapons programs. “The things they got weren’t the best, and they weren’t in a position to go to the supplier and complain.” Quoted in Jody Warrick and Peter Slevin “Libya’s Disclosures Put Weapons in New Light: Programs for Unconventional Arms Were Ambitious, but Plagued With Problems” *Washington Post*, March 2, 2004.
20. See George Perkovich with Silvia Manzanero, *The Global Consequences of Iran’s Acquisition of Nuclear Weapons* Carnegie Endowment for International Peace, April 2004. Draft available on <[www.ceip.org](http://www.ceip.org)>
21. Bennett Ramberg, “Iran May Hide Its Nuclear Ambitions from Some, But Not from Israel,” *Los Angeles Times*, December 10, 2003; Conal Urquhart, “Israel Warns Iran on N-Weapons,” *The Guardian*, December 22, 2003.
22. See *Remarks by the President on Weapons of Mass Destruction Proliferation*, Fort Lesley J. McNair, National Defense University Washington, DC, February 11, 2004.
23. William Broad, “Nuclear Weapons in Iran: Plowshares or Sword?” *The New York Times*, May 26, 2004.
24. See “Iran’s Khatami Warns UN on Future Atomic Cooperation,” *Reuters*, May 27, 2004 and “U.S. Accuses Iran of Intimidation on Nuclear Issue,” *Reuters* May 27, 2004. Iran is clearly trying to “up the ante” ahead of the IAEA meeting, but

- “I don’t take the threats too seriously,” a senior U.S. official said. “If Iran withdrew from the nuclear Non-proliferation Treaty—including its prohibitions against uranium enrichment and its requirement for IAEA inspections—it ‘would become a pariah to everyone’ and ally itself with North Korea at a time when Tehran seems to want integration with the world,” another U.S. official said.
25. See “Under fire from UN, Iran warns it may curtail nuclear cooperation,” *AFP*, June 15, 2004 and Dafna Linzer, “Iran Says It Will Renew Nuclear Efforts,” *Washington Post*, June 25, 2004.
  26. “Iran Seeks Nuclear Deal With EU, but Refuses to Give Up Enrichment,” *AFP*, October 12, 2004
  27. See “US to host G8 talks on Iran nuclear incentives but holds firm on demands,” *AFP*, October 12, 2004 and “Russia makes nuclear plea to Iran,” BBC News, <[www.bbc.co.uk](http://www.bbc.co.uk)> October 11, 2004.
  28. Radio Free Europe/Radio Liberty Analytical Reports, vol. 5, no. 36, October 7, 2002 <<http://www.rferl.org/reports/iran-report/2002/10/36-071002.asp>>
  29. The Worldwide Threat in 2003: Evolving Dangers in a Complex World, February 11, 2003 <[http://www.cia.gov/cia/public\\_affairs/speeches/2003](http://www.cia.gov/cia/public_affairs/speeches/2003)>
  30. See for example Bennet Bamberg, who proposes a Middle East Weapons of Mass Destruction Free Zone guaranteed by NATO. “Defusing the Nuclear Middle East,” *Bulletin of the Atomic Scientists*, May–June 2004.
  31. See Shahram Chubin and Robert S. Litwak, “Debating Iran’s Nuclear Aspirations” *The Washington Quarterly*, vol. 26, no. 4, Center for Strategic and International Studies and Massachusetts Institute of Technology (Autumn 2003), pp. 99–114.
  32. “Nuclear weapons will not bring prestige to Iran, top official says” Iran Daily web site, Tehran, in English, June 9, 2004.
  33. Mohsen Mirdamadi, the reformist head of the parliamentary National Security and Foreign Policy committee, before being barred from running for reelection noted “We are gradually creating an unprecedented global consensus against ourselves,” quoted in “Nukes A Hot Issue In Iran,” CBS/AP, Teheran, Iran, September 27, 2003.
  34. “U.N. Agency Poised To Rebuke Iran on Nuclear Program” *Washington Post Foreign Service*, June 14, 2004.
  35. As of mid-October 2004, the United States has reportedly begun to reconsider its all-sticks-no-carrots approach. See Stephen R. Weisman, *U.S. in Talks with Europe on Iran Nuclear Deal*, New York Times, October 13, 2004.
  36. See Michael Nguyen, “U.S. Sanctions Syria” Arms Control Today News Update, May 14, 2004.
  37. Leverett, “More than Threats.”
  38. See Art Pine, “A-Bomb against Libya Target Suggested” *Los Angeles Times*, April 24, 1996, and Arkin, William, “Nuking Libya,” *Bulletin of the Atomic Scientists*, vol. 52, no. 4 (July/August 1996). For a fuller discussion of the B-61-11 and issues involved in the development of new nuclear weapons, see Andrew Lichterman, “Looking for New Ways to Use Nuclear Weapons: U.S. Counterproliferation Programs, Weapons Effects Research, and ‘Mini-Nuke’ Development” *Western States Legal Foundation Information Bulletin*, Winter 2001.
  39. Regarding the utility of conventional bunker busters, see comments of SAC Commander Adm. James Ellis, quoted in Walter Pincus, “Future of U.S. Nuclear Arsenal Debated,” *Washington Post*, May 4, 2003.

40. For a technical discussion of why low collateral damage and destruction of deeply buried facilities are physically incompatible, see Robert W. Nelson, Princeton University, "Low-Yield Earth-Penetrating Nuclear Weapons," *Journal of Science & Global Security*, vol. 10, no. 1, Princeton University, (2002), pp. 1–20, also available on <[www.fas.org](http://www.fas.org)>. Nelson addresses these questions as well as the doubtful utility of such weapons against underground chemical or biological weapons facilities in "Nuclear Bunker Busters, Mini-Nukes and the US Nuclear Stockpile," in *Physics Today*, November 2003 at <[www.physicstoday.org/vol-56/iss-11/p32.html](http://www.physicstoday.org/vol-56/iss-11/p32.html)>. Also see, Sidney Drell, James Goodby, Raymond Jeanloz, and Robert Peurifoy, "A Strategic Choice: New Bunker Busters Versus Nonproliferation," *Arms Control Today*, March 2003.
41. Underground structures at the Natanz uranium enrichment site are reportedly buried 25 feet deep with an 8-foot concrete roof and would thus not require the use of nuclear bunker buster munitions. See Glenn Kessler, "Group Alleges New Nuclear Site in Iran: Facility Said to Be Used to House Equipment to Enrich Uranium for Use in Weapons," *Washington Post*, February 20, 2003.
42. See Wade Huntley, "Unthinking the Unthinkable: U.S. Nuclear Policy and Asymmetric Threats," *Strategic Insights*, vol. 3, no. 2, U.S. Naval Postgraduate School Center for Contemporary Conflict (February 2004).

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A DEMAND-SIDE STRATEGY FOR  
REGIONAL SECURITY AND  
NONPROLIFERATION  
IN THE PERSIAN GULF

*Michael Ryan Kraig and Riad Kahwaji\**

INTRODUCTION

The spread of weapons of mass destruction (WMD) technologies, materials, and manufacturing processes to the developing world has overtaken many issues on the U.S. national security agenda, at least as measured in human resources (intelligence, diplomatic, and military), technological innovations, military procurements, and the formal statements of U.S. strategy documents. Globally, it has become the central focus of heated debates about international stability, security, and prosperity in the post-Cold War world, both in United Nations circles and in European and Asian capitals. Since Saddam Hussein made the fateful decision to expand the Iraqi state via aggressive military means in 1990–1991—backed up by committed WMD programs that were either weaponized or very near to producing a working weapon—the “WMD proliferation threat” has replaced the nuclear balance between the United States and the Soviet Union as the central planning concern of the U.S. national security community. The subject also dominates many meetings and debates within the North Atlantic Treaty Organization (NATO) in Brussels, and it has led to the creation of a new European Union WMD nonproliferation strategy with the imprimatur of European Union President Javier Solana.<sup>1</sup>

We argue that this obsessive focus on WMD proliferation constitutes an obstacle to a more holistic approach to security policy, especially concerning the stabilization of highly volatile regions such as the Persian Gulf. In brief, the narrow functional goal of stemming proliferation of nuclear weapons has become the “silver bullet” security solution that officials and analysts claim will stabilize the world, or, at the very least, stop the world from entering a new era of uncertainty, fear, danger, and chaos. According to these arguments, if nuclear weapons spread, all is lost. But, if nuclear weapons are kept



within the writ of the Permanent Five (P-5) United Nations Security Council members and the de facto nuclear states of Israel, India, and Pakistan, then the world will be a much better place in which to live, trade, and travel.

Thus, counterproliferation and nonproliferation (including associated programs such as missile defense) have gone beyond the status of mere tactics, policy tools, or initiatives to assume the mantle of national and global grand strategy. In contrast, little research has gone into basic questions about the actual effect and role of WMD in creating security or insecurity, stability or instability. If nuclear weapons were to disappear tomorrow, what would the world look like? Would the global economy and its inter-connected system of trade, information, and travel be secure? Would the United States be secure? Would key strategic regions such as the Persian Gulf or Northeast Asia be secure? And even if *inter*state relations are stabilized by the removal of latent nuclear threats between important regional rivals, what does this say about nontraditional or *trans*national threats, which may be based on domestic instabilities and *intra*-national socioeconomic rifts?

In this regard, there are actually three grand geopolitical levels of concern that planners face in today's world: the global level of security, the regional level, and of course, the national level. Every nation is simultaneously a member of a given region, with its own unique, defining characteristics, and a member of the global community as a whole. Thus, global security, regional security, and national security are all pursued in some form or another by nearly every nation in the world and for superpowers such as the United States they are tightly intertwined.

In the twenty-first century, can one imagine a secure globe if the oil supplies of the Persian Gulf region were severely disrupted?<sup>2</sup> And, could one imagine a secure United States if there was a global economic meltdown? Conversely, could one imagine a healthy global economy if the U.S. economy took a major downturn for an extended period of time? In the pre-World War II world, one might have imagined scenarios in which, say, East Asia was beset by international or intra-national conflicts, with no severe effects on Europe, the United States, or other regions or countries outside of the affected area. Or one could imagine a secure United States with the rest of the world going to pieces. But, in large part due to U.S. political leadership and the growth of transportation, finance, and information technologies the global economy is intimately connected.<sup>3</sup>

This overview of the security landscape raises a simple but usually unstated question: how would a successful counterproliferation or nonproliferation mission contribute to global, regional, and national security, especially for the United States as the leading global power? This question is especially pertinent for highly strategic areas such as the Middle East and Persian Gulf, which contain the central energy resources used by the global economy and which also contain ethnic, religious, and territorial conflicts that could have ripple effects well beyond the region's borders. For instance, the widespread perception that there is a growing "civilizational" dispute between Muslims and Christians reflects the fact that the local dispute between Israel and the

Palestinians, or between the United States and Iran, has global cultural implications that could undermine the U.S. presence in far-flung areas such as Southeast Asia where Islam far outnumbers Christianity and other forms of world religion. Thus, the ideologies of regional disputes can be broadcast through media and through ethnic and religious groups to assume extra-regional, global proportions.

The overarching argument of this chapter is that planners must subordinate the goal of stemming nuclear proliferation to a more nuanced, macro-level view of security within the Persian Gulf. They must incorporate other security goals, requirements, and threats into a larger strategic vision that has the stated purpose of stabilizing and legitimizing the regional security system for all states, including rogues such as Iran. While the United States might make purely tactical, short-term gains by stopping nuclear proliferation in Iran—possibly through preemptive military strikes against Iranian facilities—long-term strategic goals may suffer. These goals include stabilizing the Persian Gulf as a whole, creating a reliable and low-priced supply of oil and natural gas so as to allow economic development in poorer regions of the world, and lessening the growing rift between the United States and the Arab world. This rift could lead to new regional wars in the Persian Gulf, new types of global transnational terrorism, heightened domestic turmoil in key Gulf states, and the possible growth of other transnational threats such as drug smuggling, criminal cartels, and illegal arms transfers.<sup>4</sup>

A corresponding part of this analysis is the contention that the United States must stop defining its national security (and global security as a whole) in terms of the U.S. strategic position within the international system—namely, as a nuclear state that has superior security policy options over weaker, nonnuclear states. The implicit presumption of counterproliferation and non-proliferation efforts is that if the United States can keep its current supreme global position (“primacy”) within the world, then it can stabilize regions in a better manner and ensure a functioning global economy. Nuclear weapons are, of course, known as the “great equalizer” among nations in the world today, at least in terms of military variables. But would the loss of the United States’ preeminent strategic position really undermine both global stability and U.S. national security? And does preservation of global strategic primacy automatically create a secure and predictable Persian Gulf? Is it not the case that the pursuit of *global* strategic primacy threatens to conflate vastly different *regional* threat environments, such as that between the Persian Gulf (the Iranian proliferation threat) and Northeast Asia (the North Korean proliferation threat)?

### COUNTERPROLIFERATION IS THE U.S. SECURITY STRATEGY TOWARD THE PERSIAN GULF

Many regional experts and analysts are confused with the lack of strategy in the current U.S. approach to the Persian Gulf, an approach which is based on a failing occupation in Iraq alongside bilateral military arrangements with

Gulf Arab monarchies and the complete isolation of Iran. In fact, the United States *does* have a strategy, one that intertwines counterproliferation and the Bush Administration's "war on terror." It is nonsensical to talk about *non*proliferation goals and the Nuclear Non-Proliferation Treaty (NPT) within the current writ of U.S. policy. Counterproliferation is not nonproliferation, and it is based on many contrary assumptions and contrary legal and moral requirements.<sup>5</sup> Counterproliferation, intertwined with counterterrorism, has definitely displaced nonproliferation and/or balance-of-power *realpolitik* in the Bush Administration's foreign and security policies, both globally and regionally.

What exactly are counter- and nonproliferation?<sup>6</sup> And how is global security intertwined with regional security in the Persian Gulf, or, indeed, other Asian regions? Currently, the U.S. national security policymaking agenda is defined by two apparently contradictory and conflicting philosophies:

- A military-based counterproliferation approach based upon a flexible mix of deterrence, compellance, coercive diplomacy, global military superiority, and the preventive or preemptive use of military force.
- Legal, regime-based nonproliferation approach that stresses cooperative, binding multilateral agreements, and verification mechanisms at the global and regional levels as the best routes to peace and stability.

Since the terrorist attacks on the World Trade Center on September 11, 2001, the Bush administration has also sought to link the counterproliferation approach (that stresses the threat of "rogue states" like Iraq or North Korea) with a "war on terrorism," or counterterrorist approach that stresses the future threat of transnational terrorist cells to the U.S. homeland. The State of the Union address of January 29, 2002, in which President Bush connected the global transnational terror threat to an "Axis of Evil" (a set of rogue states comprising Iran, Iraq, and North Korea), along with the Administration's *National Security Strategy of the United States* released in September 2004, seeks to define, defend, and emphasize this linkage between counterproliferation (aimed at traditional sovereign state actors) and counterterrorist military actions (aimed at transnational terror networks abroad).<sup>7</sup>

A broad counterproliferation/counterterrorist strategy involves several aspects:

- Dissuasion of competing military buildups by potential state adversaries like China, Iran, Russia, or others through the solidification of indefinite U.S. global military superiority. This will presumably convince rising middle powers in key regions to embrace U.S.-style liberal democracy and forego military expansion in their own spheres of influence.
- Deterrence of those rogue states or future "near peer competitors" who manage to acquire WMD or significant conventional forces that challenge U.S. hegemony at the regional level in the Middle East, Persian Gulf, South Asia, Southeast Asia, and Northeast Asia.

- Deterrence of transnational terrorists by threats to strike their networks within the boundaries of failed states.
- Preventive/preemptive military strikes or the threat of such strikes through coercive diplomacy in the event that dissuasion and deterrence are not feasible or desirable. This includes covert aid to those third world states perceived to be too weak to effectively police their own territory and rid themselves of threatening terrorist cells without U.S. intervention.<sup>8</sup>

In turn, each of the above elements could be seen as an overall strategy of compellence, in that the presumed superiority of U.S. values, culture, political institutions, economy, and global military power will act together as a combined package to compel (or convince) others to embrace secular, liberal, capitalist democracy for their own future development and forego threats to U.S. leadership in key regions of the world. Or, as lucidly summarized by one former Reagan defense official, “The goal of previous Presidents was to make the world safe for democracy. The goal of the Bush [National Security Strategy] is to make the world democratic.”<sup>9</sup>

As defined operationally by the U.S. government since the early 1990s, counterproliferation consists of technology denial methods directed at the developing world (export controls) as well as new methods of deterrence, defense, and preemption (precision-guided and more lethal conventional munitions alongside the existing nuclear arsenal). The perfection of defense, deterrence, and preemptive policy options has become the major goal of the national security planning community, incorporating such advances as

- Better targeting through increased surveillance and reconnaissance.
- Seamless integration of all information to provide a flawless picture of the battlefield.
- Better long-range intelligence.
- More accurate and flexible (usable) nuclear and conventional weapons.
- Better detection of hostile biological or chemical agents in regional battle-grounds.
- The invention of both small and large unmanned aerial vehicles for automated intelligence missions and “standoff” strike capabilities.
- If all else fails, missile defense against WMD strikes.<sup>10</sup>

### Alternative Perspectives to Security

Under the counterproliferation approach, the economic sphere and the military sphere are integrated only in the narrow sense of military operations. In the larger sense of politics, international development, and diplomacy they remain separate, with the fist of military power protecting the open hand of the free market. In fact, the counterproliferation vision of the world is much like that of eighteenth- or nineteenth-century diplomacy. Traditional alliances (both multilateral like NATO and bilateral like South Korea and Japan) will ensure collective security for “friends and allies” against unfriendly enemies,

while at the same time protecting trade routes, international financial holdings, and technological advances from disturbance or exploitation by enemies. Under this vision of global politics, globalization of the free market is selective, insofar as dual-use commercial advances with military applications are to be uniformly denied to developing countries that may use them to gain political strength or military power. Security is therefore seen in cooperative, multilateral, or mutual terms only with regard to friends and allies, those who band together in their economic and military relations to defend against intractable and potentially irrational enemies. Both ideological and resource competition are seen as endemic to international relations and as an unavoidable reality that necessitates improved methods of control to minimize unpredictability and uncertainty in relations with potentially hostile actors.

The counterproliferation approach views U.S. diplomatic relations largely in terms of discrete bilateral and multilateral relationships, that is, in terms of formal alliances or informal security understandings among friends. Examples of such friends include NATO, South Korea, Japan, Israel, Australia, non-allied Southeast Asian countries such as Thailand and Singapore, and the Gulf Cooperation Council (GCC) states in the Middle East, all of whom receive preferential U.S. aid, trade relationships, military technology-sharing arrangements, and, in the case of GCC states, large sales of off-the-shelf, high-technology military items.<sup>11</sup> From this perspective, technological diffusion and development are positive only insofar as they occur within this circle of friends and allies. Security is a fungible good that can (and should) be divided among opposing camps. Moreover, according to this approach, the sovereign nation-state is still the primary actor, insofar as transnational terror networks are thought to be produced, guided, funded, encouraged, equipped, or otherwise supported by rogue-state actors like Iran or failed states such as Afghanistan.

In marked contrast to the counterproliferation approach, the nonproliferation or cooperative security school of thought incorporates far different assumptions about world politics and the place of the United States in it. The central idea is that all nation-states seeking to protect themselves from the same threats, and that states seeking to lend certainty, predictability, and stability to their security situations will find greater relative security through mutual obligations to limit their military capabilities than through unilateral or allied attempts to gain dominance. Within this approach, it is not only "friends and allies" who participate in security regimes. The cooperative security outlook assumes that enemies or potential enemies will accept the same constraints on behavior as friends, despite the existence of substantial mutual suspicions and mistrust. It is also assumed that these constraints will be mutually advantageous and mutually verifiable. Security is guaranteed not through dominance but through the outlawing of policy options that have the goal of achieving dominance over the opponent. Stated simply, unilateral gain is not the goal of nonproliferation and cooperative security arrangements.

Hence, the nonproliferation/cooperative approach does not officially separate states into categories of friends, allies, and enemies, but, instead,

treats all actors as equal partners in the quest for mutual security. *Security* is increasingly defined as a collective, indivisible good. This is due largely to the globalization of social and economic trends and the diffusion of new technologies with dual-use applications. Therefore, the cooperative security viewpoint believes that security is best pursued *with* other states rather than against them, even in those cases where the states in question have starkly different value systems and ideological goals.

Overall, three schools of thought, or strategic approaches, are now vying for adherents within the U.S. foreign policy and national security discourse. The traditional, competitive, *realpolitik* model of international security can be thought of as a balance of interests based upon a rough balance of power. The more recent U.S. strategic evolution can be thought of as an imbalance of power and interests (hegemony) based upon both offensive (compellent) and defensive (deterrent) threats used in combination. Finally, the relatively recent cooperative model, which includes the tenets and goals of the international nuclear nonproliferation regime and the International Atomic Energy Agency (IAEA), can be thought of as a balance of interests based upon mutual reassurance.

As it happens, two of these strategies have a great deal in common with each other: the traditional, balance-of-power strategy is similar to the cooperative security strategy in each school's insistence on a balance of interests; they differ, however, in their preferred form of guaranteeing this balance. The *realpolitik* school relies largely on implicit threats as seen through economic and military power (and temporary alliances to build up power), while the cooperative school relies instead on promises, reassurance, and verification of legal agreements. Both of these schools, in turn, differ dramatically from the evolving U.S. approach of counterproliferation, which is increasingly focused on the establishment of an authoritative value system based on a network of friends and allies who largely share the foreign policy goals of the United States. In short, the hegemonic, counterproliferation approach assumes that the deleterious effects of competition are best addressed through the elimination of competition itself, that is, through the persistent weakening of those actors who harbor opposing goals, views, and values. In marked contrast, the balance-of-power and cooperative security schools both guarantee each actor that their national interests will be met at some minimal level—assuming that a balance of power does not break down or that cooperative promises can be reliably verified and enforced.

### COUNTERPROLIFERATION IS A *GLOBAL* STRATEGIC VISION APPLIED TO REGIONS

Current U.S. counterproliferation policy is not actually focused on regional security at all. Perhaps more accurately, it subsumes regional security under a grander global vision of spreading liberal democracy and preventing the rise of a strategic competitor, whether that competition is defined technologically, militarily, or ideologically.<sup>12</sup> This is the context within which WMD

takes on so much importance. Only WMD, and especially nuclear weapons, can pose a traditional, cross-border, interstate strategic threat to the United States' preeminent position within the global system. Implicitly, if not explicitly, it is this global preeminence (in political/ideological as well as military terms) that the Bush administration is defending.<sup>13</sup>

For instance, if one reads the 2002 *National Security Strategy of the United States*, one sees that the cooperation between great powers that it posits is not based on straightforward multipolarity involving a combined Chinese–European definition of the global order alongside the United States as equal partners, but rather on a presumed U.S. leadership role in which both Europe and China are expected to agree with the U.S. duty, obligation, and responsibility to create global peace through spreading liberalization.<sup>14</sup> In short, this strategy places the issue of competition with potential great powers such as China “in China’s court.” The question is not whether the United States will give up its superior military programs and doctrines—it most certainly will not—but rather whether China will stop competing with the United States and accept the U.S. definition of global order. The choice is left up to China as to which direction it would like to head. Although the beginning text of the U.S. National Security Strategy does posit that an inherent agreement on broad socioeconomic and political goals exists between great powers in today’s post–Cold War international system, the question is whether China understands this objective global reality and is prepared to act on it.<sup>15</sup>

It is within this context that we must examine the U.S. approach to the Persian Gulf. The U.S. global strategic position becomes the de facto and primary factor motivating regional security practices throughout Asia. The United States is not intent, at the moment, on creating a stable regional order based on the sovereign preferences of all Persian Gulf states as they currently exist. That would be a strategy of *realpolitik* or cooperative security as outlined above, with *realpolitik* focused on the military balance-of-power, and cooperative security focused on reassurance measures to ease the security dilemma between nation-states with competing national development agendas. In other words, the United States is not overly interested in either a rough balance of power or a rough balance of interests (based on reassurance measures) at this point in time. It is instead intent on a larger counterproliferation mission that is simultaneously regional and global, military and ideological, economic and social. Its goal is to prevent the emergence of a nuclear-capable competitor with an ideological mission or identity that is antithetical to the presumed objective global goal of spreading liberal capitalist democracy as the path to prosperity, peace, and stability within all regions of the globe.

### COMPETITIVE WMD PROGRAMS MAY NOT UNDERMINE REGIONAL SECURITY

Inherent in this strategic worldview is the assumption that regional security cannot exist in the presence of competitive WMD programs, especially

nuclear-weapons programs. This unstated, but very real, driving assumption of U.S. policy is rather strange from a historical point of view. History has shown that Chinese and U.S. arsenals, based on mutual-assured destruction calculations and on second-strike forces, can very comfortably coexist alongside quite positive economic, social, and diplomatic relations. One might wonder why no one in Washington is therefore comparing, as a serious academic exercise, the U.S.-Iranian case with the U.S.-Chinese case.

Instead of making such comparisons, the overriding U.S. assumption (never clearly stated) is that the Persian Gulf will not, cannot, and should not be secure, prosperous, and stable in the presence of nuclear proliferation. In short, the unstated assumption is that a nuclear Iran *will* upset Persian Gulf stability and security, *will* be aggressive, *will* try to resort to its old goals of spreading the Islamic vision of statehood within the region, and *will* give its WMD to questionable politico-terrorist groups such as Hezbollah. Or, more to the point, a nuclear Iran *will* undermine the overall strategic position of the United States, both globally and regionally, in a way that clearly has not been the case with a nuclear China.

It is hard to see how these unstated assumptions are automatically true, however ingrained they may be in all of our various government policies toward the region. Iran is, in fact, more democratic than China is or ever was, despite the corruption of the recent parliamentary elections in Tehran. At the very least, Iran has a much freer press than China (despite periodic attempts by conservatives to shut major news outlets down), and its citizens are generally more pro-Western and pro-United States. Iran also does not have the Taiwan dispute muddying the waters. Although Iran has retained the three strategically placed islands in the straits of Hormuz (Abu Musa and the Greater and Lesser Tunbs) that the Shah so blatantly annexed and occupied in 1971, and although Iran has placed naval and other military equipment and personnel on them—and even threatened to use the islands as a base from which to completely shut down Persian Gulf shipping and possibly lob missiles toward U.S. forces and its Arab neighbors in the event of a heated crisis—it is clear that Iran's hold on the islands does not have nearly the intense identity-based concerns tied to it that China attaches to Taiwan.<sup>16</sup>

However, to be fair to the persistent GCC concerns of Iranian hubris and hegemony, Iran does believe that it should have influence roughly commensurate with its geostrategic position, its rich cultural and religious heritage, and its important economic resources (particularly oil and gas).<sup>17</sup> Obviously, Iran does *not* have this influence, and has not had it, since the Shah was deposed. Whether the Iranian wish for increased influence is based on arrogant desires for hegemony, as many Arab Gulf analysts argue,<sup>18</sup> or whether it can be interpreted as just another example of the historical desire of states to be given their due, is largely beside the point. Iran is a major regional state, and it will always wish for influence commensurate to its geopolitical weight, whatever the domestic or regional political context.

It is under this fervent Iranian desire that nuclear weapons fall. Simply stated, neoconservative visions of a radically Islamic, theocratic, and



transnational-terrorist-supporting Iran wielding nuclear weapons to cow neighbors and commit indirect terrorist attacks abroad (including on U.S. soil) are wild beyond imagination. Iran, like China over the past 30 years, desperately wants to integrate with the global economy. It desperately wants its Islamic/democratic experiment to succeed, and it requires much more economic growth and prosperity to do so, at least if it wants to appease its restive, increasingly cynical youth population.<sup>19</sup> Iran wants global and regional recognition as a contributor to religious philosophy and civilizational evolution within the Middle East. And, it desperately wants to be free from existential threats to its current Islamic identity, whether from Israel, the United States, or from a newly radicalized, Taliban-ized Afghanistan and Pakistan.

This is why the world should be much less worried about an Iranian nuclear fuel cycle and more worried about getting an accurate, comprehensive declaration to the International Atomic Energy Agency (IAEA), as required legally by the NPT regime framework. Given the realities outlined above, we argue that Iran wants a “light switch” latent nuclear capability, not an arsenal of bombs ready to explode on the territory of infidels. What Iran wants is what Japan already has: a set of credible security assurances that allow it to develop without having to weaponize.<sup>20</sup> Obviously, Iran will never get security assurances in the form that Japan has them: U.S. nuclear threats against Japan’s potential enemies and coverage by the U.S. nuclear umbrella. But, Iran can credibly demand that its Islamic regime finally be recognized by the West, and by the United States in particular, and that any high-tech weapons deployments by the GCC states (or by the United States within GCC states) be purely defensive in nature (just as the GCC and the United States have a right to demand that Iranian military deployments be defensive, not offensive, in nature). Iran’s pursuit of a full fuel cycle, especially a low-enriched uranium (LEU) fuel cycle, is essentially an insurance policy, very similar to the insurance policy that Japan currently has with its overflowing plutonium stockpiles. It is also similar to India’s various nuclear programs in the 1950s and 1960s, before India decided it was indeed isolated in the world with a hostile and arrogant China on its Himalayan doorstep and needed to weaponize its latent option.<sup>21</sup>

Finally, Iran’s pursuit of an LEU capability is directly related to hyperbolic domestic political trends in Tehran. The Iranian nuclear program has become a political football, and both sides want to score the same touchdown. The International Crisis Group (ICG) commissioned polls that, when analyzed by an Iranian ICG expert alongside other domestic polls in Iran, showed decisively that most of the Iranian public (and many officials) do *not* want a nuclear bomb.<sup>22</sup> However, they *do* want a full nuclear fuel cycle for prestige as well as for scientific, economic, and identity-based concerns. Nuclear technology, in the Iranian collective psyche, means symbolic sovereign equality and international respect.<sup>23</sup> And, unlike in Europe and the United States, this pronuclear majority in Iran does not see an automatic connection between a fully monitored, internationally safeguarded energy program and

a nuclear-weapons capability. A majority of Iranians would point out that Japan and others also have this latent capability and are legally monitored and verified by the IAEA, just as Iran will be, so what is the big deal?

We also believe that Iran's relationships with Hezbollah and other groups indicate that it will never share WMD with non-state actors. Surrendering control over its strategic assets could bring worldwide condemnation upon Iran and effectively nullify any conceivable chances of economic integration with its neighbors or with the world. Iran recognizes that it is safe from U.S. military strikes only if it sticks to truly local, politically motivated terrorism based on Shiite irredentist goals vis-à-vis Israel and avoids aiding transnational, apocalyptic zealots whose goal is to bring down the entire global economic system. Hezbollah does not equal al Qaeda; Hezbollah is not a "scream against globalization," to use the words of one prominent Washington security analyst.<sup>24</sup> Al Qaeda, in contrast, is indeed very publicly against the prevailing global order. Iran does not provide significant aid to the latter type of terrorists (beyond harboring some under tight domestic conditions for a bargaining chip with the United States), and Iran certainly would not countenance handing them a nuclear weapon.<sup>25</sup>

### WHAT COUNTERPROLIFERATION CANNOT FIX: REGIONAL POLITICAL AND SOCIAL FAILURE

The U.S. invasion and occupation of Iraq has cemented a strategic reality that has been evolving for three decades: the rise of the United States as an external guarantor of Persian Gulf security. U.S. military bases, ports of call, troop deployments, and extensive sharing of high-tech weapons technology now define the Persian Gulf environment. By design or by accident, the so-called rogue states in the region (Syria and Iran) are completely surrounded by U.S. deployments in and around the Middle East and Central Asia.<sup>26</sup> However, although U.S. military dominance may be unquestioned, the U.S. occupation in Iraq, combined with increased terror attacks and domestic instability in Saudi Arabia, has created an unprecedented legitimacy crisis within the region, raising fundamental questions about the future of Persian Gulf security.

As U.S. power and predominance have risen in the Persian Gulf, to the point that the region is mainly dependent on the United States for its security needs, the differences between the United States and regional actors in political outlook, purported national and international interests, and threat assessments have multiplied and undermined mutual trust. As the United States has become more important to the region, so has the region become more suspicious of U.S. goals and critical of U.S. influence. These differences have arisen over several issues: overall diplomatic and economic relations with Iran, the conditions and parameters of peace talks between Israel and the Palestinians; counterproliferation efforts vis-à-vis Iraq and Iran, and domestic political developments within Gulf societies. However, one key factor underlies all of these divisions—whereas before 9/11 the United States viewed regional threats as emanating from divisions between states within the

region (as seen in the threats by Iraqi and Iranian governments toward their neighbors), now, after 9/11, the United States has adopted an existential view of threats that pictures every state and society within the region as a potential long-term challenge to U.S. security and U.S. values. The very character of Persian Gulf states, including their domestic political practices, is now being seen as a target of U.S. policy. Instead of deterring regional aggressors on behalf of status quo states in the Persian Gulf, the United States is now trying to transform political practices throughout the Gulf, even those of friends and allies.

Ironically, despite this purported focus on domestic realities in Persian Gulf states, Washington has consistently failed to recognize the importance of domestic factors in Gulf leaders' threat perceptions, and it has failed to change its focus from WMD counterproliferation to one of ensuring regional security as a whole. Because of the pressures of globalization and the vast increase in open media sources within Persian Gulf societies, the greatest danger in the Gulf is not a nuclear Iran or a traditional threat of conventional invasion, but rather internal socioeconomic and political changes that might be increasingly hard for leaders to direct or control.<sup>27</sup> Regionally, the greatest threat is not strategic WMD attacks, but Saudi fragmentation and weakening of the central state, Iraqi revolution or dissolution, growth in transnational violence and terrorism, and loss of control in general. These will strategically threaten the United States and its allies as they will affect the ready availability of oil at predictable prices. Furthermore, such dynamics could also easily create new opportunities for the growth and empowerment of radical transnational groups utilizing terrorist methods.

A successful counterproliferation mission in the Persian Gulf is not sufficient to secure the larger U.S. and global goals of regional stability, prosperity, and overall developmental progress of nations in the Gulf. Other strategic goals include dramatically lessening the hatred, or at least the mistrust, of the United States in the region today;<sup>28</sup> keeping the oil supply stable and predictable at reasonable prices; and supporting positive trends in domestic liberalization and reform over time, in all Persian Gulf states, but in a way that is not tremendously destabilizing.

### THE SOLUTION: STRIVE FOR TRUE REGIONAL SECURITY, NOT COUNTERPROLIFERATION

Absolute nonproliferation is irrelevant if, by nonproliferation, one means that Iran does not get a nuclear fuel cycle, and that the United States quickly signs the required disarmament and arms control pacts such as the Comprehensive Test Ban Treaty (CTBT) to fulfill its NPT Article VI disarmament commitments. Iran will, and the United States will not. If threatened, Iran may even flip the switch and turn its latent nuclear capability into a real weapons capability. Latent nuclear proliferation is inevitable in the Persian Gulf. The question is: What can the United States do about it?

Obviously, the NPT legal commitments do matter to some extent, and, in particular, it matters whether or not Iran believes that the pressure being put on it is *norm-based pressure* (to change its *behavior*) rather than *pure coercion* (to change its *identity*). In this sense, the United States could do a lot to show Iran that it accepts the Islamic Republic for what it is, even if it does not like what Iran is currently doing across several issues. Nor is this long-term European approach morally bankrupt, “soft,” or politically unrealistic, as many in Washington, DC contend. While Iran remains a proud and prickly country that rarely conforms to Western expectations in its foreign and domestic behavior, the undeniable fact remains that Iran *is* the most evolved, pluralistic political system in the region.

So, a first policy prescription is simply to accept Iran’s current domestic socioeconomic and political configuration in all its complexity and contradictions, and a second policy prescription is to adopt the European approach of carrots tied to very specific sticks in a way that empowers the IAEA rather than indirectly undermines its mission. (A *de facto* U.S. policy of regime change and counterproliferation does undermine the IAEA’s effectiveness as a supposedly neutral international institution). Once the United States becomes more European in its outlook—which means accepting domestic governments for what they are and working for smaller changes and management of tension over longer periods of time—both the United States and Europe can truly get behind the nonproliferation goal of an Iran that has ratified the Additional Protocol and is abiding by it. The international community should aim at halting Iranian nuclear activities at a level that satisfies Iran’s desire for security, prestige, scientific achievement, and energy production and simultaneously meets minimum U.S. and global nonproliferation concerns.<sup>29</sup> This would involve a viable, verifiable, and sustainable proliferation compromise (assuming that a nuclear “zero option” is no longer a realistic policy goal).

Nor is this intermediate, interim goal completely unrealistic from a political-strategic perspective. In fact, the somewhat chaotic domestic political debate in Tehran could be influenced to support such a compromise solution, both on the left and the right of the political spectrum. Iranian academic Nasser Hadian, who draws on his own contacts in the Foreign Ministry and political circles in Tehran, has argued that there are four general categories of thought on the nuclear energy/weapons program in Iranian public debates. The two extreme categories of officials and analysts are relatively straightforward, and in fact represent “ideal types” that are recognizable in U.S., European, and South Asian domestic politics as well. At one extreme, the most progressive school of thought believes that Iran should not even try to acquire nuclear energy due to economic and environmental concerns, while at the other extreme, the most hard-line school of thought believes that Iran should publicly pursue a fully weaponized capability, officially deployed by military forces and backed by a nuclear doctrine of some kind (much as in the case of Pakistan and India after their May 1998 nuclear tests).<sup>30</sup>

The options the United States has would be limited indeed if these two schools of Iranian strategic thought were the sum-total of political arguments in Tehran today. In essence, the United States would have to follow Undersecretary of State John Bolton's proffered policy of treating Iran as an absolute rogue intent on full weaponization. In that case, it should try to isolate Iran to weaken the hard-liners currently in charge and empower those more sensible Iranian officials who want to eschew nuclear power altogether—and who harbor much less extreme preferences vis-à-vis the U.S. role in the world and the security of Israel. This broad policy recommendation also exists within the research arm of the Republican Caucus on Capitol Hill.<sup>31</sup>

However, as much as the Bush administration and its independent supporters want to paint this as domestic political reality in Tehran, it is an incomplete picture that does not do justice to the array of policy options truly available to the United States. The two extreme Iranian schools of thought are very much in the minority, neither commanding much attention nor respect from the majority of both conservatives and progressive reformers in the Iranian system. Instead, the majority of thought (as always) falls somewhere in the more messy middle of the spectrum. This dominant middle is filled with officials, citizens, and analysts who share one thing in common: the belief that Iran has the right and the need to pursue a fully indigenous fuel-cycle capability, including the current path toward uranium enrichment.

The difference between the Iranian right and the left on this score is largely semantic from the view of policy options for external powers such as the United States and Europe. The more progressive or reformist side of this debate argues that nuclear weapons should never be pursued and that the strictest of inspection provisions should be accepted and enforced by Iran in cooperation with the international community. The more conservative side sees this nuclear energy program as a "latent" nuclear capability that could conceivably be weaponized if Iran found itself facing a security crisis of major proportions—for instance, a Talibanized and nuclear-capable Pakistan bent on destruction of Shiite Islamic thought, or a United States intent on military strikes and regime change.<sup>32</sup>

The ultimate consequence of either of these two schools "winning" the domestic debate in Tehran is ultimately the same: the creation of a fully indigenous fuel-cycle complex. The only question, at that point, would be how closely this nuclear complex is monitored and verified according to international nonproliferation standards, and more broadly, what regional security environment faces Iran's anxious decision-makers on a day-to-day basis.

Therefore, the way to stop a fuel cycle from becoming a weapon is neither through counterproliferation methods nor nonproliferation regimes. Nonproliferation regimes, backed up by counterproliferation threats, are indeed necessary to influence, verify, and monitor Iranian activities. But such monitoring does not ensure that Iranian decision-makers never make a strategic political decision to "flip the switch" and make a latent capability into a real arsenal.

The way to stop the switch from being flipped toward weapons capability is simple: make Iran feel secure within its own region, vis-à-vis its neighbors

and vis-à-vis the United States. Given the complex, subtle, nuanced reality of Iran's security perceptions and domestic nuclear debates, the United States should adopt a demand-side approach to regional security that seeks to create a stable, largely cooperative Persian Gulf security scene. This scene should be based on the equal sovereign status of all states and the security of small Persian Gulf states such as Kuwait alongside an Iran that feels it is being given its geopolitical due. The goal should be to lessen the anarchical nature of the Persian Gulf security environment for all participants, especially for Iran.

Taking a demand-side approach to lessening the anarchy of the Persian Gulf security environment would likely stop an Iranian fuel cycle from turning into an Iranian nuclear bomb. A less hegemonic U.S. approach to the region might also stop domestic political situations from getting markedly worse in Arab Gulf states, in terms of rabid anti-Americanism and radical Islamic terrorism. Therefore, a multilateral security framework in the Persian Gulf, based on traditional norms of sovereignty and balance of power alongside new cooperative security precepts ensuring mutual trust and a credible balance of interests, is a prerequisite for both U.S. and Israeli national security as well as global security—both from transnational and traditional state-level threats.

### CONCLUSION: MOVING TOWARD THE DEMAND SIDE OF SECURITY

The Bush Administration's current hegemonic, counterproliferation strategy does not deviate from U.S. policies in previous periods and thus risks policy failure. Bilateral ties, by themselves, will neither solve outstanding political conflicts nor prevent new conflicts from arising among the Persian Gulf states. In fact, dependence on the United States is only going to increase the domestic pressures against current Arab regimes. In stark contrast to the approach of hegemony and counterproliferation, a principled multilateral approach to Persian Gulf security would have the following attributes:

- Gulf security would be inclusive. Even if Iran were not integrated into the collective military structure of U.S. allies, Iran would still be included through myriad economic or security ties as opportunities for common action arose.
- Gulf security would be built on a rule-based order in which universal principles would apply to all actors in the Persian Gulf, including the United States.
- There would be basic recognition of the inherent right to legitimate measures for self-defense on the part of all states in the region, whether or not the United States considered those states to be friends or allies. Thus, Iran's right to self-defense, including the maintenance of a viable military, would be recognized and allowed. The demand side of WMD proliferation would be addressed because every actor's security concerns would be taken into account.

- The goal would not be to end competition through regime change, but rather to manage competition between all governments as they are currently constituted.
- WMD would be viewed as a general problem requiring equal rules and constraints that apply to all parties, including the United States, Israel, Pakistan, and India.
- WMD would not be the defining criteria of U.S. policy toward the Persian Gulf. Rather, the effects of WMD proliferation on regional security would be factored into a broader U.S. policy geared toward creating a stable, prosperous, and predictable regional environment in which WMD is just one of many troublesome issues. Environmental concerns, domestic socioeconomic development, transnational threats, and lingering distrust between small and large states in the Persian Gulf would all get an equal share of attention.
- Iraq would not be used as a giant U.S. military base, intelligence platform, and covert operations headquarters against local enemies.

In general, the central assumption of the strategy of cooperative multilateralism is that security is sought *with* other states, rather than against them, and that domestic developments in the Persian Gulf will follow a more beneficial course if all states are gradually intertwined in a web of military and economic agreements that create strong interdependence. Another assumption of this school of thought is that the current global diffusion of dual-use technologies, materials, and processes (along with new political ideas and ideologies) mitigates any attempts to draw neat dividing lines between those who seek absolute security and those groups who are made absolutely insecure as targets for regime change. Global diffusion means that regional security is a collective good that is non-fungible. Unlike during the Cold War, dividing lines such as the Iron Curtain cannot easily be drawn between pure allies and pure enemies and technological diffusion cannot be blocked wholesale at the borders of friends and allies. Since ideas, technology, materials, and even ideologies are now diffusely spread without real and effective government control, security itself (at the national, regional, or global levels) cannot be apportioned like pieces of pie, rewarded to some and denied to others.<sup>33</sup>

In summary, the United States needs to quit caring about regional security defined as maintaining U.S. strategic dominance and instead start caring about regional security from the standpoint of the regional governments themselves. It must somehow learn to separate regional concerns from traditional, strategic, global security concerns such as nuclear-weapons proliferation. Regional security concerns—overall stability, prosperity, political development of existing states, reassurance measures, and multilateral cooperation toward a common regional security goal—must become the overriding goal of U.S. policy, rather than WMD counterproliferation alone. Because if the United States stops WMD, but the region falls apart due to “non-traditional” threats emanating from political instability, financial bankruptcy, transnational terror,

and criminal rings, the United States will be much less secure than if it stabilizes the region, but fails to stop an Iranian bomb.

Paradoxically, when WMD counterproliferation, U.S. strategic dominance, and the implicit U.S. wish to spread its own value system cease to become the overriding goals of U.S. policy in the Persian Gulf, the world will become more secure and less threatened by WMD developments over time. The question is whether the United States has the fortitude, patience, and wisdom to commit to this much more nuanced approach to WMD nonproliferation in the Persian Gulf at the beginning of the twenty-first century.

## NOTES

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2. For a concise argument of why Persian Gulf resources will remain central to global prosperity in the twenty-first century, see James Russell, "Searching for a Post-Saddam Regional Security Architecture," *Middle East Review of International Affairs*, vol. 7, no. 1, March 2003.
3. On the nature of globalization and its effects on security, see Richard Kugler and Ellen Frost, eds., *Challenges of the Global Century: Report of the Project on Globalization and National Security* (Washington, DC: National Defense University Press, March 2001); see also columns by Banning Garrett, "The Strategic Straitjacket of Globalization," *YaleGlobal Online*, February 11, 2004 <<http://yaleglobal.yale.edu/display.article?id=3311>> and Michael R. Kraig, "US Attempt at Domination Hobbled by Contradiction," *YaleGlobal Online*, April 19, 2004 <<http://yaleglobal.yale.edu/display.article?id=3727>>
4. For a sobering list of the myriad transnational and intra-national threats already besetting Iraq and which could spread to other parts of the region, see Dr. Mustafa Alani, "An Iraqi View of Transnational Threats and Domestic Challenges," in *Alternative Strategies for Gulf Security*, ed. Michael R. Kraig, special issue of *Middle East Policy Journal*, vol. 12, no. 3 (Fall 2004), pp. 45-48.
5. For a full exposition of the often-contradictory precepts of each school, see Martin Butcher, *What Wrongs Our Arms May Do: The Role of Nuclear Weapons in Counterproliferation* (Washington, DC: Physicians for Social Responsibility, August 2003).
6. The rest of this section relies heavily on an earlier essay for the Stanley Foundation, which provides the programmatic rationale for the "Strategies for US National Security Program" and associated activities. The original text of this descriptive and analytical essay can be seen as "Program Details" at <<http://sns.stanleyfoundation.org>>
7. See White House, *National Security Strategy of the United States of America*, September 2002 <<http://www.whitehouse.gov/nsc/nss.html>>
8. This approach has also been labeled "The Preventive War Strategy." See Lawrence Korb and Michael Kraig, *Strategies for US National Security: Winning the Peace in*



*the 21st Century*, Report of the Stanley Foundation Independent Task Force on Strategies for US National Security, Muscatine, Iowa, December 2003 <<http://sns.stanleyfoundation.org>>

9. Remarks from briefings in Washington, DC on U.S. security strategy, December 11, 2003 through March 2004, by Drs. Michael Kraig and Lawrence Korb. For an in-depth deconstructionist (sociological) analysis of the values and ideological goals implicit in the Bush National Security Strategy, see Michael Kraig, "To Make the World not Just Safer but Better: The Bush National Security Strategy and the Role of US Global Preeminence in the 21st Century," (Muscatine, IA: The Stanley Foundation, November 2002) <[http://sns.stanleyfoundation.org/taskforce/papers/kraig\\_nsc.pdf](http://sns.stanleyfoundation.org/taskforce/papers/kraig_nsc.pdf)>
10. On the conventional side, the U.S. Air Force has recently successfully tested (with very little press) the Global Hawk unmanned aerial vehicle (UAV)—a stealthy, automated system that could perform intelligence, reconnaissance, and cruise-missile bombing missions around the globe. The test involved a flight from U.S. territory to the South American equatorial regions and back. Smaller UAVs, such as the Predator, could be launched from forward bases or ships for missions with both intelligence and strike purposes. On the nuclear side, command and control software (including targeting software) have been improved at U.S. Strategic Command in Omaha for the purpose of rapid retargeting and flexible nuclear attack options in regional threat environments, guidance software for nuclear-armed Minuteman III intercontinental ballistic missiles (ICBMs) has been dramatically improved for better accuracy, and the extremely accurate W-87 warheads / reentry vehicles on the Peacekeeper missiles will probably be switched to the MM III arsenal once the Peacekeeper is retired. The U.S. Department of Energy is pushing several new warhead programs for better penetration of deep underground targets with less radioactive fallout, as well as bombs designed solely to generate strong electromagnetic pulses to take out the opponent's communication and intelligence networks. Finally, the Air Force is incrementally exploring ideas for a Common Aerial Vehicle, or reentry vehicle, for the MM III ICBM force, which could potentially carry conventional as well as nuclear weapons packages to anywhere on the globe. However, Congress has not yet gone decisively ahead with these programs, in part because it would signal once and for all the death of the Comprehensive Test Ban Treaty (CTBT).
11. For example, the United Arab Emirates has now bought the most advanced version of the F-16 from U.S. contractors—a version so advanced that the U.S. Air Force has yet to buy it for itself. Another pertinent example is the Israeli Arrow missile defense system, which was codeveloped with the U.S. Ballistic Missile Defense Organization for use against Syrian, Iranian, and Iraqi missiles.
12. Kraig, "To Make the World not Just Safer but Better."
13. Remarks by Dr. Cindy Williams, Professor, Massachusetts Institute of Technology (MIT) Security Studies Program, at the annual meeting of the Peace and Security Funders' Group in Boulder, Colorado, May 2004. Dr. Williams estimated that the U.S. Department of Defense and the intelligence agencies are currently spending 14 times more on "maintaining global strategic primacy" than on weapons or training or aid programs that mitigate "non-traditional" threats such as transnational terrorism, unstable, weak, and failing states, post-conflict reconstruction, nation-building, and peace enforcement.
14. *Ibid.*
15. *Ibid.*

16. The National Security Strategy of the United States of America, September 2002, <[www.whitehouse.gov/nsc/nss.pdf](http://www.whitehouse.gov/nsc/nss.pdf)>
17. See statements by Iranian participants from a not-for-attribution, informal roundtable discussion sponsored by the Stanley Foundation and the Institute for Near East and Gulf Military Analyses in Dubai, January 2004, as summarized in Michael Kraig, ed., "Conference Report," *Middle East Policy Journal*, vol. 11, no. 3 (September 2004), pp. 1–39.
18. See statements by Arab Gulf participants, *Ibid.*
19. Remarks by Ray Takeyh and Mark Gasiorowski during separate presentations at the "Security Architectures in the post-Saddam Middle East," workshop hosted by the Center for Contemporary Conflict of the Naval Postgraduate School and the Center for Naval Analysis (CNA), at CNA Headquarters, Alexandria, VA, February 9, 2004.
20. Remarks by Dr. Ray Takeyh during presentation at the Naval Post Graduate School Center for Contemporary Conflict Conference, "WMD Proliferation in the Middle East: Directions and Policy Options in the New Century," June 28–30, 2004, Monterey, CA <[www.ccc.nps.navy.mil/events/recent/jun04mideast.pdf](http://www.ccc.nps.navy.mil/events/recent/jun04mideast.pdf)>
21. Dr. Nassar Hadian, "Iran's Nuclear Program: Contexts and Debates," in Geoffrey Kemp, ed., *Iran's Bomb: American and Iranian Perspectives* (Washington, DC: The Nixon Center, April 2004), pp. 51–67.
22. Karim Sadjadpour, "Iranians Don't Want to Go Nuclear," *Washington Post*, February 3, 2004 <[www.washingtonpost.com/wp-dyn/articles/A7222-2004Feb2.html](http://www.washingtonpost.com/wp-dyn/articles/A7222-2004Feb2.html)>
23. Remarks of Dr. Hadi Semati, Visiting Scholar from Tehran University, Carnegie Endowment Nonproliferation Project, Washington, DC, at the roundtable, "Dealing with Iran," 2004 Carnegie Nonproliferation Conference <[www.ceip.org/files/projects/npp/resources/2004conference/home.htm](http://www.ceip.org/files/projects/npp/resources/2004conference/home.htm)>
24. Remarks by Dr. Robert Litwak at the Naval Postgraduate School Center for Contemporary Conflict conference, "WMD Proliferation in the Middle East: Directions and Policy Options in the New Century," June 28–30, 2004, Monterey, California <[www.ccc.nps.navy.mil/events/recent/jun04mideast.pdf](http://www.ccc.nps.navy.mil/events/recent/jun04mideast.pdf)>
25. There is, of course, a hot debate in Washington policy circles over the issue of some 9/11 terrorists crossing Iranian territory earlier in 2001. However, despite all the hyperbole, it is still unclear whether Iranian authorities knew about the exact locations of these transnational terrorists in their travels from Afghanistan and Pakistan to points further West, or whether the Iranians knew, but passively accepted, that such groups occasionally traversed their territory from Afghanistan to other Gulf states and Turkey, or whether the authorities in Tehran actively aided and abetted such individuals. From a larger geopolitical standpoint, as argued in this paper, the claim of active Iranian aid makes little sense, and in any case pales in comparison to the top-down creation and support of al Qaeda-linked groups by the Pakistani Inter-Service Intelligence apparatus in the decades leading up to 9/11. Furthermore, it is doubtful that Iranian authorities would have known of these individual's concrete plans. Just because there are some individuals of very dubious reputation crossing borders from one state to another, this does not mean that the authorities of all the states in question (including Germany in 2001) actually knew about these men's exact plans for catastrophic terrorism against the Twin Towers in New York. Prior to 9/11, it was the standard practice of governments of many countries, both Western and Eastern, to

- more passively track, analyze, and monitor the travels of such individuals without actually arresting and detaining them on a regular basis.
26. The first paragraphs of this section are taken from Michael Kraig, "Gulf Security in a Globalizing World: Going beyond U.S. Hegemony," *YaleGlobal Online*, June 29, 2004 <<http://yaleglobal.yale.edu/display.article?id=4154>>
  27. Daniel L. Byman and John R. Wise, *The Persian Gulf in the Coming Decade: Trends, Threats, and Opportunities* (Santa Monica, CA: RAND Corporation, 2002).
  28. Remarks by Litwak, "WMD proliferation."
  29. This was the basic conclusion of Dr. Lewis Dunn, vice president of Science Applications International Corporation, at a conference on WMD proliferation and U.S. policy options sponsored by the Center for Contemporary Conflict of the Naval Postgraduate School in Monterey, CA, June 28–30, 2004. See also the remarks of Robert Litwak and Ray Takeyh at this conference, referenced in other footnotes.
  30. Hadian, "Iran's Nuclear Program," 60–62.
  31. Jon Kyl, Chairman, "The Iranian Paradox: Strategic Threat, Democratic Hope," *Republican Policy Committee*, July 27, 2004 <<http://rpc.senate.gov>>
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## COOPERATIVE THREAT REDUCTION AT THE NEXT PHASE

*Rose Gottemoeller*

Cooperative threat reduction (CTR) programs have proven themselves in Russia and the former Soviet Union as the most effective tool of nonproliferation policy to come along in a long time. Over the past decade, they have locked up nuclear weapons and materials and eliminated nuclear weapon systems. They have also helped nuclear scientists, engineers, and technicians to move into non-weapon work. In this way, they have prevented nuclear weapons and know-how from falling into terrorist hands and posing a dire, unpredictable threat to the United States.

“Cooperative threat reduction” refers to all programs, whether administered by the Defense, Energy, or State Departments, that are designed to help other countries enhance physical protection of weapons of mass destruction (WMD) and their components; dispose of or eliminate weapons and components; and transition scientists, engineers, and technicians away from weapon work, thus preventing loss of expertise, the so-called brain drain. Indeed, cooperative threat reduction programs may be administered by other agencies such as the Department of Health and Human Services; they may also receive funds from private entities such as the Nuclear Threat Initiative.

This chapter explores CTR programs from the perspective of three different groups: the United States, the originator of the programs; the Russian Federation and other newly independent states (NIS) of the former Soviet Union; and countries and regions beyond the borders of the NIS. It focuses on the current concept and content of the programs with a view to their potential for future development as tools for achieving nonproliferation goals. In particular, this chapter examines the potential of these programs in helping to resolve proliferation “tough cases” such as Iran and North Korea.

### U.S. PERSPECTIVE

President Bush’s budget request for fiscal year (FY) 2005 illustrated how stable CTR programs have become in the U.S. context. The request totaled about \$1 billion for CTR, of which \$472 million were for programs in the

Department of Energy, \$409 million for Defense, and \$108 million for State. These solid numbers are a far cry from the FY 1992 to FY 1994 period, when the government had the authority to spend \$400 million of Defense Department funds but no appropriation occurred. Thus, the program managers had to negotiate with the Defense comptrollers to find funds in other programs that were not being utilized. This “robbing Peter to pay Paul” approach made the programs deeply unpopular in the Department of Defense. Thus, the current budget of \$1 billion, backed up as it is by a presidential commitment to continue spending at least a billion dollars a year through 2012 (or \$10 billion over 10 years), is a pleasant change. In the context of the G-8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction, other countries will match that amount with a minimum of \$10 billion, for a total of \$20 billion. Not only is the United States committed to CTR programs, but it also has an array of partners to join in the initiative. Moreover, the commitment of all the partners is currently long-term and fairly stable.

Experts and government officials are debating, however, whether \$20 billion is enough. Some argue that the U.S. government should be spending much more to keep nuclear weapons and other WMD out of the hands of terrorists. In 2001, for example, a bipartisan task force convened by the secretary of energy called for much higher appropriations. Named the Baker–Cutler Study after its two chairmen, former Senate Majority Leader Howard Baker and former White House Counsel Lloyd Cutler, this task force’s report outlined an expenditure of \$30 billion over 10 years to achieve rapid success in securing nuclear materials and warheads.<sup>1</sup> Others argue, however, that enough funds have already been appropriated, and they cannot be spent fast enough. Therefore, they argue for more modest increases or even holding the line against new appropriations.

While the nuclear security problem is not one that can be solved by simply throwing money at it, the tempo of CTR programs could be increased through judicious increases in funds coupled with improvements in their management. Implementation has become significantly more routine in recent years with more and more successes racked up by project managers and agency officials and fewer and fewer occasions to appeal to political leaders and decision-makers for breakthroughs on implementation. Even on very difficult and persistent issues such as facility access, some progress has been made on the basis of arrangements arrived at on the working level, or through direct agency-to-agency contacts.<sup>2</sup>

This success in U.S.-Russian project implementation has not always extended to the other members of the G-8 Global Partnership, however. Countries that are newly working with Russia on threat reduction projects have often found the learning curve steep and difficult. Contracting and project management methods that are well-accepted in their own contexts have not translated well to the Russian environment with the result that both the Russian participants and their G-8 partners have become frustrated with the slow pace of implementation. In the case of Japan, the national legislature

has threatened to remove funding from the Japanese G-8 budget if real progress in cooperation cannot be shown. Therefore, developing a way to communicate the success of the U.S. experience to other G-8 partners should be an important goal of the United States and G-8 policy.

But, this is not to say that all U.S.-Russia problems have been solved. Indeed, new political barriers have been thrown up to make the programs in some cases more difficult to implement. For example, issues raised concerning liability protection in the context of cooperative threat reduction have essentially halted the plutonium disposition program, despite very strong and continuing support from key leadership figures such as Senator Peter Domenici. Another key program, the Nuclear Cities Initiative, has found itself subsumed into other, less well-designed programs to manage the transition of nuclear scientists, engineers, and their facilities to non-weapon work.

All in all, however, cooperative threat reduction programs have become well-established as a tool of U.S. policy toward Russia and the NIS. Likewise, the prognosis for the future seems fairly stable with a predictable amount of funding planned until 2012. Some questions still need to be pursued, however. Can the programs be implemented faster in Russia and the NIS and are more funds needed for that purpose? If the programs do not achieve a faster pace of implementation, will the commitment to their funding become shakier? Will some countries withdraw from the Global Partnership? By contrast, if progress continues to be good in Russia and the NIS, should the United States encourage the programs to expand into new territory beyond the borders of the former Soviet Union? Can they serve broader goals of U.S. nonproliferation policy?

## RUSSIAN PERSPECTIVE

Russian political players are of two minds on CTR and on taking CTR programs to a larger international stage. Russian Minister of Defense Sergei Ivanov, for example, strongly denied that Russian warheads need better physical protection during a nuclear emergency response exercise conducted in August 2004: "Unfortunately, in different regions of the world the myth is propagated that Russian nuclear weapons are guarded badly and weakly. This is a myth . . . We give this question the highest priority because Russia understands its responsibility to protect nuclear weapons and to prevent possible accidents."<sup>3</sup> At the same time, Russian officials have insisted that all funding in the G-8 Global Partnership continues to be needed in Russia—including for better physical protection of warheads. The official Russian position is that G-8 funding should not go to other countries in the NIS, never mind third countries in other regions of the world.

However, it is worth noting that some Russian players, particularly those who have been active subcontractors implementing CTR programs, understand that establishing new cooperative projects in countries outside the NIS could be a growth direction for CTR. If such growth is going to occur, they would like to have the opportunity to participate.

Different attitudes are found in other NIS countries. In Kazakhstan, for example, President Nazarbayev has taken the position that his country's positive experience in denuclearization should be developed as a model for other countries to follow. He and his senior ministers would like to see Kazakhstan in a position of leadership, working with new countries in new regions on CTR.

Russia's overall perception of its role in the programs is also changing sharply. In the 1990s, the Russians acquiesced to an assistance relationship, essentially letting the United States set priorities and take the lead in managing projects. In the past 2 years, the Russian participants have increasingly demanded a partnership relationship, by which they mean that Russia will bring resources to the table to pay for projects, and will also take part in setting priorities and managing projects. This switch in roles from an assistance to a partner relationship means that a number of implementation mechanisms, such as real-time communications, would have to be improved. It also means that U.S. managers would have to expend more time and energy working with their Russian counterparts on priority-setting and management. Because of the potential for more delays and difficulties, the possibility of stronger Russian partnership is not greeted positively by some U.S. managers.

It is worth noting, however, that something akin to full partnership has developed at various times in the cooperative programs. The international nuclear safety program, which was designed to improve the safety of Chernobyl-style reactors after the disastrous accident of 1986, provides an example. In the early years of the program, the United States and Russia developed a routine arrangement for making funding decisions and deciding which projects should be priorities. This process was possible because of the existence of an up-to-date, web-based database to which all the responsible parties had real-time access. All participants, Russians and Americans alike, felt like they had a role in the technical and other decisions associated with project funding.<sup>4</sup> This is the type of partnership relationship to which the Russians currently aspire across the board in cooperative programs.

Another question that is raised frequently about the Russians is the firmness of their commitment. Continuing problems with access to facilities and uncertainty stemming from the constant reorganization of the Russian bureaucracy have lent persistence to this question. Related issues stem from the resurgence of the Federal Security Service (FSB) and the weakness of the presidential administration. Does President Putin want these programs to succeed or not? Sometimes he tends to hand problems with programs back to his bureaucracy, even though it was not able to resolve them in the first place.

Nevertheless, Russia has steadily, if slowly, allowed the reach of these programs to extend into increasingly sensitive facilities. From the early days of CTR, when the United States was only able to work in non-Ministry of Defense and non-Ministry of Atomic Energy facilities, the programs now extend into sites in the bailiwick of both agencies. The United States has even been able to embark on a pilot project to secure facilities at a serial production

plant for nuclear warheads—the most sensitive of sites in the Russian nuclear weapons complex. When this trend is combined with Russian resources and on interest in partnership; they point to a considerable Russian commitment to these programs. It is not a perfect situation, however, as continued Russian bureaucratic resistance and procedural roadblocks make clear.

### “INTERNATIONALIZATION” OF COOPERATIVE THREAT REDUCTION

As mentioned at the outset, CTR programs have proven themselves in Russia and the NIS as the most effective tool of nonproliferation policy to come along in a long time. We should now begin to develop this effective nonproliferation tool for use in other countries and regions. This goal was supported in the 2005 Senate defense authorization bill, which provided a “far-reaching amendment to improve and accelerate U.S. efforts to secure and remove dangerous nuclear and radiological materials and related equipment from vulnerable and insecure facilities around the world.”<sup>5</sup> The “Global Threat Reduction Initiative” announced by Spencer Abraham in May further embodied this goal.<sup>6</sup> It called for \$450 million over the next decade to remove highly enriched uranium from vulnerable sites around the world. These “global clean-out” efforts are the leading edge of internationalization.

However, such an expansion of CTR programs has to be undertaken carefully and must include engaging key elites in the countries involved and developing their cooperation and buy-in. Otherwise, attempts at cooperation will fail. Mutual confidence has grown slowly in U.S.-Russia cooperation, and there is no reason to think that it will grow more quickly in other settings. In essence, the United States is seeking to engage countries in areas that affect their most sensitive security interests.

This process, however, can be facilitated. For example, engagement can be developed and then expedited through projects with utility and appeal to key elites. In the U.S.-Russia case, the Department of Energy worked with the Ministry of Atomic Energy and the Ministry of Emergency Situations to develop “situation crisis centers,” 24/7 watch centers available to provide emergency communications in the event of a nuclear accident or incident. The Russian ministry leaders had a great interest in such cooperation because they wanted to improve on the communication system that proved inadequate following the Chernobyl disaster in 1986. Cooperation with the United States enabled them to solve a difficult problem in a way that was visible and comprehensible to important political elites in Moscow. The confidence gained through that cooperation, in turn, paid dividends for future U.S. cooperation with these two ministries.

Other confidence-building techniques are available and have proven their utility in joint U.S.-Russian cooperation. For example, starting slowly with “pilot projects” and engaging local companies as subcontractors to carry out the work have proven to be successful ways to heighten interest and build confidence among Russian participants. Another method, which might be



especially useful in countries with which the United States does not have good relations, would be to use “buffers” to carry out the cooperation. For example, projects might be run through the International Atomic Energy Agency (IAEA) rather than on a bilateral basis.<sup>7</sup>

### IDENTIFYING PRACTICAL METHODS FOR INTERNATIONALIZATION

The United States should be planning now for how it might adapt threat reduction techniques to address the proliferation “tough cases” of Iran and North Korea. A good example of an existing adaptation process is the work that has been done to develop programs for scientists, engineers, and technicians in Iraq and Libya. This process has not tried simply to transfer the experience in Russia to these settings, but has considered what other issues need to be addressed through joint cooperation. Therefore, the transformation of Iraq or Libya has assumed at least as much importance as the traditional “brain drain” goals of preventing scientists and others who are knowledgeable from taking their skills to countries or terrorist groups of proliferation concern. For example, once the security situation improves in Iraq, the scientific and engineering elites will be engaged through this program in the repair and reconstruction of their country’s infrastructure.

But it is wise to be cautious about adaptation since the situation in other countries and regions is clearly very different from that in the Russian Federation and the NIS—even while granting that the lessons learned there are useful. Proliferation tough cases are not all alike, and U.S. policy goals may be very different in different circumstances. Thus, as policymakers consider expansion, they should be very precise about what they are trying to achieve with threat reduction programs.

Returning to the example of Iraq and Libya, where programs to redirect scientists and engineers have focused on transformation: can Iraqi or Libyan scientists and engineers be engaged in these programs in a way that will help reconstruct and transform their industries and national infrastructures? Can they be engaged in helping to renew the educational system, especially science education? These are very different roles than the role that such programs played in the former Soviet Union. There, the United States was more worried about ensuring that former Soviet weapon scientists received adequate funding so that they would not be tempted to seek employment in countries of proliferation concern. The United States was not involved in reconstructing Russian industry or infrastructure.

If the United States has the opportunity to embark on such a program with Pakistan or India, however, the focus might be closer to what was done in Russia than what is planned in Iraq. Goals with Pakistan and India might involve a long-term effort to engage key elites in order to create a sense of shared responsibility for nonproliferation goals, such as protecting nuclear materials and not engaging in nuclear commerce. It also would be important to create a long-term commitment to arms control and reduction programs, including the eventual elimination of nuclear weapons on the Indian

subcontinent. To accomplish this, the United States might wish to develop joint projects under lab-to-lab or scientist-to-scientist arrangements, focusing, for example, on technologies to enhance physical protection of warheads or nuclear materials. Discussions on best practices for such protection could be part and parcel of such joint projects. Thus, the policy goals for scientist redirection that would be front and center in Pakistan and India would be much different from those in Iraq and Libya.

North Korea provides a second example. Unlike Russia and the NIS, North Korea is one of the most closed societies on earth. As a strategic matter, North Korea's regional partners and the United States are trying to effect a sea change there. In this case, it is important to stress that CTR cannot bear the whole burden of the effort, but must be fitted into a coherent plan that includes economic, energy, humanitarian, and other types of assistance. If the North Koreans are willing to take the steps that are being asked of them to shut down and eliminate their nuclear program, then the broader steps in this plan can swing into action.

In these circumstances, the U.S. threat reduction cooperation would benefit from close cooperation with partners with whom the North Koreans are familiar and perhaps more comfortable. The Russians, for example, have always been closely involved in the North Korean nuclear program, and could be called upon to take the lead in removing the plutonium and fuel rods from the country for storage in Russia. The Kazakhstanis, also with a close historical tie to Korea—extending even back to czarist times—might be called on to use their experience gained shutting down the Aktau reactor on the Caspian to help shut down the Yongbyon reactor in North Korea. The United States, in this case, will have to decide if it has the trust and confidence to work with partners and let them take responsibility for projects, perhaps paying for project work—in cooperation with other countries—but not being the lead manager. This would be an unprecedented situation for the United States in the history of threat reduction cooperation. It would require close coordination and good communication among all of the countries involved, including North Korea—a goal that is difficult in the extreme.

In Iran, there might be a similar need for partners because of the long-standing lack of a relationship between Washington and Tehran. Although eminent organizations such as the Council on Foreign Relations have been calling for renewing engagement, shedding the baggage of 30 years is complicated for both countries to do.<sup>8</sup> Therefore, a “pilot project” approach might have special utility in Iran, when added to the already existing work of the International Atomic Energy Agency (IAEA) and continued Iranian implementation of the Additional Protocol. One pilot project might be a special transparency regime associated with the Russian fuel services contract at Bushehr. It could be negotiated on a tripartite basis among Russia, Iran, and the United States as a condition of beginning fueling of the reactor. Iran and the United States might both respond well to a pilot project, as long as active efforts to resolve questions about the Iranian nuclear program continue through the IAEA.

Another approach is especially worth incorporating into large, multiple-site projects such as the Global Threat Reduction Initiative. It is designed to

move highly enriched uranium and spent fuel out of vulnerable reactor sites and other facilities around the world. "Tiger teams" have been used very successfully in settings of this kind. In fact, they were critical to the effort to move over 500 kilograms of highly enriched uranium out of Kazakhstan on an urgent basis in the winter of 1994. This effort was known as Project Sapphire.<sup>9</sup> Tiger teams are small, multidisciplinary teams that have the authority as well as the technical knowledge and logistics savvy to complete complicated jobs of this kind. They are often interagency in nature, although that is not a necessary requirement. Tiger teams, to be successful, require a well-defined goal, a hard, tight deadline, and the authority to move resources quickly. They also need the ability to move decisions quickly up the chain of command in order to break logjams. Their operating style is the antithesis of normal bureaucratic procedures, but they can be very practical and effective in achieving urgent results. They are currently being considered as a mechanism for implementing the (Department of Energy) DOE's Global Threat Reduction Initiative.

### ROLE IN BILATERAL U.S.-RUSSIAN ARMS CONTROL

During the successful ratification of the Moscow Treaty in the U.S. Senate, proponents argued that the existence of threat reduction cooperation in Russian strategic arms elimination facilities obviated the need for treaty-specific verification measures beyond what was already available through the Strategic Arms Reduction Treaty I (START I) Treaty. Indeed, cooperative threat reduction programs can and do play a role in ensuring U.S. confidence in Russian strategic arms reductions. The threat reduction contracting process has become so established that it has effectively become the means for transparent Russian reductions. For example, a large U.S. firm might be working with a Russian shipyard to dismantle strategic strike submarines. Once the Russian government has decided which submarines to dismantle, the U.S. firm, as prime contractor, negotiates a contract with a Russian subcontractor to dismantle those submarines by a certain date. Thus, the threat reduction program provides a high degree of natural transparency, because U.S. and Russian companies work cooperatively. Indeed, the contract for the dismantlement work might contain more information than would have been available through START verification procedures alone.

The problem is that cooperation operates as a U.S. assistance program in Russia, so Russians do not have the same opportunities to develop natural transparency at U.S. facilities. In an ideal world, Russian companies would have an opportunity to compete for contracts to eliminate U.S. weapon systems. But the competitiveness of U.S. defense contracting makes this outcome highly unlikely. Still, some small subcontracts might be awarded to Russian firms, for example, to dispose of scrap metal. Even such a small effort would be an important confidence-building measure in Moscow.

Other measures could also be used to address this issue, such as arranging special transparency visits to U.S. elimination facilities, which the United States

has already been offering in the context of bilateral discussions to follow up on the Moscow Treaty. The United States might also be more open about contracting processes; for example, bringing Russians in for government–industry briefings on the schedule and venue for dismantlement work, and possibly providing contract documents for the Russians to review. Although U.S. and Russian cooperative threat reduction mechanisms will never be equivalent, the experience gained in Russia can be mined to develop new ways for Russia to have confidence that U.S. weapons are being eliminated.

Threat reduction cooperation can and should play a role in arms control and reduction efforts, but it is not a silver bullet. The United States and Russia should explore the notion of a hybrid system. Such a system would make use of existing arrangements (e.g., the Verification Protocol of START I), supplementary transparency measures such as those that Presidents Bush and Putin agreed would be developed after the Moscow Treaty was in place, and cooperative threat reduction measures.<sup>10</sup>

## CONCLUSIONS

Cooperative threat reduction provides a new and practical set of tools to strengthen nonproliferation of WMD in Russia as well as in other countries around the world. They are an important means—the most successful and progressive to come along in recent years—to prevent nuclear weapons and materials from falling into the hands of terrorists and national leaders who wish to do harm to the international community.

In thinking about the broad application of threat reduction to the challenges of proliferation, it is also important to think about the imperfections of such programs. The work of CTR with Russia is by no means easy; it continues to encounter barriers and impediments, some thrown up by politics, others by legal issues, still others by technical problems or the need to protect sensitive information. Therefore, honing these tools for future nonproliferation successes will require continued efforts to perfect them, whether in Russia or in new settings.

How new countries might be different will also be important to consider. The “Russian model” for threat reduction cooperation cannot be assumed to be a good fit for other countries and regions; adaptation will be necessary. In some cases, however, the participation of Russia or other original threat reduction countries—Kazakhstan, for example—might ease the way to smoother, more quickly developing cooperation. Therefore, both the differences with the original countries and their potential to contribute to new success should be considered.

In the end, perhaps the most critical set of decisions will be those made by the United States. The United States must decide if it is able to maintain two priorities: continuing the important work in Russia and expanding cooperative threat reduction on the international scene. The United States must also decide if it must always be in the leadership role. In certain circumstances, such as working with Iran or North Korea to eliminate their nuclear

programs, it might be important for the United States to let other countries undertake some of the leadership in accomplishing threat reduction goals. Of course, for the United States to be willing to do so, it must be absolutely confident that those goals would be accomplished in a timely and complete way.

Threat reduction cooperation cannot achieve success on its own. It must be embedded in a larger system to advance nonproliferation goals, including diplomatic efforts to strengthen and extend the nonproliferation regime in all directions, continuing work to bolster export controls, and wide-ranging measures, among them military, to strengthen enforcement. Cooperative threat reduction is a hopeful new tool, but it cannot and should not stand alone.

## NOTES

1. Howard Baker and Lloyd Cutler, "A Report Card on the Department of Energy's Nonproliferation Programs with Russia," Russia Task Force, The Secretary of Energy Advisory Board, U.S. Department of Energy, January 10, 2001.
2. For a useful discussion on this issue, see "Overcoming Impediments to U.S.-Russian Cooperation on Nuclear Nonproliferation," Report of a Joint Workshop, National Research Council of the National Academies of Sciences of the United States, 2004.
3. Quoted in "Russia says no militant threat to nuclear arsenal," *The Russia Journal Daily*, August 4, 2004 <[www.russiamjournal.com/print/russia\\_news\\_44911.html](http://www.russiamjournal.com/print/russia_news_44911.html)>; see also Pavel Felgenhauer, "Nuclear Security Is a Myth," *Moscow Times*, August 10, 2004.
4. For an interesting Russian commentary on this cooperation, see "Overcoming Impediments to U.S.-Russian Cooperation on Nuclear Nonproliferation," pp. 70–71.
5. William Hoehn, "Update on Congressional Activity Affecting U.S.-Former Soviet Union Cooperative Nonproliferation Programs," June 7, 2004 at <[www.ransac.org/](http://www.ransac.org/)>. This report provides a thorough analysis of the budget prognosis for the programs in FY 2005.
6. For the text of Abraham's speech to the IAEA announcing the Global Threat Reduction Initiative, see <[www.energy.gov/engine/content.do?PUBLIC\\_ID=15949&BT\\_CODE=PR\\_SPEECHES&TT\\_CODE=PRESS\\_SPEECH](http://www.energy.gov/engine/content.do?PUBLIC_ID=15949&BT_CODE=PR_SPEECHES&TT_CODE=PRESS_SPEECH)>
7. More detailed discussion of these options may be found in Rose Gottemoeller with Rebecca Longworth, "Enhancing Nuclear Security in the Counter-Terrorism Struggle: India and Pakistan as a New Region for cooperation," Carnegie Endowment for International Peace, Working Paper no. 29, August 2002; also see Timothy D. Miller and Jeffrey A. Larsen, "Dealing with Russian Tactical Nuclear Weapons: Cash for Kilotons," *Naval War College Review*, Spring 2004, pp. 64–86.
8. "Iran: Time for a New Approach," Report of an Independent Task Force Sponsored by the Council on Foreign Relations, Zbigniew Brzezinski and Robert M. Gates, Co-Chairs, July 2004.
9. For a description of Project Sapphire, see <[www.nti.org/db/nisprofs/kazakst/fissmat/sapphire.htm](http://www.nti.org/db/nisprofs/kazakst/fissmat/sapphire.htm)>
10. For more on these points, see Rose Gottemoeller, "Beyond Arms Control: How to Deal with Nuclear Weapons," Carnegie Endowment for International Peace, Policy Brief No. 23, February 2003.

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