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**A NUCLEAR-ARMED IRAN:  
THE MIDDLE EAST NUCLEAR PROLIFERATION ENIGMA**

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## Iran as a Nuclear Fact: Overview of the Issue

“There is, in fact, an axiom of proliferation. It states that as long as any state holds nuclear weapons, others will seek to acquire them. Those others now include terrorist groups and nation states. . . . The axiom of proliferation contains far more truth than the ‘axis of evil’. It rests on a gut human instinct - fairness. Simply, states are unprepared to believe that their security is less important than that of others. This was put to me repeatedly in more than 25 years of involvement in the treaty. It is not acceptable to others for the US, for example, to claim that its security is so important that it is justified in holding nuclear weapons but this is not the case for other states, such as India and now Iran (Butler, 2005).”

The first decade of the twenty-first century has proven to be a decade of opportunities gained and lost. Despite a decade worth of increased diplomatic initiatives and posturing, to include multiple failed attempts to impose further sanctions, thanks largely to the Chinese and Russians making even the most modest sanctions unenforceable, the combined and coordinated efforts of the United States (US), the European Union (EU), and the United Nations (UN) have ultimately failed to halt Iran’s nuclear weaponization program, and consequently, failed to curb or halt Iranian-Shi’ite regional ascendancy. Moreover, the continued integrity and long-term viability of the Nonproliferation Treaty (NPT) and the International Atomic Energy Agency (IAEA), as credible international mechanisms for preventing the global proliferation of nuclear weapons, has been cast into doubt; as such, they will suffer serious and irreversible damage *when* Iran, still an NPT member, acquires/develops a nuclear weapons capability. Accordingly, within the time frame of 2011-2015, whether following Israel’s policy of nuclear opacity, confirmed by an actual overt test, or via a public/international announcement, Iran will conceivably acquire nuclear weapons capability.

Admittedly, “guesstimating” (Cordesman and Al-Rodhan, 2006, 7) the time frame for when Iran will acquire/develop nuclear weapons capability is, and has been, considerably

problematic. Coupled with the fact that Iran presents major problems for and in intelligence collection and analysis (7), any estimating of Iran's nuclear capabilities is, and has been, complicated by three key factors:

- “First, the US, the EU, and the UN all agree that Iran has the right to acquire a full nuclear fuel cycle for peaceful purposes under Nuclear Nonproliferation Treaty (NPT) but there is no clear way to distinguish many of the efforts needed to acquire a nuclear weapon from such ‘legitimate’ activities or pure research” (7).
- “Second, Iran has never denied that it carries out a very diverse range of nuclear research efforts. In fact, it has openly claimed that it is pursuing nuclear technology and has a ‘national’ right to get access to nuclear energy. This has given it a rationale for rejecting Russia’s offer to provide Iran nuclear fuel without giving Tehran the technology and the expertise needed to use it for weaponization purposes, and the US agrees with this position, and” (7),
- “Third, it has never been clear whether Iran does have a ‘military’ nuclear program that is separate from its ‘civilian’ nuclear research. America and French officials have argued that they believe that Iran’s nuclear program would only make sense if it had military purposes. Both governments have yet to provide evidence to proof these claims” (7).

To further compound matters, there exists a long history of time frame estimates as to when Iran would acquire nuclear weapons. Cordesman and Al-Rodhan characterizes them as “a past history of uncertain and wrong judgments” (73):

- **Late 1991:** In Congressional reports and CIA assessments, the US estimates that there is a ‘high degree of certainty that the government of Iran has acquired all or virtually all of the components required for the construction of two to three nuclear weapons.’ A

February 1992 report by the US House of Representatives suggests that these two or three nuclear weapons will be operational between February and April 1992 (73).

- **Late October 1991:** A US National Intelligence Estimate report says that Iran's nuclear program appears disorganized and in its early stages. Richard H. Solomon, US Assistant Secretary of State for East Asian and Pacific Affairs, says that China has sold nuclear-related technologies to Iran despite earlier assurances that it would not sell such technologies to Iran (73).
- **November 1991:** Israeli officials contend that, using Pakistani assistance, Iran could make a nuclear bomb by the end of the decade. For their part, US officials estimate that it would take 10 to 15 years. According to a New York Times report (1 November), US analysts insist that Iran has neither the money nor the professional personnel to produce a nuclear weapon in a short time. One expert said that although China may assist Iran in nuclear weapons development, such assistance 'will certainly not be on the scale of Western help to Iraq' (73).
- **February 24, 1993:** CIA Director James Woolsey says that Iran is still 8 to 10 years away from being able to produce its own nuclear weapon, though if it were assisted from abroad; it could become a nuclear power earlier (73)
- **December 13, 1993:** According to Defense News, the CIA 'believes that Iran could have nuclear weapons within eight to 10 years, even without critical assistance from abroad' (73).
- **February 16, 1994:** According to the latest CIA estimates, Iran could develop a nuclear bomb in six to eight years, although its nuclear weapons program is still in an early stage and relies on foreign technology and expertise (73)

- **September 23, 1994:** CIA Director James Woolsey says that, ‘Iran is eight to ten years away from building [nuclear] weapons, and that help from the outside will be critical in reaching that timetable. Iran has been particularly active in trying to purchase nuclear materials or technology clandestinely from Russian sources. Iran is also looking to purchase fully-fabricated nuclear weapons in order to accelerate sharply its timetable’(73).
- **January 5, 1995:** US Defense Secretary William Perry says that Iran may be less than five years from building an atomic bomb though ‘how soon ... depends how they go about getting it.’ Perry said buying or stealing a bomb from one of the Soviet states could happen in ‘a week, a month, five years.’ Alternatively, if Tehran could obtain a large amount of highly enriched uranium, then ‘five years is on the high end’(73).
- **January 1995:** The director of the US Arms Control and Disarmament Agency, John Holum, testifies that Iran could have the bomb by 2003 (74).
- **January 19, 1995:** According to Thomas Graham, Special U.S. Representative for Nonproliferation, Iran has ‘no current program’ for producing weapons-grade fissile materials. ‘They are not that far along,’ he added (74).
- **February 29, 1996:** Lynn Davis, US Undersecretary of State, says that Iran is ‘many years away’ from possessing a nuclear weapons capability, but stealing nuclear technology or material ‘can reduce the time dramatically in terms of developing a weapon’ (74).
- **April 29, 1996:** Israeli Prime Minister Shimon Peres says ‘he believe that in four years, they [Iran] may reach nuclear weapons’ (74).

- **March 1997:** John Holum, director of the US Arms Control and Disarmament Agency, testifies to a House panel that Iran could develop a nuclear bomb sometime between 2005 and 2007 (74).
- **June 26, 1997:** General Binford Peay, US military commander in the Persian Gulf, says that Iran may have nuclear weapons ‘some time at the turn of the century, the near-end of the turn of the century’ if it gets access to fissionable material (74).
- **October 21, 1998:** General Anthony Zinni, head of US Central Command, says Iran could have the capacity to deliver nuclear weapons within five years; ‘If I were a betting man,’ he said, ‘I would say they are on track within five years, they would have the capability’ (74).
- **November 21, 1999:** According to a senior Israeli official, Iran will have a nuclear capability within five years, unless Russian military aid to Iran stops (74).
- **January 17, 2000:** A new CIA assessment on Iran’s nuclear capabilities says that the CIA cannot be ruled out the possibility that Iran may possess nuclear weapons. This analysis is based on the CIA’s admission that it cannot monitor Iran’s nuclear activities with any precision and hence cannot exclude the prospect that Iran may have nuclear weapons (74).
- **September 20, 2000:** According to the CIA, Iran is ‘attempting to develop the capability to produce both plutonium and highly enriched uranium, and it is actively pursuing the acquisition of fissile material and the expertise and technology necessary to form the material into nuclear weapons.’ A CIA official also claimed that Iran could be in a position to test fire an ICBM within five years (74).

- **February 6, 2002:** CIA Director George Tenet tells the Senate that Iran is seeking long-range ballistic missiles and weapons of mass destruction and will probably succeed in having them by 2015.<sup>376</sup> He also said that Iran ‘may be able to indigenously produce enough fissile material for a nuclear weapon by the end of this decade ... obtaining material from outside could cut years from this estimate’ (74).

Add to this the political controversy sparked between the 2005 and 2007 National Intelligence Estimate’s on Iran’s nuclear program. Ironically, the time frame described in the 2007 NIE is the same as one described in a 2005 NIE: “all intelligence agencies ‘recognize the possibility that this capability may not be attained until *after* 2015’” (Kerr, 2009, 14). Moeed Yusuf (2009) further illustrates (provided below) the contradictory and uncertain nature, as well as the methodological weakness, of many predictive estimates and forecasts in his “Select U.S. Intelligence Predictions for First Nuclear Tests” table (Yusuf, 2009, 58):

**Table 5: Select U.S. Intelligence Predictions for First Nuclear Tests**

Country	Year of Projection	Year Projected to Conduct First Test	Year of Actual First Test
Soviet Union	1946	1953	1949
Soviet Union	1948	1950-1953	1949
China	1957	Post-1967	1964
China	1960	1962-1964	1964
China	1963	1963-1964	1964
India	1963	1967-1968	1974
India	1966	1967	1974

As such, the general and/or specific issue of this LAMP predictive analysis paper is not *when* Iran will acquire nuclear weapons capability, but how will Iran's acquisition and/or declaration of nuclear weapons have an effect on nuclear proliferation in the Arabian/Persian Gulf and the broader Middle East.

Undoubtedly, Iran's acquisition and/or declaration of nuclear weapons will have profound regional and global consequences and implications. Despite the ongoing nuclear proliferation optimism-pessimism debate (Sagan, Waltz & Betts, 2007; Madson, 2006, 6-9), a number of regional and global security and threat environment consequences and implications cannot be ignored as it directly relates to Iran. First, Iran is the second 'rogue' state to acquire a nuclear weapons capability. Second, while the twentieth century was ascribed as "the Century of Symmetrical Warfare" (Krepinevich, 2009, 28), the twenty-first century, thus far, has been characterized by the increase of irregular or asymmetric warfare. Iran's acquisition of nuclear weapons, as well as its growing capacity and capabilities to engage in irregular or asymmetric warfare, will present varied credible military and policy challenges and concerns. Third, given Iran's links to Hezbollah and Hamas, the "sum of all fears" (Raska, 2008, 24) proliferation issue turns to the matter of nonstate entities or groups gaining access to and/or utilizing advanced or new conventional weapons technology (i.e.: such as precision-guided rockets, etc.) and to whether they will be used to covertly deliver/use nuclear weapons. Lastly, unlike past Cold War nuclear doctrine and strategy, Iran's acquisition of nuclear weapons, as with its political and strategic culture and threat perceptions, cannot be simplified into or reduced to a zero-sum game.

To date, Israel is widely believed to be the only, despite being undeclared, nuclear-armed power in the Middle East. With the removal of Iran's counterbalance, Iraq, Iran has been free to assert its political and military power in a more upfront and threatening manner. While there

remains ongoing debate as to how the 2003 war in Iraq has altered the geopolitical and security environment in the region and impacted nuclear proliferation in the Middle East and elsewhere, Iran's acquisition of nuclear weapons will ultimately be viewed in the Middle East in the same light as Israel's nuclear arsenal: "As a primary threat to regional security and a factor of instability" (Bahgat, 2007, 157). In sum, a nuclear-armed Iran creates the likelihood or probability of additional nuclear proliferation in the Middle East and Arabian/Gulf regions (Posen, 2006, 22).

### **Critical Assumptions**

For the purposes of this LAMP predictive analysis paper, the following assumptions were made.

- Iran's nuclear program is not for peaceful energy purposes.
- Iran will acquire nuclear weapons capabilities (i.e.: the ability to produce and use) within the 2011-2015 time frame.
- Iran's political and military regional influence has not reached apogee.
- Iran's political and religious domestic/internal influence has reached apogee.
- Iran's fundamentalist government will continue to take a hard-line contemptuous view of the United States, European, and United Nation initiatives to halt its nuclear program.
- Iran's Revolutionary fundamentalist government is determined to acquire nuclear weapons.
- Iran's Revolutionary fundamentalist government is determined to be recognized as a nuclear weapons power.

- Iran's Revolutionary fundamentalist government is determined to be recognized as a dominant regional actor and power in the Arabian/Persian Gulf region and the broader Middle East.
- The United States and Washington's European allies will rely exclusively on a 'contain-and-deter' strategy; the use of force is not a viable option. If the 'contain-and-deter' strategy fails, the United States and Washington's European allies will ultimately accept Iran as a nuclear fact and resort to a strategy of deterrence (Cohen, 2009, 6).
- China will continue to resist additional Iranian sanctions and putting Iran's nuclear weapons program before the Security Council.
- China and Russia see little cost-benefit in helping the United States 'contain-and-deter' Iran.
- China and Russia see little cost-benefit in helping the United States inhibit or prevent nuclear proliferation in the Middle East.
- The Nonproliferation Treaty (NPT) and the International Atomic Energy Agency (IAEA) will continue to be used as 'cover' by Iran and other states seeking to covertly develop a weaponized nuclear program.

## **Research Design**

This LAMP predictive analysis paper is a qualitative study that attempts to systematically forecast how various states in the Arabian/Persian Gulf and the broader Middle East might respond to a nuclear-armed Iran. As previously indicated, this paper utilizes the Lockwood Analytical Method for Prediction methodology or technique to objectively and inductively examine and evaluate a full range of possible potential alternative futures based upon the relative likelihood of

possible courses of actions for each central national actor. For clarification purposes, LAMP does not assign probabilities. As pointed out by Lockwood and Lockwood (1993), “the probability of any given future will be constantly changing due to the potentially infinite possibilities for free will of the central national actors to affect events” (Lockwood and Lockwood, 1993, 12).

Additionally, this LAMP study assumes that the possible potential actions of a central national actor, or actors, are representative of a rational actor making free will choices and decisions as they directly relate to their national security interests and threat perceptions. A summary of the LAMP research method (i.e.: 12 steps in the process or procedure), as taken from Lockwood and Lockwood (27-28), are:

1. Determine the issue for which you are trying to predict the most likely future.
2. Specify the national “actors” involved.
3. Perform an in-depth study of how each national actor perceives the issue in question.
4. Specify all possible courses of action for each actor.
5. Determine the major scenarios within which you will compare the alternate futures.
6. Calculate the total number of permutations of possible “alternate futures” for each scenario.
7. Perform a “pairwise comparison” of all alternate futures to determine their relative probability.
8. Rank the alternate futures for each scenario from highest relative probability to the lowest based on the number of “votes” received.
9. Assuming that each future occurs, analyze each alternate future in terms of its consequences for the issue in question.
10. State the potential of a given alternate future to “transpose” into another alternate future.

11. Determine the “focal events” that must occur in our present in order to bring about a given alternate future.
12. Develop indicators for the focal events.

For the purposes of this study, the data collected, and subsequently analyzed for use, were largely drawn from a variety of secondary peer-reviewed academic and think-tank sources, to include a few scholarly books. While some of these sources may be perceived as being biased, imperfect, out of date, or otherwise flawed, they do effectively supply this study with relevant and thoughtful information regarding the possibilities of when Iran may acquire nuclear weapons capability, the likelihood in which certain states in the Middle East region may proliferate, as well as what are the possible proliferating actors national security interests and threat perceptions as they directly relate to a nuclear-armed Iran.

As such, the source author(s) political or ideological bias, which ideological paradigm an author belonged to, etc. mattered not for this study. What did matter was the viability of the information and whether or not the pertinent information rested on a firm foundation of solid, logical support. While this may represent a limitation to this particular study, it intrinsically points to a flaw or weakness in the LAMP methodology procedure Step #3, which requires that an in-depth study be performed on not only the national actor or actors, but on how each national actor perceives the issue in question (27). Explicitly, this study could only draw from and analyze unclassified data and information. This is not to imply or infer that having access to relevant classified data would make any difference, but that any and all relevant classified data would further add to the overall predictive analysis picture, so to speak. Admittedly, no amount of accurate intelligence or classified pertinent and/or relevant information can be sufficient to perfectly predict or forecast the future, alternative futures, or potential future outcomes.

## The LAMP Steps:

“Although nuclear weapons could also be developed to serve either as deterrents against overwhelming conventional military threats or as coercive tools to compel changes in the status quo, the simple focus on states' responses to emerging nuclear threats is the most common and most parsimonious explanation for nuclear weapons proliferation. George Shultz once nicely summarized the argument: ‘Proliferation begets proliferation.’ Every time one state develops nuclear weapons to balance against its main rival, it also creates a nuclear threat to another state in the region, which then has to initiate its own nuclear weapons program to maintain its national security (Sagan, 1996-1997, 57-58).”

### Step 1. Determine the Predictive Issue

#### *Specific Issue*

What are the consequences for nuclear proliferation in the Arabian/Persian Gulf and the broader Middle East should Iran *declare* itself a nuclear-armed power?

#### *General Issue*

What are the consequences for nuclear proliferation in the Arabian/Persian Gulf and the broader Middle East should Iran *not declare* itself a nuclear-armed power?

### Step 2. Central National Actors Involved

For the purposes of this predictive study, while numerous states have interactions with Iran, the four chosen central national actors are Israel, Saudi Arabia, Turkey, Egypt, and Iran. Excluding Iran, from a regional security and threat dynamics perspective, Israel, Saudi Arabia, Turkey, and Egypt were primarily chosen primarily because they are the ‘other’ nuclear competing regional powers (Posen, 2006, 20) and because they stand to be adversely impacted the most by a nuclear-armed Iran. Excluded from this study were the regional considerations of Syria and Pakistan. The exclusion of Syria was largely due to three main factors: 1) Syria’s

close proximity to Israel, especially given the 2007 Israeli strike against a Syrian nuclear facility (Cordesman, 2007); 2) Syria has a strategic alliance with Iran (Bowen and Kidd in Sokolski and Clawson, 2005, 72); thus, from a security and threat dynamics perspective, would not be adversely impacted by a nuclear-armed Iran (Yaphe and Baktiari, 2007, 6); and 3) Syria's nuclear weapons aspirations are not dictated nor driven by prestige factors, "in part because Syria does not see itself as the natural leader of the Arab world" (Clawson, 2003, 7; also see Russell in Sokolski and Clawson, 2005, 36). The exclusion of Pakistan was because of two main factors: 1) Pakistan does not have "an adversarial relationship with Iran that would lead to a confrontation in the foreseeable future" (Kibaroglu and Caglar, 2008, 59); and 2) a nuclear-armed Iran is not going to pose a serious challenge to a nuclear-armed Pakistan (59) because "deterrence is not terribly difficult to create" (Madson, 2006, 75).

### **Step 3. Central National Actors Perceptions**

#### ***Israel***

"You should know that the criminal and terrorist Zionist regime, which has sixty years of plundering, aggression, and crimes in its file, has reached the end of its work and will soon disappear off the geographical scene" (Ahmadinejad in Jaseb and Dahl, 2008).

Israel is an undeclared nuclear power and is the foremost military power in the Middle East region. Given that the state of Israel was created following the dramatic and traumatic experiences of the Holocaust (Bahgat, 2007, 155), arguably, the past and current Israeli nuclear and military security and threat doctrines and policies rests upon the cornerstone foundation of the "Never-Again Principle" (Yaphe and Lutes, 2005, 16). Therefore, Israel views its regional nuclear monopoly and possession of nuclear weapons as:

- The last line of defense “or as an ‘insurance policy’ to guarantee their survival (156). Israel’s nuclear capability, whether via nuclear opacity/ambiguity or not, seeks “to convince Arab antagonists that Israel’s destruction is unobtainable and that as a consequence, diplomatic engagement on terms established by Israel is the only viable Arab option” (*Iran’s Nuclear Program*, 2006, 105).
- As a stabilizing factor, via its policy of nuclear opacity/ambiguity in the Middle East region (Bahgat, 2007, 156). Arguably, such an Israeli policy (Raska, 2008, 25) has prevented the proliferation of nuclear arms in the Middle East (22). It is a ‘stabilizing factor’ in that it restrains “Arab war aims to something well short of the kind of military achievements that Israel would consider to pose an existential threat (*Iran’s Nuclear Program*, 2006, 105).

While a nuclear-armed Iran would conceivably end Israel’s regional nuclear monopoly, it would, and will, provoke a stronger Israeli rationale to continue to develop a credible second strike nuclear capability (i.e.: a *proliferation* of its own nuclear stockpiles and capabilities), as well as anti-missile/anti-rocket systems such as Iron Dome and the Arrow long-range ballistic missile defense system.

A nuclear-armed Iran would further harden and solidify the strategic and security culture, an amalgam of a country’s set of shared beliefs, assumptions, and narratives that shape its strategic decision-making process (Knepper, 2008, 451) of Israel that Iran is unquestionably an existential threat; a threat perception that is unlikely to change in the unforeseeable future especially given the continued extreme rhetoric of Iranian leaders (i.e.: past and current) and Iran’s continued support of terrorism against Israel (Pedatzur, 2007, 514). A nuclear “balance of terror” (Raska, 2008, 26) with Iran has numerous ramifications for Israeli policy makers.

“First, a nuclear Iran would represent an existential threat to Israel’s security by linking radical Islamic regime, long-range missile capability, and nuclear weapons. Israel’s small and dense population is exceedingly vulnerable to a nuclear attack. Second, a nuclear Iran could embolden radical Arab groups as well as more moderate Arab states into acting more aggressively vis-à-vis Israel. Third, a nuclear Iran would open a Pandora’s Box of a regional nuclear arms race: Iranian efforts to develop nuclear capability are already igniting nuclear fears in the neighboring states; Saudi Arabia, Egypt and Turkey have recently announced plans to start their own civilian nuclear programs under the auspices of the IAEA. Fourth, a nuclear Iran would effectively negate Israel’s advantage in conventional deterrence, freedom of action, and military superiority. In the words of Parsi, ‘it would not only end Israel’s (nuclear weapons) monopoly in the Middle East, it will also shake a fundamental tenet of Israel’s military doctrine – the idea that Israel can only survive in the Middle East by maintaining military superiority.’ Fifth, a nuclear Iran would solidify its regional hegemony aspirations as well as enhance its control of the region’s energy resources” (26).

Accordingly, despite the ongoing debate as to whether a nuclear-armed Iran may embolden Iran’s terrorist proxies or will encourage Iran to increase acts of asymmetric warfare against Israel, another aspect of the nuclear-armed Iran security problem for Israel will be the creation of a stable deterrent balance, which inherently will require communications and dialogue with Iran, a state who does not recognize the legitimacy of Israel and whether via extreme rhetoric or policy, continues to urge the destruction of Israel (Yaphe and Lutes, 2005, 18).

### ***Saudi Arabia***

“We are a nation working for peace but we reserve the right to defend our country. We work towards procuring the weapons necessary to protect our country and this makes up these weapons though live tests before we buy them, and we make a shield to protect the safety of the Holy Shrines and the security of our citizens” (Crown Prince Abdul Aziz in Madson, 2006, 56).

While Saudi Arabia, the leader of the Sunni Arab world and GCC states (Kechichian, 2007) continues to seemingly appear unconcerned with Iranian acquisition of nuclear weapons, Saudi Arabia and Iran continue to be divided by long-standing geopolitical and religious tensions. Despite the fact that Saudi Arabia and Iran do not recognize Israel and that both have

close relations with Palestinian organizations, such as Hamas and Islamic Jihad, both have long-held aspirations for Islamic leadership, as well as possessing different visions of regional order (Wehrey and others, 2009, ix; *Iran's Nuclear Program*, 2006, 65). Although powerful and influential domestic constituencies in Saudi Arabia have been pushing King Abdullah to make Saudi Arabia a bulwark against Iranian and Sh'ia ambitions" (Yaphe and Baktiari, 2007, 6), a nuclear-armed Shi'ite Persian Iran presents a number of religio-political and military concerns for Saudi Arabia. Some of these are:

- Due to their close proximity to one another, both are vulnerable to one another's conventional military power (Posen, 2006, 21).
- Iran has achieved "unquestioned conventional military superiority in the Arab Gulf region (*Iran's Nuclear Program*, 2006, 65).
- "Most analysts assume that the Saudi military is no match for the Iranian armies" (Bahgat, 2007, 85; also see Russell in Sokolski and Clawson, 2005, 31-32; Clawson, 2003, 5).
- Saudi Arabia would fear that a nuclear Iran would have more religio-political leverage to 'politicize' the annual Mecca pilgrimage and holy sites (Clawson, 2003, 5; Bahgat, 2007, 73; *Iran's Nuclear Program*, 2006, 75-76).
- The ongoing covert and overt nature of Iran's involvement (i.e.: financially, logistically, and militarily) in Yemen and along the Yemen-Saudi border, Saudi Arabia continues to worry about Iran projecting itself as the protector of not only the Saudi Sh'ia community, but those Sh'ia communities in states that border Saudi Arabia (*Iran's Nuclear Program*, 2006, 73).

From the perspective of Saudi Arabia's strategic and security culture, the acquisition of nuclear weapons by Iran would place tremendous internal pressure on the Saudi government to follow suit. According to a United States Senate Committee on Foreign Relations report authored by Bradley L. Bowman (2008):

“Saudi officials believe Iran wants a nuclear weapon in order to become a regional superpower, to alleviate a sense of marginalization, to serve as a deterrent, and to be a more dominant force in the Gulf. While senior Saudi officials describe a nuclear-armed Iran as “an existential threat,” most Saudi officials do not believe Iran would actually use nuclear weapons against Saudi Arabia. Saudi Arabia worries that Iranian nuclear weapons would encourage and enable the Iranians to pursue a more aggressive, hegemonic foreign policy in the region” (Bowman, 2008, 11).

Arguably, given the United States' *ongoing* “failing policies, lack of regional leadership, and eroding position in the region” (Yaphe and Baktiari, 2007, 6), of late, Saudi Arabia has shown a propensity to act independently of the U. S. (Madson, 2006, 44). And while debate and discourse rages as to possible Saudi courses of action to a nuclear-armed Iran, Bowman reveals his observations on one possible course of action, no doubt one the U.S. would much prefer.

“When asked if Saudi Arabia would pursue nuclear weapons in response to Iranian acquisition of nuclear weapons, senior and midlevel Saudi leaders echo the official Saudi line, dismissing the notion as “ridiculous” and saying Saudi Arabia would be the “last country to get nuclear weapons.” Several senior Saudis suggest that Saudi Arabia would rather rely on a U.S. nuclear umbrella” (Bowman, 2008, 12; also see Schake and Yaphe, 2001, 32-36).

At this point, it should be noted that when Egypt was recently offered such a security protection arrangement by the U.S., Cairo's response was “Egypt will not be part of any American nuclear umbrella intended to protect the Gulf countries” (Mahdy, 2009). Arguably, if Egypt turns down such protection, despite the diplomatic bluster, Saudi Arabia may well do likewise, especially given the mention made by Richard Russell (2001):

“It would be imprudent, to say the least, for Riyadh to make the cornerstone of their national-security posture out of an assumption that the United States would

come to the kingdom's defense – under any and all circumstances” (Russell in Clawson, 2003, 4).

As such, Bowman goes on to reveal two important and telling bits of information on the possible real intentions of Saudi Arabia concerning a nuclear-armed Iran. The first being:

“However, when pressed, some senior Saudi officials candidly state that SAG would seek to obtain nuclear weapons or rely on a nuclear guarantee from Pakistan while simultaneously buying parts on the market” (Bowman, 2008, 12).

The second being:

“One of the central questions staff attempted to answer throughout this study was whether Saudi Arabia would respond to an Iranian acquisition of a nuclear weapon by pursuing a weapon as well. In addition to the responses detailed above from Saudi Government officials, staff interviewed a large number of U.S. officials and Saudi scholars in Saudi Arabia, as well as a significant number of U.S. scholars in Washington. While responses varied, virtually every person interviewed by staff believed that Saudi Arabia would be the country most likely to pursue a nuclear weapon in response to an Iranian bomb. Significant disagreement existed regarding the Saudi's final decision, as well as their capability to obtain a nuclear weapon, but almost all individuals agreed that the United States should monitor Saudi Arabia, specifically. One senior U.S. diplomat said a Saudi nuclear weapon would be the “real downside” of an Iranian nuclear weapon, predicting that a Saudi pursuit of a nuclear weapon would be “virtually certain.” Referring to the Saudis, another senior U.S. diplomat with excellent access to the highest levels of the Saudi Government said that the idea of an Iranian nuclear weapon “frightens them to their core” and would lead the Saudis to pursue a nuclear weapon of their own. Some acknowledged these Saudi fears, but argued that the importance of the bilateral relationship with the United States would dissuade the Saudis from pursuing a nuclear weapon (16).

Intrinsically, a Saudi nuclear weapons decision remains an unknown at this point in time, but such a decision will not be determined based entirely upon strategic or security concerns; it will be motivated by prestige and the need for a ‘Sunni bomb’ to counter the ‘Iranian Shi’ite bomb’.

### ***Turkey***

Given that Turkey still remains a member of NATO, a nuclear alliance, and has been an associate member of the EU since 1963 (i.e.: Ankara Treaty), Turkey would naturally be

constrained or limited (i.e.: disincentives) to develop a nuclear weapons initiative (Posen, 2006, 21-22). Even so, there have been disrupted NATO security guarantees and growing anti-NATO attitudes which has further been compounded by growing Turkish resentment towards the EU over the continued EU reluctance and stymieing to accept Turkey as a full ECC member (Kibaroglu and Caglar, 2008, 68-69; Yaphe and Baktiari, 2007, 6; Clawson, 2003, 7-8; Bowman, 2008, 39-40). At the same time, Turkish-U.S. relations are continuing to deteriorate “because of U.S. policy in Iraq, Iraqi Kurdish aspirations, and the possible passage of a Congressional resolution recognizing the Armenian genocide of 1915” (Yaphe and Baktiari, 2007, 6; also see Bowman, 2008, 36-39). Therefore, for security and prestige reasons (Posen, 2006, 21), Turkey would not only be alarmed by a nuclear-armed Iran but would view the acquisition and presence of nuclear weapons in the Iranian military arsenal as upsetting “the delicate balance that has existed between the two nations since the Treaty of Kasr-i Shirin in 1639, in favor of Iran” (Kibaroglu and Caglar, 2008, 60). Furthermore, a nuclear-armed Iran would exacerbate Turkish concerns about Iran’s continued export and increasing support of Islamic radicalism, Iran’s continued support and cooperation as it relates to Kurdish separatism, and Iran’s influence of WMD and missile proliferation on the Turkish security environment, Turkish regional freedom of action (Lesser, 2005, 97-98).

From a strategic culture and security perspective, “nuclear forces and doctrines have been part of the security calculus of the modern Turkish republic for the majority of its existence” Lesser, 2005, 89). And while arguably Turkish-Iranian relations grow, according to Umit Ozdag, founder of the Eurasian Center for Strategic Studies (ASAM):

“Turkey will not accept living side by side with an Iran possessing nuclear weapons for a long period of time, and it will produce nuclear weapons to achieve balance, since it will be difficult to live with an Iran whose self-confidence has excessively mounted. Also, the ensuing shift in the power of conservatives in Iran

will have adverse implications for Turkish-Iranian relations” (Ozdogan in Kibaroglu and Caglar, 2008, 71).

Additionally, TUSAM, the Turkish acronym for National Security Strategies Research Center, has asserted that:

“Turkey is surrounded by hostile neighbors that eventually aim to divide Turkey, in order to exploit its natural resources like “vultures.” Thus, Turkey should inescapably develop national defense strategies centered on the neighboring threats. TUSAM also points to the inadequacy of confronting unconventional threats, i.e. weapons of mass destruction, by conventional means, hence referring to the need of nuclear power and ballistic missiles acquisition in order to even the nuclear asymmetries” (Al-Marashi and Goren, 2009, 5).

In sum, a nuclear-armed Iran would inherently represent a negative development for Turkey and the wider region (Bowman, 2008, 36). And while the Turkish strategic and security culture may largely feel that they will not be the target of Iranian aggression any time in the foreseeable future, “an Iranian acquisition of nuclear weapons would dramatically shift the balance of power between the two countries, resulting in a more assertive Iranian role in the region (36, 40). Additionally, Bowman reports on the growing Turkish support for a thriving and viable nuclear energy option with the capabilities to be weaponized, if eventually deemed necessary.

“In effect, the Iranian nuclear program has strengthened the position of nuclear energy advocates in Turkey. While significant popular opposition to nuclear energy still exists in Turkey due primarily to environmental concerns, the government seems determined to move forward in its development of a nuclear energy program. As a result of these developments, if Iran crosses the nuclear threshold in 5 to 10 years, Turkey will already have a significantly stronger technological foundation should it choose to pursue a nuclear weapons capability” (Bowman, 2008, 36).

As indicated previously, while there may be significant disincentives to a Turkish pursuit of nuclear weapons (i.e.: NATO, EU, further damage to Turkish-U.S. relations, etc.), Bowman

reports that aspects of the Turkish strategic and security culture lean towards a Turkish pursuit of nuclear weapons.

“In a closed door meeting, staff asked a group of influential Turkish politicians how Turkey would respond to an Iranian acquisition of nuclear weapons. These politicians emphatically responded that Turkey would pursue nuclear weapons as well. These individuals stated, ‘Turkey would lose its importance in the region if Iran has nuclear weapons and Turkey does not.’ Another politician said it would be ‘compulsory’ for Turkey to obtain nuclear weapons in such a scenario. However, when staff subsequently asked whether a U.S. nuclear umbrella and robust security commitment would be sufficient to dissuade Turkey from pursuing nuclear weapons, all three individuals agreed that it would” (41).

Admittedly, whether Turkey will actually pursue a nuclear weapons program in response to an Iranian acquisition of nuclear weapons remains an in question.

### *Egypt*

Like Saudi Arabia, a nuclear-armed Iran presents Egypt with not only a variety of strategic and security concerns but motivations for pursuing the acquisition of nuclear weapons. As the most populous Arab country, Egypt’s motivations and regional aspirations, if not justifications, are guided by Egypt’s long claimed leadership role in the Middle East and prestige (Bahgat, 2007, 109). Even so, according to Gawdat Bahgat, “the Egyptian leaders have never had the necessary determination and political will to pursue nuclear weapons, and they are not likely to consider this option in the foreseeable future” (124). This is seemingly backed by historical precedence: “Egypt has been able to tolerate a nuclear Israel for than 30 years, as well as accommodate Libya’s weapons programs” (Hemmer, 2007, 52). Arguably, for Egypt, the real issue is not necessarily Iran acquiring nuclear weapons, but Egypt’s determination, or not, to be the leading Arab power. Therefore, according to Patrick Clawson (2003):

“Were Iran to acquire nuclear weapons, that would affect the on-going debate in Egypt about whether it needs to nuclearize to maintain its status as a regional

power. If in addition Saudi Arabia were to acquire nuclear weapons – even if by the indirect Pakistani route described above – it is difficult to see Egypt remaining non-nuclear, because it would be unacceptable to Egypt to be perceived as a less potent power than another Arab country” (Clawson, 2003, 6).

Whether admitted by Egyptian leadership or not, Iran’s acquisition of nuclear weapons will deliver a blow to Egypt’s prestige and leadership role in the Arab and Islamic world, more so if Saudi Arabia proliferates. Iranian acquisition would also further jeopardize Egypt’s persistence and quest for a nuclear free Middle East zone.

Inherently, especially since the 1979 Iranian Islamic Revolution, Egyptian leadership has viewed Iran “as a threat with or without nuclear weapons, but Egypt would perceive a nuclear armed Iran as especially threatening” (Bowman, 2008, 27). However, according to Bowman, “Egypt sees Iran as a political and strategic threat and not an existential or military one” (27). Even so, “as with Saudi Arabia and Turkey, if Iran were to obtain nuclear weapons in the coming years, it would place significant pressure on Egypt to follow suit” (28). In the end, while the Egyptian strategic and security culture may be tempted to pursue a nuclear weapons capability, the overall costs may outweigh the benefits (30), despite the 1998 Mubarak “when the time comes and we need nuclear weapons, we will not hesitate” (Clawson, 2003, 6) nuclear rhetoric.

### ***Iran***

“Once a country has turned that corner, the more foreign pressure you apply, the more a country’s nuclear program goes underground, the more they will rely on secrecy, compartmentalization, deception and denial, and the more opportunities are lost to turn them around” (Yaphe and Baktiari, 2007, 3).

From an Iranian strategic and security perspective, there are varying perceptions and motivations as to why Iran pursued nuclear weapons capability to become a nuclear-armed power. Three primary Iranian motivations, especially given the recent U.S. military interventions in Iraq and Afghanistan (Bahgat, 2007, 25-27), were aimed specifically at 1)

detering further U.S. and Western interventionism in the Middle East (9); 2) deterring “Western and particularly U.S. interference in its [Iran] domination of the Gulf” (*Iran’s Nuclear Program*, 2006, 65); and 3) deterring any and all U.S. or U.S.-led military attacks designed either harm Iran’s territorial integrity and/or to facilitate actual regime change in Iran (65; Bahgat, 2007, 9). Additionally, Iranian acquisition of nuclear weapons allows Iran to not only export the revolution (Eisenstadt in Sokolski and Clawson, 2005, 231) but to create and exploit religio-political spheres of influence in the wider Middle East region. Such religio-political power is often referred to as ‘prestige’; therefore, in essence, Iran’s pursuit and acquisition of nuclear weapons was to enhance or elevate Iran’s regional prestige (Mayer, 2004, 26) and status of leadership in the Arab and Islamic world.

Inherently, there are other underline elements, goals, and motivations for Iran’s acquisition of nuclear weapons. According to Michael Eisenstadt, “Iranians may see nuclear weapons as a means of pursuing an eliminationist solution to the Arab-Israeli conflict (Eisenstadt in Sokolski and Clawson, 2005, 232). Jennifer Knepper (2008), in evaluating Iran’s strategic and security culture identified four driving elements:

“These four elements include: (1) an all-encompassing conviction in Shia Islam as the bedrock of the regime’s political legitimacy and the country’s national identity; (2) a hypernationalistic belief in Iran’s rightful place as the leader of the Islamic civilization and as a regional hegemon; (3) a pervasive sense of external and internal vulnerability; and (4) an ingrained perception that the U.S. desires to dominate and eventually destroy the Islamic civilization” (Knepper, 2008, 451).

Knepper goes on to make a predictive conclusion concerning a nuclear-armed Iran:

“The evaluation of these elements strongly augurs that a nuclear-armed Iran is not likely to employ these weapons offensively due to its fear of retaliation and the constraining interests within its regime’s political structure. Rather, its drive toward a nuclear-weapons capability is to provide Iran with a defensive deterrent that will advance its desires for regional hegemony and mitigate its pervasive sense of insecurity” (451).

While it is apparent that Knepper, among others, view Iran's acquisition of nuclear weapons as products of rational actors, there are questions as to the real intentions of Iran's religious Islamic fundamentalist leadership and regime, especially when aspects of Iran's foreign policy is seemingly either hijacked or motivated by a political-religious imperative (i.e.: Mahdism or Mahdi expectations; a millenarian and messianic phenomenon that is being perpetuated and fomented by Ahmadinejad and Twelver Shi'ism). As such, would a hypothetical Iranian overt or covert nuclear attack on Israel eventually be considered the actions of rational actors if it was committed as an act to hasten the return of the Mahdi (see Amuzegar, 2007; Hitchcock, 2007, 62-81; Kazemzadeh, 2007; Moore, 2007)? In the end, a nuclear-armed Iran will possibly provoke further nuclear proliferation in the Middle East region being some rational acting states may see no other rational choice but to do so to enhance their own strategic security and prestige.

#### **Step 4. Course of Action for the Central National Actors**

##### ***Israel's Options***

##### **1. Status Quo (Bomb *stays* in the basement).**

Status quo implies or infers that Israel will maintain a status quo by keeping its policy of nuclear ambiguity/opacity intact. Michael Raska (2008) further clarifies this option as:

“Israel may opt for a flexible response by keeping the foundations of its nuclear ambiguity intact. Thus, if Israel's nuclear capabilities, protective efforts, and its nuclear doctrine may remain undisclosed, but not denied either – Israel would continue to signal that is willing and able to deliver an appropriate destructive response. However ... such a posture may lower the enemy state perceptions of Israel's nuclear deterrent, and increase the risks for a pre-emptive nuclear strike. Specifically, ‘with the bomb kept silently in the basement, Israel's imperative communications could be compromised perilously. Unable to know for certain whether Israel's retaliatory/counter-retaliatory abilities were aptly formidable, enemy states could conclude, rightly or wrongly, that a first-strike attack or post-pre-emption reprisal would be cost effective’” (Raska, 2008, 28-29).

## 2. Open Deterrence (Bomb *comes out* on the table).

Open deterrence implies or infers that Israel will abandon its policy of nuclear ambiguity/opacity. In doing so, Israel will seek to make the Iranian leadership and policy makers abundantly clear as to the consequences and price they will pay if they covertly or overtly launch or instigate (i.e.: via a proxy such as Hezbollah, etc.) a nuclear strike on Israel. It also implies or infers that whether Israel would augment its nuclear position via assurances from/with the U.S. or a reliance on the protection of an American nuclear umbrella, that Israel will actively continue to pursue and develop varied anti-missile and anti-rocket defense systems, as well as pursue and develop ‘second strike’ nuclear capabilities. Michael Raska (2008) and Reuven Pedatzur (2007) further clarify this option as:

“Israel accepts nuclear parity, shifts to a declaratory status based on Mutually Assured Destruction (MAD). Israel declares a ‘ready arsenal’ (launch-on warning); a second strike nuclear capability; and devises a nuclear warfighting doctrine.

Israel may switch to an open nuclear posture, yet, with multiple options of disclosure to maximize gains for Israeli nuclear requirements. It can opt for nuclear deterrence based on nuclear parity and MAD or it may stipulate a war-fighting doctrine, either counter-force or counter-value, by envisioning how a nuclear war would actually be fought in case deterrence fails. Here, Israel would have to determine how enemy states such as Iran would be more likely deterred, and how to amplify the credibility and perceptions of its own ability to retaliate. Appropriate strategy would have to be complemented by the configuration of its nuclear posture. For example, Israel may switch to a “ready arsenal” – launch on warning mode, targeting enemy’s population and industrial centres (counter-value). But the modalities, risks, costs, and benefits of a particular strategy would have to be carefully weighted, in order to maximize Israel’s nuclear advantage” (Raska, 2008, 29).

“This is the most reasonable and effective option that Israel should adopt. Just as the two super-powers reached recognition that only unconcealed and dependable deterrence of each side by the other would prevent any use of nuclear weapons, Israel will be forced to adopt this approach. It seems that the most effective way of deterring the policy-makers in Iran from the future use of nuclear weapons will

be to make clear to them the price they will be forced to pay if they launch missiles against Israel.

For this purpose Israel will be forced to abandon the policy of nuclear ambiguity and switch to unconcealed deterrence, in which it will make clear to Iran the new rules of the game. This deterrence must include clear explanations regarding the red lines that, by crossing them, the Iranians risk an Israeli nuclear response. For example, it will be made clear that the detection of any missile launched from Iran in a westerly direction will mean for Israel the launching of an Iranian nuclear missile against it. In such circumstances Israel will not wait to see where the missile hits and whether it is equipped with a nuclear warhead. No attempt will be made to intercept it, but Israeli retaliation will automatically follow” (Pedatzur, 2007, 521).

### ***Saudi Arabia’s Options***

1. Proliferate.
2. Non-Proliferate

### ***Turkey’s Options***

1. Proliferate.
2. Non-Proliferate.

### ***Egypt’s Options***

1. Proliferate.
2. Non-Proliferate.

## **Step 5. Iranian Alternative Futures Scenarios**

As previously indicated, the specific LAMP study issue was: What are the consequences for nuclear proliferation in the Arabian/Persian Gulf and the broader Middle East should Iran *declare* itself a nuclear-armed power? For the purposes of creating the following scenarios, emphasis has been placed on the word *declare* to imply or infer as to whether Iran will actually declare itself a nuclear power or not declare itself a nuclear power and simply follow Israel’s

policy of nuclear ambiguity/opacity. Remember, for the purposes of this LAMP study, a critical assumption was made that Iran has acquired nuclear weapons capability, *whether declared or undeclared*.

***Scenario 1: Iran DOES declare itself a nuclear power***

In sum, whether confirmed by an actual overt test or via a public/international announcement, Iran *does* declare itself a nuclear-armed power.

***Scenario 2: Iran DOES NOT declare itself a nuclear power***

In sum, there are no overt or covert tests done, no public/international announcement, and Iran *does not* declare itself a nuclear power. In this scenario, it is conceivable that Iran will attempt to apply the Israeli policy of nuclear ambiguity/opacity. What is openly and widely acknowledged by Iran is that they have nuclear weapons capabilities.

**6. Calculating the Alternative Futures**

The mathematical method for calculating the alternative futures comes from Lockwood and Lockwood, Chapter 4 (1993, 38-41).

$X$  to the power of  $Y = Z$

$X$  = number of strategic options

$Y$  = number of actors

$Z$  = the total number of alternate futures

For this particular LAMP study:

$(2 \text{ Israel}) \times (2 \text{ Saudi Arabia}) \times (2 \text{ Turkey}) \times (2 \text{ Egypt}) = Z$ .

$2 \times 2 \times 2 \times 2 = 4 \times 4 = 16$  alternative futures.

## 7. Pairwise Comparisons of the Alternative Futures

The pairwise comparisons for the two Iranian alternate futures scenarios with the 16 alternate futures in each are shown in tables numbered 1 and 2 below and on the following pages.

**Table 1**

***Scenario 1: Iran DOES declare itself a nuclear power***

Alternative Future #	Israel	Saudi Arabia	Turkey	Egypt	# of Votes
1	SQ	P	P	P	9
2	OD	P	P	P	10
3	SQ	NP	NP	NP	0
4	OD	NP	NP	NP	1
5	SQ	P	NP	NP	11
6	OD	P	NP	NP	15
7	SQ	P	NP	P	12
8	OD	P	NP	P	13
9	SQ	P	P	NP	8
10	OD	P	P	NP	14
11	SQ	NP	NP	P	2
12	OD	NP	NP	P	3
13	SQ	NP	P	NP	4
14	OD	NP	P	NP	5
15	SQ	NP	P	P	6
16	OD	NP	P	P	7

SQ = Status Quo  
OD = Open Deterrence

P = Proliferate  
NP = Non-Proliferate

**Table 2*****Scenario 2: Iran DOES NOT declare itself a nuclear power***

Alternative Future #	Israel	Saudi Arabia	Turkey	Egypt	# of Votes
1	SQ	P	P	P	8
2	OD	P	P	P	6
3	SQ	NP	NP	NP	12
4	OD	NP	NP	NP	10
5	SQ	P	NP	NP	15
6	OD	P	NP	NP	11
7	SQ	P	NP	P	14
8	OD	P	NP	P	9
9	SQ	P	P	NP	13
10	OD	P	P	NP	4
11	SQ	NP	NP	P	5
12	OD	NP	NP	P	3
13	SQ	NP	P	NP	7
14	OD	NP	P	NP	1
15	SQ	NP	P	P	2
16	OD	NP	P	P	0

SQ = Status Quo  
OD = Open Deterrence

P = Proliferate  
NP = Non-Proliferate

**Step 8. Ranking the Alternative Futures**

This section ranks the alternative futures from tables 1 and 2 from highest (i.e.: most likely) to lowest (i.e.: least likely) relative probability. Since there are only two scenarios, as previously done, the results will once again be organized into two separate tables numbered 3 and 4 on the following pages.

**Table 3 – Rank Ordered Futures***Scenario 1: Iran DOES declare itself a nuclear power*

Alternate Futures #	Israel	Saudi Arabia	Turkey	Egypt	# of Votes
6	OD	P	NP	NP	15
10	OD	P	P	NP	14
8	OD	P	NP	P	13
7	SQ	P	NP	P	12
5	SQ	P	NP	NP	11
2	OD	P	P	P	10
1	SQ	P	P	P	9
9	SQ	P	P	NP	8
16	OD	NP	P	P	7
15	SQ	NP	P	P	6
14	OD	NP	P	NP	5
13	SQ	NP	P	NP	4
12	OD	NP	NP	P	3
11	SQ	NP	NP	P	2
4	OD	NP	NP	NP	1
3	SQ	NP	NP	NP	0

SQ = Status Quo

OD = Open Deterrence

P = Proliferate

NP = Non-Proliferate

**Table 4 – Rank Ordered Futures*****Scenario 2: Iran DOES NOT declare itself a nuclear power***

Alternate Futures #	Israel	Saudi Arabia	Turkey	Egypt	# of Votes
5	SQ	P	NP	NP	15
7	SQ	P	NP	P	14
9	SQ	P	P	NP	13
3	SQ	NP	NP	NP	12
6	OD	P	NP	NP	11
4	OD	NP	NP	NP	10
8	OD	P	NP	P	9
1	SQ	P	P	P	8
13	SQ	NP	P	NP	7
2	OD	P	P	P	6
11	SQ	NP	NP	P	5
10	OD	P	P	NP	4
12	OD	NP	NP	P	3
15	SQ	NP	P	P	2
14	OD	NP	P	NP	1
16	OD	NP	P	P	0

SQ = Status Quo

OD = Open Deterrence

P = Proliferate

NP = Non-Proliferate

## **Step 9. Analysis of the Most Likely Alternate Futures**

This section gives a brief synopsis of the *three* most likely futures for each scenario. Theoretically, this section provides the best or ‘most likely’ response to the LAMP specific issue research question: What are the consequences for nuclear proliferation in the Arabian/Persian Gulf and the broader Middle East should Iran ‘*declare*’ itself a nuclear-armed power? This predictive study hopes to present the reader with the most relevant and viable alternatives for a future that still remains unknown.

### ***The Mostly Likely Futures – Scenario 1: Iran DOES declare itself a nuclear power***

#### ***1. Alternative Future #6***

- Israel = Open Deterrence (OD)
- Saudi Arabia = Proliferates (P)
- Turkey = Non-Proliferates (NP)
- Egypt = Non-Proliferates (NP)

For this scenario, alternate future #6 is the most likely alternate future for Scenario 1. In this future, Iran has acquired nuclear weapons capability and has declared itself a nuclear power. Israel responds by abandoning its policy of nuclear ambiguity/opacity, accepts nuclear parity, and declaring a ‘ready arsenal’ (launch-on warning). Additionally, Israel will actively continue to pursue and further develop a reliable second strike nuclear capability, actively continue to pursue and develop varied anti-missile and anti-rocket defense systems, and will devise a nuclear warfighting doctrine based on Mutually Assured Destruction (MAD).

Fearing a more active, assertive, and insidious Iranian role in the broader Middle East region, now nuclear-armed, Saudi Arabia, having the strategic incentives and the financial

resources available, covertly or overtly decides to acquire nuclear weapons, while still calling for the entire Middle East to be nuclear free and free of weapons of mass destruction. For Saudi Arabia, a nuclear-armed Iran is *not* viewed or perceived as creating regional stability, but quite the opposite; a nuclear-armed Iran further jeopardizes an already precarious Middle East. To Sunni Saudi Arabia, countering a Shi'ite Iran is an imperative. Therefore, Saudi Arabia will rebuff any and all U.S. assurances and efforts to have Saudi Arabia fall under or be protected by a U.S. nuclear umbrella. Thus, Saudi Arabia will actively resort to starting its own covert or overt nuclear weapons program or covertly buying or leasing nuclear weapons from China, Pakistan, or North Korea.

While both Turkey and Egypt fear a more active, assertive, and insidious Iranian role in the broader Middle East region, neither the Turkish or Egyptian leadership, as with their respective strategic and security cultures, have the necessary determination and political will to pursue nuclear weapons. While both may seek to actively bolster their existing conventional militaries and anti-missile systems, they will continue to call for the entire Middle East to be nuclear free and free of weapons of mass destruction. Given Turkey is still a member of NATO, a nuclear alliance and umbrella, Egypt may rethink its position as it regards being apart of a U.S. nuclear umbrella.

## ***2. Alternate Future #10***

- Israel = Open Deterrence (OD)
- Saudi Arabia = Proliferates (P)
- Turkey = Proliferates (P)
- Egypt = Non-Proliferates (NP)

Alternate future #10 is the second most likely alternate future for Scenario 1. In this future, as with alternate future #6, Iran has acquired nuclear weapons capability and has declared itself a nuclear power. Additionally, as with alternate future #6, the likely courses of action by Israel, Saudi Arabia, and Egypt will remain the same. The noticeable change in this future is that Turkey has ultimately determined that a nuclear-armed Iran poses a significant and undeniable threat to the strategic security and interests of Turkey. Furthermore, Turkey has come to the realization that it cannot rely upon the assurances of protection or security commitments of the U.S., NATO, or the EU. Having a significantly stronger technological foundation established, Turkey makes the strategic choice to start its own nuclear weapons program and pursue a nuclear weapons capability, while actively bolstering its own conventional forces and/or seeking closer regional strategic and military ties with Israel.

### ***3. Alternate Future #8***

- Israel = Open Deterrence (OD)
- Saudi Arabia = Proliferates (P)
- Turkey = Non-Proliferates (NP)
- Egypt = Proliferates (P)

Alternate future #8 is the third most likely alternate future Scenario 1. In this future, as with alternate future #6 and #10, Iran has acquired nuclear weapons capability and has declared itself a nuclear power. Again, as with alternate future # 6 and #10, the likely courses of action by Israel and Saudi Arabia remain unchanged. As with alternate future #6, Turkey does not proliferate. The noticeable change in this future is that Egypt has made the strategic choice to pursue nuclear weapons capability. Whether openly acknowledged or not, Egypt's strategic

choice to proliferate is not necessarily or primarily motivated by the need to counter a nuclear-armed Iran. Egypt has made the choice primarily based upon its on going leadership role and prestige competition with Saudi Arabia. In sum, Egypt is pursuing nuclear weapons not as a strategic security response to Iran but as a Middle East leadership role and prestige response or gambit to Saudi Arabia. Accordingly, in doing so, Egypt will invariably continue to call for a nuclear free Middle East free of weapons of mass destruction. Conversely, in a regional strategic response to Saudi Arabia, Egypt's quest for nuclear weapons may well cause further nuclear proliferation in that Egypt's pursuit and acquisition of nuclear weapons may prompt Algeria, as with some other North African states, to do likewise.

***The Mostly Likely Futures – Scenario 2: Iran DOES NOT declare itself a nuclear power***

***1. Alternate Future #5***

- Israel = Status Quo (SQ)
- Saudi Arabia = Proliferates (P)
- Turkey = Non-Proliferates (NP)
- Egypt = Non-Proliferates (NP)

For this scenario, alternate future #5 is the most likely alternate future for Scenario 2. In this future, Iran has acquired nuclear weapons capability but *does not* declare itself a nuclear power. Israel opts to keep its nuclear capabilities, protective efforts, and its nuclear doctrine undisclosed. In essence, Israel will give a flexible response by continuing to adhere to the foundations of its policy of nuclear ambiguity/opacity. Conceivably, it can be assumed that Israel will actively pursue a 'ready arsenal' (launch-on warning), actively continue to pursue and

further develop a reliable second strike nuclear capability, and actively continue to pursue and develop varied anti-missile and anti-rocket defense systems.

As with Scenario 1, alternate future #6, fearing a more active, assertive, and insidious Iranian role in the broader Middle East region, now nuclear-armed, Saudi Arabia, having the strategic incentives and the financial resources available, covertly or overtly decides to acquire nuclear weapons, while still calling for the entire Middle East to be nuclear free and free of weapons of mass destruction. For Saudi Arabia, a nuclear-armed Iran is *not* viewed or perceived as creating regional stability, but quite the opposite; a nuclear-armed Iran further jeopardizes an already precarious Middle East. To Sunni Saudi Arabia, countering a Shi'ite Iran is an imperative. Therefore, Saudi Arabia will rebuff any and all U.S. assurances and efforts to have Saudi Arabia fall under or be protected by a U.S. nuclear umbrella. Thus, Saudi Arabia will actively resort to starting its own covert or overt nuclear weapons program or covertly buying or leasing nuclear weapons from China, Pakistan, or North Korea.

Likewise, as with Scenario 1, alternate future #6, while both Turkey and Egypt fear a more active, assertive, and insidious Iranian role in the broader Middle East region, neither the Turkish or Egyptian leadership, as with their respective strategic and security cultures, have the necessary determination and political will to pursue nuclear weapons. While both may seek to actively bolster their existing conventional militaries and anti-missile systems, they will continue to call for the entire Middle East to be nuclear free and free of weapons of mass destruction. Given Turkey is still a member of NATO, a nuclear alliance and umbrella, Egypt may rethink its position as it regards being apart of a U.S. nuclear umbrella.

## ***2. Alternate Future #7***

- Israel = Status Quo (SQ)
- Saudi Arabia = Proliferates (P)
- Turkey = Non-Proliferates (NP)
- Egypt = Non-Proliferates (P)

Alternate future #7 is the second most likely alternate future for Scenario 2. In this future, as with alternate future #5, Iran has acquired nuclear weapons capability but *does not* declare itself a nuclear power. Additionally, as with alternate future #5, the likely courses of action by Israel, Saudi Arabia, and Turkey will remain the same. The noticeable change in this future is that Egypt has made the strategic choice to pursue nuclear weapons capability. As with Scenario 1, alternate future #8, whether openly acknowledged or not, Egypt's strategic choice to proliferate is not necessarily or primarily motivated by the need to counter a nuclear-armed Iran. Egypt has made the choice primarily based upon its on going leadership role and prestige competition with Saudi Arabia. In sum, Egypt is pursuing nuclear weapons not as a strategic security response to Iran but as a Middle East leadership role and prestige response or gambit to Saudi Arabia. Accordingly, in doing so, Egypt will invariably continue to call for a nuclear free Middle East free of weapons of mass destruction. Conversely, in a regional strategic response to Saudi Arabia, Egypt's quest for nuclear weapons may well cause further nuclear proliferation in that Egypt's pursuit and acquisition of nuclear weapons may prompt Algeria, as with some other North African states, to do likewise.

### ***3. Alternate Future #9***

- Israel = Status Quo (SQ)
- Saudi Arabia = Proliferates (P)

- Turkey = Non-Proliferates (P)
- Egypt = Non-Proliferates (NP)

Alternate future #9 is the third most likely alternate future for Scenario 2. In this future, as with alternate future #5, Iran has acquired nuclear weapons capability but *does not* declare itself a nuclear power. Additionally, as with alternate future #5, the likely courses of action by Israel, Saudi Arabia, and Egypt will remain the same. The noticeable change in this future is that Turkey has made the strategic choice to pursue nuclear weapons capability. As with Scenario 1, alternate future #10, Turkey has ultimately determined that a nuclear-armed Iran poses a significant and undeniable threat to the strategic security and interests of Turkey. Furthermore, Turkey has come to the realization that it cannot rely upon the assurances of protection or security commitments of the U.S., NATO, or the EU. Having a significantly stronger technological foundation established, Turkey makes the strategic choice to start its own nuclear weapons program and pursue a nuclear weapons capability, while actively bolstering its own conventional forces and/or seeking closer regional strategic and military ties with Israel.

### **Step 10 & 11: Determine and Develop Focal Events and Indicators**

Arguably, there are an infinite and unpredictable amount of possible future focal points and indicators. It is the belief of this author that focal points and indicators are interchangeable and can shift from one to the other (i.e.: a focal point can shift from being a focal point to being an indicator and vice versa). As such, this section gives a brief synopsis of *some* possible future focal points and indicators. In no way, shape, or form are these to be construed as *finite*. As such, this section offers a range of *possibilities* and asserts that some to all may or may occur

differently or may not occur at all. The guiding argument here is that the future is both uncertain and unknowable, despite the predictive analytical methodology utilized.

***Scenario 1: Alternate Future #6***

In alternate future #6, Israel abandons its policy of nuclear ambiguity/opacity and accepts nuclear parity, Saudi Arabia covertly or overtly decides to acquire nuclear weapons, and both Turkey and Egypt lack the necessary determination and political will to pursue nuclear weapons. The possible focal events and indicators for this future are listed below.

- Iran has acquired nuclear weapons capability and has declared itself a nuclear power.
- Iran does not moderate its position or rhetoric and becomes more active, assertive, and insidious in implementing its revolutionary goals and agenda in the Arab/Persian Gulf region and the broader Middle East.
- Concerned with Iran's covert and overt involvement with Sh'ia militant factions in Yemen, as well as with Iran's continued stymieing of Israeli-Palestinian peace process, a shift occurs in the Saudi Arabian political, military, and cultural landscape. Saudi Arabia confronts Iranian assertiveness with its own assertiveness.
- The influence of the U.S. in the region continues to decline but is enough to reassure the political-military cultures in Egypt and Turkey.
- Saudi Arabia increasingly separates itself from U.S. influence.
- Hezbollah continues to increase its military capabilities while continuing to provoke Israel into another confrontation.
- Israel's political and military cultures harden.

***Scenario 1: Alternate Future #10***

In alternate future #10, Israel abandons its policy of nuclear ambiguity/opacity and accepts nuclear parity, Saudi Arabia covertly or overtly decides to acquire nuclear weapons, Turkey makes the strategic choice to start a nuclear weapons program, and Egypt lacks the necessary determination and political will to pursue nuclear weapons. The possible focal events and indicators for this future are listed below.

- Iran has acquired nuclear weapons capability and has declared itself a nuclear power.
- Iran does not moderate its position or rhetoric and becomes more active, assertive, and insidious in implementing its revolutionary goals and agenda in the Arab/Persian Gulf region and the broader Middle East.
- Concerned with Iran's covert and overt involvement with Sh'ia militant factions in Yemen, as well as with Iran's continued stymieing of Israeli-Palestinian peace process, a shift occurs in the Saudi Arabian political, military, and cultural landscape. Saudi Arabia confronts Iranian assertiveness with its own assertiveness.
- The influence of the U.S. in the region continues to decline but is enough to reassure the political-military culture in Egypt.
- Saudi Arabia increasingly separates itself from U.S. influence.
- Hezbollah continues to increase its military capabilities while continuing to provoke Israel into another confrontation.
- Israel's political and military cultures harden.
- Cooperation between Turkey and Iran over the Kurdish problem deteriorates.
- The EU continues to stymie Turkish entry as a full ECC member.
- U.S. and Turkish relations continue to deteriorate.

***Scenario 1: Alternate Future #8***

In alternate future #8, Israel abandons its policy of nuclear ambiguity/opacity and accepts nuclear parity, Saudi Arabia covertly or overtly decides to acquire nuclear weapons, Turkey lacks the necessary determination and political will to pursue nuclear weapons, and based upon its on going leadership role and prestige competition with Saudi Arabia, Egypt has made the strategic choice to start a nuclear weapons program. The possible focal events and indicators for this future are listed below.

- Iran has acquired nuclear weapons capability and has declared itself a nuclear power.
- Iran does not moderate its position or rhetoric and becomes more active, assertive, and insidious in implementing its revolutionary goals and agenda in the Arab/Persian Gulf region and the broader Middle East.
- Concerned with Iran's continuing covert and overt involvement with Sh'ia militant factions in Yemen, as well as with Iran's continued stymieing of Israeli-Palestinian peace process, a shift occurs in the Saudi Arabian political, military, and cultural landscape. Saudi Arabia confronts Iranian assertiveness with its own assertiveness.
- The influence of the U.S. and EU in the region continues to decline but is enough to reassure the political-military culture in Turkey.
- Saudi Arabia increasingly separates itself from U.S. influence.
- Hezbollah continues to increase its military capabilities while continuing to provoke Israel into another confrontation.
- Israel's political and military cultures harden.
- A political and military shift occurs in Egypt.
- The escalation of tensions between Egypt and Iran heighten as Hezbollah activities in Egypt increase.

***Scenario 2: Alternate Future #5***

In alternate future #5, Israel opts to keep its nuclear capabilities, protective efforts, and its nuclear doctrine undisclosed, Saudi Arabia covertly or overtly decides to acquire nuclear weapons, and both Turkey and Egypt lack the necessary determination and political will to pursue nuclear weapons. The possible focal events and indicators for this future are listed below.

- Iran has acquired nuclear weapons capability and has declared itself a nuclear power.
- Iran does not moderate its position or rhetoric and becomes more active, assertive, and insidious in implementing its revolutionary goals and agenda in the Arab/Persian Gulf region and the broader Middle East.
- Concerned with Iran's covert and overt involvement with Sh'ia militant factions in Yemen, as well as with Iran's continued stymieing of Israeli-Palestinian peace process, a shift occurs in the Saudi Arabian political, military, and cultural landscape. Saudi Arabia confronts Iranian assertiveness with its own assertiveness.
- The influence of the U.S. in the region continues to decline but is enough to reassure the political-military cultures in Egypt and Turkey.
- Saudi Arabia increasingly separates itself from U.S. influence.
- Hezbollah continues to increase its military capabilities while continuing to provoke Israel into another confrontation.
- Israel's political and military cultures harden.

***Scenario 2: Alternate Future #7***

In alternate future #7, Israel abandons its policy of nuclear ambiguity/opacity and accepts nuclear parity, Saudi Arabia covertly or overtly decides to acquire nuclear weapons, Turkey

lacks the necessary determination and political will to pursue nuclear weapons, and based upon its on going leadership role and prestige competition with Saudi Arabia, Egypt has made the strategic choice to start a nuclear weapons program. The possible focal events and indicators for this future are listed below.

- Iran has acquired nuclear weapons capability and has declared itself a nuclear power.
- Iran does not moderate its position or rhetoric and becomes more active, assertive, and insidious in implementing its revolutionary goals and agenda in the Arab/Persian Gulf region and the broader Middle East.
- Concerned with Iran's continuing covert and overt involvement with Sh'ia militant factions in Yemen, as well as with Iran's continued stymieing of Israeli-Palestinian peace process, a shift occurs in the Saudi Arabian political, military, and cultural landscape. Saudi Arabia confronts Iranian assertiveness with its own assertiveness.
- The influence of the U.S. and EU in the region continues to decline but is enough to reassure the political-military culture in Turkey.
- Saudi Arabia increasingly separates itself from U.S. influence.
- Hezbollah continues to increase its military capabilities while continuing to provoke Israel into another confrontation.
- Israel's political and military cultures harden.
- A political and military shift occurs in Egypt.
- The escalation of tensions between Egypt and Iran heighten as Hezbollah activities in Egypt increase.

***Scenario 2: Alternate Future #9***

In alternate future #9, Israel abandons its policy of nuclear ambiguity/opacity and accepts nuclear parity, Saudi Arabia covertly or overtly decides to acquire nuclear weapons, Turkey makes the strategic choice to start a nuclear weapons program, and Egypt lacks the necessary determination and political will to pursue nuclear weapons. The possible focal events and indicators for this future are listed below.

- Iran has acquired nuclear weapons capability and has declared itself a nuclear power.
- Iran does not moderate its position or rhetoric and becomes more active, assertive, and insidious in implementing its revolutionary goals and agenda in the Arab/Persian Gulf region and the broader Middle East.
- Concerned with Iran's covert and overt involvement with Sh'ia militant factions in Yemen, as well as with Iran's continued stymieing of Israeli-Palestinian peace process, a shift occurs in the Saudi Arabian political, military, and cultural landscape. Saudi Arabia confronts Iranian assertiveness with its own assertiveness.
- The influence of the U.S. in the region continues to decline but is enough to reassure the political-military culture in Egypt.
- Saudi Arabia increasingly separates itself from U.S. influence.
- Hezbollah continues to increase its military capabilities while continuing to provoke Israel into another confrontation.
- Israel's political and military cultures harden.
- Cooperation between Turkey and Iran over the Kurdish problem deteriorates.
- The EU continues to stymie Turkish entry as a full ECC member.

U.S. and Turkish relations continue to deteriorate.

## Step 12: Transpositions

As indicated in Lockwood and Lockwood (1993), alternate futures can and may transpose into one another if the actions of one actor changes the perceptions of one or more of the other involved actors. When such occurs, it is called a transposition. Additionally, such an occurrence has the potential or likelihood to change the relative probability of *all* possible alternate futures as time and actions progress. Likewise, they would likely have the potential to change possible focal points and indicators.

As with focal points and indicators, any and all possible transpositions are uncertain and unknowable. Therefore, rather than attempting to identify the most likely transpositions for *each* possible ‘most likely’ scenario alternate future, this section will take a more general approach. As is evident from the pairwise comparisons and subsequent rankings, there are discernible consistencies in the *three* most likely futures for *each* scenario.

- Saudi Arabia proliferates.
- If Iran *does* declare itself a nuclear weapons power, Israel ends its nuclear opacity.
- If Iran *does not* declare itself a nuclear weapons power, Israel does not end its nuclear opacity.
- Israel’s undeclared nuclear weapons had no effect on nuclear proliferation in the Middle East *prior* to Iran’s acquisition of nuclear weapons. Conversely and admittedly, there will be some to assert that it was Israel’s nuclear weapons that caused Iran to proliferate, but as this study has shown, Iran’s nuclear weapons proliferation motivations were more aimed or geared towards inhibiting U.S. and Western actions in the Middle East than those of Israel.

- There is a definite probability that proliferation by Saudi Arabia will cause Egypt to proliferate.
- Saudi Arabian proliferation will have marginal effect on whether Turkey proliferates.
- Iran's acquisition of nuclear weapons *will* definitely increase the likelihood of nuclear weapons proliferation in the Middle East.

The given here is Iran. As such, it will arguably be the actions of Iran that will determine the majority of transposition. Even so, some independent of Iran transposition do exist.

One possible transposition is that the very probability exist that even with an Iranian declaration that it is a nuclear weapons power, Israel may opt to continue its policy of ambiguity/opacity. Additionally, while not covered here as an Israeli option, an Iranian declaration that it is a nuclear weapons power may not inhibit a limited Israeli military response aimed at Iran's nuclear facilities. Inherently, this would indicate that Israel does not believe that Iran has nuclear weapons, despite an Iranian declaration (i.e.: no doubt such an assumption would be based on credible Israeli intelligence assets in and outside of Iran). Another possible transposition is that even with an Iranian declaration that it is a nuclear weapons power, Saudi Arabia may not proliferate, especially given the decades that most states in the Middle East have tolerated Israel undeclared nuclear weapons. Likewise, another transposition is that a strategic choice by Saudi Arabia to proliferate may not cause Egypt to proliferate. Of all those analyzed, Egypt is the one that will be the least likely to proliferate based solely on Iranian acquisition of nuclear weapons, while the other, specifically Saudi Arabia and Turkey, will largely be influenced by an Iranian acquisition of nuclear weapons. Arguably, Egypt's proliferation primarily rests upon whether Saudi Arabia proliferates.

## Conclusion

Despite the plethora of relevant peer-reviewed public information and discourse on Iran's nuclear program, its intentions and motivations, and whether it will acquire nuclear weapons capability, there is no question that a nuclear-armed Iran will increase the likelihood of additional nuclear proliferation in the Arab/Persian Gulf region and the wider Middle East. The more pertinent questions are:

- Is Iran's nuclear program a cover for an actual Iranian nuclear weapons program?
- Will Iranian proliferation be limited or restricted to the broader Middle East or will it crossover into South America?
- When will Iran acquire nuclear weapons capability?
- Despite the arguments for the continued viability of the NPT and the IAEA, if Iran does acquire actual nuclear weapons capability *and/or* nuclear weapons, what will be the continued credibility and effectiveness of the UN in inhibiting future nuclear proliferation not just among states but among nonstate actors or entities? The thought and possible actuality of a still NPT member developing nuclear weapons capability is and will be a crushing, if not decisive, blow to and against the UN and the current nonproliferation regimes.
- Will the Iranian acquisition of nuclear weapons moderate Iran's foreign policy and involvements outside of Iran? In other words, will Iran act rationally and respond positively to "Western-style cost-benefits analysis" as it pertains to classic nuclear deterrence (Timmerman in Sokolski and Clawson, 2005, 113)?
- Will a nuclear-armed Iran increase the centuries old history of conflict between the Sunni and Sh'ia communities throughout the broader Middle East?

- Given that the Middle East is one of the most unstable regions in the world, will a nuclear-armed Iran turn the Middle East into a ticking time bomb with a dangerously short fuse?

In summation, admittedly, this study has sought to identify the ‘most likely’ alternate futures or options might prompt some Middle East states to proliferate if indeed Iran does eventually acquire nuclear weapons capability in the near future. Several such alternate futures or options have been identified and analyzed, but as noted, each of these futures or options are based upon the assumptions and limited understanding of the author. Additionally, this author acknowledges that while no one predictive analytical methodology is perfect, for this LAMP study to have any continued validity, it must be continuously revamped, updated, and expanded.

## Reference List

- Al-Marashi, Ibrahim and Nilsu Goren. 2009. "Turkish Perceptions and Nuclear Proliferation." Center for Contemporary Conflict. Naval Postgraduate School. <http://www.nps.edu/Academics/centers/ccc/publications/OnlineJournal/2009/Apr/marashiApr09.html> (Accessed 23 December 2009).
- Amuzegar, Jahangir. 2007. "The Ahmadinejad Era: Preparing for the Apocalypse." *Journal of International Affairs*. 60(2): 35-53. APUS Online Library. <http://web.ebscohost.com.ezproxy1.apus.edu/ehost/pdf?vid=4&hid=2&sid=ff785423-222e-4c3e-afca-a8221cb0cf1b%40sessionmgr13> (Accessed 26 October 2009).
- Bahgat, Gawdat. 2007. *Proliferation of Nuclear Weapons in the Middle East*. Gainesville: University Press of Florida.
- Bowen, Wyn Q. and Joanna Kidd. 2005. "The Nuclear Capabilities and Ambitions of Iran's Neighbors." In ed. Sokolski, Henry and Patrick Clawson. 2005. "Getting Ready for a Nuclear-Ready Iran." Strategic Studies Institute, United States Army War College. <http://www.strategicstudiesinstitute.army.mil/pdf/files/pub629.pdf> (Accessed 20 December 2009).
- Bowman, Bradley L. 2008. "Chain Reaction: Avoiding a Nuclear Arms Race in the Middle East." Report to the Committee on Foreign Relations, United States Senate. One Hundred Tenth Congress, Second Session. U.S. Government Printing Office. Retrieved from Council of Foreign Relations (CFR). [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110\\_cong\\_senate\\_committee\\_prints&docid=f:39674.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_senate_committee_prints&docid=f:39674.pdf) (Accessed 18 December 2009).
- Butler, Richard. 2005. "Heavily Armed Duo in No Position to Lay Down Law on Proliferation." *The Sydney Morning Herald*. <http://www.smh.com.au/news/Opinion/Heavily-armed-duo-in-no-position-to-lay-down-law-on-proliferation/2005/03/07/1110160750281.html> (Accessed 20 December 2009).
- Clawson, Patrick. 2003. "Nuclear Proliferation in the Middle East: Who is Next After Iran?" Nonproliferation Policy Education Center (NPEC). <http://www.npec-web.org/Essays/Presentation030401%20Clawson%20Nuclear%20Prolif%20TB.pdf> (Accessed 22 December 2009).
- Cohen, Roger. 2009. "The Making of an Iran Policy." *The New York Times*. <http://www.nytimes.com/2009/08/02/magazine/02Iran-t.html?pagewanted=1> (Accessed 27 December 2009).
- Cordesman, Anthony H. 2007. "The Israeli 'Nuclear Reactor Strike' and Syrian Weapons of Mass Destruction." Center for Strategic and International Studies (CSIS).

- [http://csis.org/files/media/isis/pubs/071024\\_syriannucl\\_weapcontext.pdf](http://csis.org/files/media/isis/pubs/071024_syriannucl_weapcontext.pdf) (Accessed 23 December 2009).
- Cordesman, Anthony H. and Khalid R. Al-Rodhan. 2006. "Iranian Nuclear Weapons? The Uncertain Nature of Iran's Nuclear Programs." Center for Strategic and International Studies (CSIS). [http://csis.org/files/media/isis/pubs/060412\\_iran\\_uncertainty.pdf](http://csis.org/files/media/isis/pubs/060412_iran_uncertainty.pdf) (Accessed 23 December 2009).
- Eisenstadt, Michael. 2005. "Deter and Contain: Dealing with a Nuclear Iran." In ed. Sokolski, Henry and Patrick Clawson. 2005. "Getting Ready for a Nuclear-Ready Iran." Strategic Studies Institute, United States Army War College. <http://www.strategicstudiesinstitute.army.mil/pdf/files/pub629.pdf> (Accessed 20 December 2009).
- Hemmer, Christopher. 2007. "Responding to a Nuclear Iran." *Parameters* 37(3): 42-53. U.S. Army War College. APUS Online Library. <http://web.ebscohost.com.ezproxy1.apus.edu/ehost/detail?vid=4&hid=104&sid=b547c8ef-3090-4992-ab21-5cdea7f87636%40sessionmgr113&bdata=JnNpdGU9ZWwhvc3QtbGl2ZQ%3d%3d#db=aph&AN=27015125> (Accessed 27 December 2009).
- Hitchcock, Mark. 2007. *The Apocalypse of Ahmadinejad: The Revelation of Iran's Nuclear Prophet*. Colorado Springs: Multnomah Books.
- Iran's Nuclear Program*. 2006. Abu Dhabi: The Emirates Center for Strategic Studies and Research.
- Jaseb, Hossein and Fredrik Dahl. 2008. "Ahmadinejad says Israel will 'Disappear'." *Reuters*. <http://www.reuters.com/article/idUSL0261250620080603> (Accessed 23 December 2009).
- Kazemzadeh, Masoud. 2007. "Ahmadinejad's Foreign Policy." *Comparative Studies of South Asia, Africa, & the Middle East*. 27(2): 421-447. APUS Online Library <http://web.ebscohost.com.ezproxy1.apus.edu/ehost/pdf?vid=4&hid=2&sid=dc4d008c-aae5-47ff-97b9-76c40589e729%40sessionmgr14> (Accessed 26 October 2009).
- Kechichian, Joseph A. 2007. "Can Conservative Arab Gulf Monarchies Endure a Fourth War in the Persian Gulf?" *Middle East Journal* 61(2): 283-306. APUS Online Library. <http://web.ebscohost.com.ezproxy1.apus.edu/ehost/pdf?vid=5&hid=4&sid=a49ac757-88eb-4802-9822-57376c6c2de6%40sessionmgr13> (Accessed 27 December 2009).
- Kerr, Paul K. 2009. "Iran's Nuclear Program: Status." CRS Report for Congress. The Federation of American Scientists. <http://www.fas.org/sgp/crs/nuke/RL34544.pdf> (Accessed 23 December 2009).

- Kibaroglu, Mustafa and Baris Caglar. 2008. "Implications of a Nuclear Iran for Turkey." *Middle East Policy* 15(4): 59-80. APUS Online Library.  
<http://web.ebscohost.com.ezproxy1.apus.edu/ehost/pdf?vid=2&hid=105&sid=c9d5b4a9-dd9a-4950-834d-98044e6aee2a%40sessionmgr11> (Accessed 21 December 2009).
- Knepper, Jennifer. 2008. "Nuclear Weapons and Iranian Strategic Culture." *Comparative Strategy* 27(5): 451-468. APUS Online Library.  
<http://web.ebscohost.com.ezproxy2.apus.edu/ehost/pdf?vid=5&hid=108&sid=049239f3-4091-4dee-9191-cad14d113f1c%40sessionmgr110> (Accessed 23 December 2009).
- Lesser, Ian O. 2005. "Turkey, Iran, and Nuclear Risks. In ed. Sokolski, Henry and Patrick Clawson. 2005. "Getting Ready for a Nuclear-Ready Iran." Strategic Studies Institute, United States Army War College.  
<http://www.strategicstudiesinstitute.army.mil/pdf/files/pub629.pdf> (Accessed 20 December 2009).
- Lockwood, Jonathan S. and Kathleen O. Lockwood. 1993. *The Lockwood Analytical Method for Prediction*. Printed by MBS for American Military University.
- Madson, Peter N. 2006. "The Sky is not Falling: Regional Reaction to a Nuclear-Armed Iran." Thesis. Naval Postgraduate School. <http://handle.dtic.mil/100.2/ADA445779> (Accessed 22 December 2009).
- Mahdy, Fareed. 2009. "Disarmament: Egypt Rejects U.S. Nuclear Umbrella." Inter Press Service (IPS). <http://ipsnews.net/news.asp?idnews=48156> (Accessed 28 December 2009).
- Mayer, Charles C. 2004. "National Security to Nationalist Myth: Why Iran Wants Nuclear Weapons." Thesis. Naval Postgraduate School. Federation of American Scientists.  
<http://www.fas.org/nuke/guide/iran/mayer.pdf> (Accessed 22 December 2009).
- Moore, Steve. 2007. "Op-Ed: Radical 'Twelver' Ideology Drives Ahmadinejad's Policies." Digital Journal. <http://www.digitaljournal.com/article/246668> (Accessed 29 October 2009).
- Ozdag, Umit. 2005. "Iran Nukleer Silah Sahibi Olmali Mi?" [Should Iran Possess Nuclear Weapons?]. In Kibaroglu, Mustafa and Baris Caglar. 2008. "Implications of a Nuclear Iran for Turkey." *Middle East Policy* 15(4): 59-80. APUS Online Library.  
<http://web.ebscohost.com.ezproxy1.apus.edu/ehost/pdf?vid=2&hid=105&sid=c9d5b4a9-dd9a-4950-834d-98044e6aee2a%40sessionmgr11> (Accessed 21 December 2009).
- Pedatzur, Reuven. 2007. "The Iranian Nuclear Threat and the Israeli Options." *Contemporary Security Studies* 28(3): 513-541. APUS Online Library.  
<http://web.ebscohost.com.ezproxy1.apus.edu/ehost/pdf?vid=5&hid=7&sid=0f62a353-34fd-4c84-bc8a-efd6826d59ea%40sessionmgr4> (Accessed 23 December 2009).

- Posen, Barry R. 2006. "A Nuclear-Armed Iran: A Difficult but Not Impossible Policy Problem." A Century Foundations Report. [http://www.tcf.org/publications/internationalaffairs/posen\\_nuclear-armed.pdf](http://www.tcf.org/publications/internationalaffairs/posen_nuclear-armed.pdf) (Accessed 27 December 2009).
- Raska, Michael. 2008. "Beyond the Bomb in the Basement: Israel's Nuclear Predicament and Policy Options." *Asian Journal of Public Affairs* 1(2): 22-33. National University of Singapore. [http://www.spp.nus.edu.sg/ajpa/issue2/AJPA\\_Bomb\\_in\\_the\\_Basement.pdf](http://www.spp.nus.edu.sg/ajpa/issue2/AJPA_Bomb_in_the_Basement.pdf) (Accessed 22 December 2009).
- Russell, Richard L. 2005. "Arab Security Responses to a Nuclear-Armed Iran." In ed. Sokolski, Henry and Patrick Clawson. 2005. "Getting Ready for a Nuclear-Ready Iran." Strategic Studies Institute, United States Army War College. <http://www.strategicstudiesinstitute.army.mil/pdf/files/pub629.pdf> (Accessed 20 December 2009).
- Russell, Richard L. 2001. "A Saudi Nuclear Option?" in Clawson, Patrick. 2003. "Nuclear Proliferation in the Middle East: Who is Next After Iran?" Nonproliferation Policy Education Center (NPEC). <http://www.npec-web.org/Essays/Presentation030401%20Clawson%20Nuclear%20Prolif%20TB.pdf> (Accessed 22 December 2009).
- Sagan, Scott D. 1996-1997. "Why Do States Build Nuclear Weapons?: Three Models in Search of the Bomb." *International Security*, 21(3): 54-86. APUS Online Library. <http://www.jstor.org.ezproxy2.apus.edu/stable/pdfplus/2539273.pdf> (Accessed 20 December 2009).
- Sagan, Scott, Kenneth Waltz, and Richard K. Betts. 2007. "A Nuclear Iran: Promoting Stability or Courting Disaster." *Journal of International Affairs* 60(2): 135-150. APUS Online Library. <http://web.ebscohost.com.ezproxy2.apus.edu/ehost/pdf?vid=4&hid=12&sid=d80e5593-029d-4214-837c-5ffd6e88b1a0%40sessionmgr11> (Accessed 21 December 2009).
- Schake, Kori N. and Judith S. Yaphe. 2001. "The Strategic Implications of a Nuclear-Armed Iran." Institute of National Strategic Studies. National Defense University. NDU Press McNair Paper 64. <http://www.ndu.edu/inss/McNair/mcnair64/mcnair64.pdf> (Accessed 21 December 2009).
- Timmerman, Kenneth R. 2005. "The Day Iran Gets the Bomb." In ed. Sokolski, Henry and Patrick Clawson. 2005. "Getting Ready for a Nuclear-Ready Iran." Strategic Studies Institute, United States Army War College. <http://www.strategicstudiesinstitute.army.mil/pdf/files/pub629.pdf> (Accessed 20 December 2009).
- Wehrey, Frederic, Theodore W. Karasik, Alireza Nader, Jeremy Ghez, Lydia Hansell, and Robert A. Guffey. 2009. "Saudi-Iranian Relations Since the Fall of Saddam: Rivalry,

- Cooperation, and Implications for U.S. Policy.” RAND: National Security Research Division. [http://www.rand.org/pubs/monographs/2009/RAND\\_MG840.pdf](http://www.rand.org/pubs/monographs/2009/RAND_MG840.pdf) (Accessed 27 December 2009).
- Yaphe, Judith S. and Charles D. Lutes. 2005. “Reassessing the Implications of a Nuclear-Armed Iran.” Institute of National Strategic Studies. National Defense University. NDU Press McNair Paper 69. <http://www.ndu.edu/inss/mcnair/mcnair69/mcnairpdf.pdf> (Accessed 21 December 2009).
- Yaphe, Judith S. and Bahman Baktiari. 2007. “Nuclear Weapons and the Middle East Region: A New Round of Proliferation?” Conference (March 6-7, 2007, National Defense University, Washington D.C.) Proceedings via a Conference sponsored by William S. Cohen Center for International Policy and Commerce, The University of Maine: School of Policy and International Affairs, and The National Institute for Strategic Studies at the National Defense University. <http://www.spia.umaine.edu/ConferenceReport.pdf> (Accessed 27 December 2009).
- Yusuf, Moeed. 2009. “Predicting Proliferation: The History of the Future of Nuclear Weapons.” Foreign Policy Paper Number 11. Brookings. [http://www.brookings.edu/~media/Files/rc/papers/2009/01\\_nuclear\\_proliferation\\_yusuf/01\\_nuclear\\_proliferation\\_yusuf.pdf](http://www.brookings.edu/~media/Files/rc/papers/2009/01_nuclear_proliferation_yusuf/01_nuclear_proliferation_yusuf.pdf) (Accessed 22 December 2009).