

Removing Opacity:

A Public Declaration of Israel's Nuclear Capability under the Lockwood
Method of Analytical Prediction (LAMP)

INTRODUCTION

It is not a secret that since its creation in 1947 and its independence in 1948, the primary concern facing the state of Israel has been its security. It is surrounded by hostile neighbors, some of whom call for Israel's destruction. Security drives almost every major foreign policy decision and is one of the top issues in every Israeli election. What remains a secret however, is Israel's nuclear status.

Israel's nuclear weapons program began with the inception of statehood and grew out of the belief that nuclear weapons were justified to insure its survival. Collaboration with the French, for reasons beyond the scope of the paper, brought a nuclear reactor to Israel in 1956 at Dimona in the Negev desert. Israel used subterfuge to conceal the activities at Dimona.¹ Through various means, including secret operations, Israel obtained plutonium and enriched uranium and also purchased "heavy water" from Norway in 1959 in order to process the elements².

At some point in the late 1960's intelligence sources were confident that Israel had become the sixth nuclear power³. Since then, Israel has continued to develop its nuclear weapons program including the purchase of krytons, high-speed electronic switching tubes that can be used as detonators⁴. Israel has also developed the Jericho missile series, and has the ability to deliver nuclear weapons via F-15 and F-16 jet fighters. More recently, reports indicate that Israel test fired cruise missiles, capable of carrying nuclear warheads, from Dolphin Class submarines⁵.

During operation Desert Storm, Israel went on a full-scale nuclear alert. When Iraq fired SCUD missiles, capable of carrying chemical weapons, into the country, the Israeli government threatened retaliation. Most interpreted the threat to mean the use of nuclear weapons. The point is that while the world is certain that Israel has nuclear weapons capability, it has never officially declared itself a nuclear power. Instead, Israel has a policy of “Nuclear Opacity”⁶. This policy has served Israel for a number of reasons including the fact that actual knowledge that Israel has a nuclear arsenal capable of obliterating her enemies would “create pressure among leading Arab states to develop their own indigenous nuclear capability.”⁷

However, it is apparent that despite “Nuclear Opacity” some Arab and Islamic countries have attempted to create their own nuclear weapons capability. Just before the Gulf War Iraq was making progress in its nuclear program. The Coalition victory in Operation Desert Storm and the ensuing U.N. Sanctions, including the presence of monitoring teams, greatly stifled, though did not extinguish Iraq’s WMD program. Shimon Peres, Israel’s foreign minister, believes that Iran already has nuclear weapons and they may be targeted at Israel. Given that proliferation of nuclear and other WMD is occurring at some level despite Israel’s policy, the question becomes: How would an official declaration by Israel that it had nuclear weapons effect proliferation in the Middle East? This paper will attempt to provide some potential responses to this very question by employing the Lockwood Analytical Method of Prediction (LAMP).

LAMP

The Lockwood Analytical Method of Prediction, unlike other predictive methods, is based on “relative probability” of certain events occurring. LAMP does not assign quantitative probabilities such as percentages, to future events. The reason for this is that the probability of an event occurring is “constantly changing based on how each national actor behaves as we move through history.”⁸ This analysis will follow the 12 steps of LAMP, which are: 1. Determine the Issue; 2. Specify the National Actors; 3. Provide a study of how each national actor perceives the issue; 4. Specify all courses of action for each actor; 5. Indicate the major scenarios within which the alternate futures will be compared; 6. Calculate the total number of permutations of “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 lowest; 9. Analyze each future in terms of its consequences for the issue; 10. State the potential of an alternate future to transpose into another alternate future; 11. Determine the focal events that must occur to bring about a given alternate future; 12. Indicators for the focal events.⁹

The Issue

As stated above the issue here is: How would an official declaration by Israel that it had nuclear weapons effect proliferation in the Middle East? Before proceeding it is helpful to understand why this issue is important. The history of Israel’s nuclear program is long and detailed, and is wrought with secrets and subterfuge. Its security is so important that during the 1967 war Israel shot down one of its own Mirage fighters for

flying into the airspace over Dimona.¹⁰ Until recently the issue of nuclear weapons was not even debated in the Knesset, Israel's Parliament.¹¹ Opacity has aided Israel in providing a veiled threat of massive retaliation should its existence or security be jeopardized. Moreover, since the U.S. prefers that Israel's nuclear profile remain low, opacity has aided in obtaining conventional weapons guarantees from the U.S.¹² Israel's nuclear opacity may also be an alternative to "open, crude and humiliating threats against the enemy, while giving it enough information to influence its will to fight"¹³ in order to seek political arrangements. In addition, opacity decreases the likelihood that its enemies will feel the pressure to develop their own programs¹⁴ and reduce international opinion that may justify Israel's enemies obtaining nuclear weapons. In other words, part of the reason behind Israel's opacity is deterrence, not just from conflict, but also from proliferation itself.

One more salient point here is that while proliferation is often used specifically for the spread of nuclear weapons, this analysis will include biological and chemical weapons, along with nuclear weapons (WMD). The reason for this is while nuclear weapons are by far the more destructive weapon, the effect of chemical and biological weapons on Israel is unique. Physically, because Israel has a "small population base" and the devastation from a chemical or biological attack would be greater than a country with a larger, more spread out population. Psychologically, an attack with chemical or biological weapons may take on "existential dimensions"¹⁵ given the lingering emotional effects of the Holocaust on Israel's citizens.

National Actors

The national actors for this analysis will be Syria, Iraq, Iran, and Saudi Arabia. While there are other national actors that are relevant to the issue, including too many actors in the analysis may render it less effective given that the permutations of potential future events greatly increases with additional actors. Moreover, such actors as Jordan and Egypt were not discussed because they have peace treaties with Israel, and there may be different issues and scenarios in their responses to an official declaration by Israel that it has nuclear weapons.

National Actor Perceptions

In order to understand Syria, Iraq, Iran, and Saudi Arabia's perception of the issue, it is important to briefly discuss the history and politics of the actors that inform the perception of each. As Aronson states, "Nuclear strategy—both in regard to proliferation and nonproliferation—must be studied within a political-historical context."¹⁶

Syria

Since its independence in 1946 a few themes have dominated Syria's existence, including the desire among Syrian Arabs to achieve some unity with other Arabs of the Middle East in order to fulfill aspirations of regional leadership. In other words Arab unity and nationalism.¹⁷ In fact, the Syrian public expects its leaders to conform to the role of defender and champion of Arab rights and aspirations.¹⁸ Another theme has been a universal dislike of Israel which Syrians believe was forcibly imposed on the region by the West, and which they feel is a direct threat to Arab unity. To this end, recovering the

Golan Heights and support for Palestinian independence is part of a larger desire for Arab unity and regional hegemony. It is instructive to note that Syrian ideology is somewhat predicated on the concept of a greater Syria, that Syria should dominate its Arab neighbors.

Syria's major security concern is Israel, which has defeated Syria in the wars of 1948, 1967 and 1973. During the 1967 war Syria lost the Golan heights and has been attempting to regain the territory ever since. However, some of the reasons offered for the reluctance of Syria to enter a peace agreement with Israel, which may return the Golan Heights, are illustrative of Syrian policy. Syria does not want Israel to become a normal player in the Middle East because the two clash on almost every issue. Moreover, a peace agreement would "signal the beginning of the end of Syrian control over Lebanon"¹⁹ thus damaging the "Greater Syria" claim and Syria's aspirations of spearheading Arab unity. Similarly, Syria's militancy toward Israel is the "only asset it has in the Middle East"²⁰ without which its influence in the Arab world would be diminished. Finally, an Israeli-Palestinian agreement would end a valuable symbol of Syria's championing of Arab rights and aspirations.

It is important to note that Syria recognizes that Israel possesses a superior conventional weapons capability and presumes that Israel does have nuclear weapons. To counter this, Syria has pursued a chemical and ballistic weapons program (and to a lesser extent a biological weapons program) to counter the perceived Israeli threat. Syria believes that chemical weapons act as deterrents to Israeli attacks.

Syria also has security concerns beyond Israel. One of the reasons that Syria moved into Lebanon was to attain some strategic parity with Israel. Moreover, the

Lebanese government is perceived as a potential threat should either radical Muslims gain control of Lebanon, or Christians come to power and align themselves with Israel. In addition, Syria's hegemony over Lebanon is part of its attempt to retrieve a Greater Syria and partially fulfill its perceived role as leader of Arab unity.

Syria is also concerned about Iraq, a rival for political power and ideological leadership within the Ba'ath party. Syria supported Iran during the Iran-Iraq war and supported the coalition during Desert Storm. Syria and Iraq have been involved in a war of propaganda and internal subversion, causing Syria to perceive Iraq as a threat to its security.

Given all of these concerns, should Israel publicly declare that it has nuclear weapon, Syria would perceive it as an overt threat to its security. Syria's citizens would put pressure on the government to prove that it can protect them (and act as Arab defender) and prove to other Arab countries that it can counter the Israeli threat and act as the leader of "Arab Unity". Similarly, because "nuclear weapons are the ultimate symbol of power in the nuclear age"²¹ an Israeli declaration that it had nuclear weapons would generate further anger among Syria's citizens and deepen feelings of resentment and hostility. Israel would be perceived as "powerful" and Syria as "weak". The Syrian government would be forced to respond to this inferiority complex. This is only compounded by the knowledge and threat that Syria's eastern neighbor, Iraq, has and seeks to further develop its own WMD. Syria would thus be threatened to the Southwest and the East. Syria would feel the need to continue the proliferation of WMD. Thus, Syria perceives any public declaration by Israel that it has nuclear weapons as increasing the proliferation of WMD in the Middle East.

Iraq

Like Syria, Iraq has long had aspirations of leading the movement for Arab Unity, and championing Arab rights. It also has long-standing territorial ambitions. It is these ambitions and aspirations that at some level continue to underlie Iraqi policy. For example, after achieving independence from the British in 1932, the Hashemite King Ghazi formed an alliance, the Pan Arab movement, by signing a non-aggression treaty in 1936. In 1938, King Ghazi, annexed Kuwait as part of his ambition to create the "Fertile Crescent Movement", uniting Syria, Kuwait and Palestine to Iraq. Iraq allied with other Arab countries to attack Israel in 1948 and suffered a humiliating defeat. In 1949, Syria opposed a union with Iraq, causing tension between the two countries. In an effort to challenge Egypt's role as leader of Arab Unity, Iraq signed the Baghdad pact with Turkey, Britain and Iran. Similarly, in 1958, King Hussein of Jordan and Abd al Ilah of Iraq proposed a union of Hashemite monarchies to counter the Egypt-Syria union.

The major policy guiding Iraq through the 1960's and 1970's was Arab Nationalism. Iraq joined the fight against Israel in 1967 and aided Syria during the 1973 war. During the 1970's Iraqi relations with Iran deteriorated. Iran supplied weapons to Kurdish rebels fighting in Northern Iraq and long standing border disputes, especially that over Shatt el-Arab heightened tensions between the two nations. Though some these disputes were settled, in the 1980's Saddam Hussein declared the agreements null and void and laid claim to Shatt el-Arab for Iraq. Thus started the eight year Gulf War between Iran and Iraq. In 1990, Iraq invaded Kuwait, claiming Kuwait had violated the

border to secure oil, but also furthering the long-standing claim that Kuwait was part of Iraq.

It is important to note that Iraq, like Syria is controlled by the Ba'ath party, which espouses Arab Unity and an end to perceived Western domination and influence in the region. To this end, Iraq is vehemently anti-Israel and outwardly supports Palestinian national aspirations. However, a settlement of the Israeli-Palestinian dispute may leave Iraq without a valuable rallying cry against Israel and the West. Moreover, Iraq would like to establish itself as the dominant Arab political and military power in the Gulf region. It also retains aspirations on Kuwait and the Shat el-Arab waterway. However, Iraq's ability to achieve its goals have been limited by a weak economy and continued U.N. sanctions imposed after the coalition victory in Operation Desert Storm.²²

Yet, Iraq has continued covert activities to develop nuclear, biological and chemical weapons. Iraq repeatedly concealed its weapons and "related equipment, technology, or documentation from the UN Special Commission on Iraq (UNSCOM) inspections and monitoring."²³ There is no doubt that should Israel declare itself a nuclear power that Iraq would use it as an argument that it should be permitted to build its own nuclear weapons, to deter a perceived threat from Israel. Moreover, while WMD are perceived as having a deterrent effect and are used to intimidate an enemy, they are also symbols of prestige and power; they have a "glitter factor."²⁴ Iraq would see Israel's declaration of nuclear capability as humiliating and unacceptable given Iraq's desire to be the main "power" in the Middle East and to lead the Arab world. Iraq would use the Israeli declaration as a further excuse to proliferate in an attempt to achieve its territorial and regional aspirations.

Iran

One of the major theme's facing Iran throughout its history and thus informing its foreign policy has been the "cultural confrontation between the forces of modernization and the forces of traditionalism."²⁵ The twentieth century is a perfect example of this conflict. When Reza Kahn came to power in 1921, he established himself and his lineage as Shah of Iran. Reza initiated modernization programs designed to reduce the traditional power of the tribal and religious leaders and bring about legal, economic and educational reforms.²⁶ The Shah also emphasized defense against external and internal threats. Later, he sought U.S. assistance to counter the Soviet threat and he repressed Islamic extremist and communist groups in the country.²⁷

In 1979, Iran suffered from high inflation and negative growth. The Shah neglected domestic issues yet lived an opulent life. He used the money from oil sales to purchase weapons, suppressed the Iranian people and was supported by the West, especially the United States. As a result, many Iranians were disenfranchised and disillusioned, and they turned to tradition and Islam, in the form of Ayatollah Khomeini who led an Islamic revolution that reverberated throughout the world, especially the Middle East.

Many governments in the Gulf region, which were monarchies or dictatorships, were threatened by the Revolutionary rhetoric emanating from Iran. Thus, Iran found itself in conflict with its Arab neighbors. Partly for territorial reasons and partly because of the fear that Revolutionary and extremist Islamic ideas would spread to Iraq's Shia

population in southern Iraq, Saddam Hussein attacked Iran in 1980. The war lasted eight years and had an indelible effect on the Iranian psyche.

During the war, Iraq launched missiles with chemical weapons at Iranian targets and Iran suffered significant casualties due to Iraqi superiority in conventional and non-conventional weapons. In addition, an international arms embargo was placed on Iran during the war. The Iran-Iraq war has been the greatest impetus for Iran's current pursuit of nuclear and chemical/biological weapons.²⁸ The arms embargo indicated the importance of becoming militarily self-sufficient while the casualties demonstrated the need for a deterrent to potential aggression from Iraq or other outside actors.

Other factors in Iran's proliferation have been a desire for preeminence in the Persian Gulf and a desire to deter major power intervention.²⁹ Moreover, the Revolution in Iran altered its worldview and foreign policy. It was tinged with the notion of Jihad, or holy crusade to protect Islamic people, beliefs and institutions.³⁰ The Islamic revolution was a means by which Muslims and non-Muslims could liberate themselves from tyrants and Western imperialism.

An example of this is Iran's relationship with Israel. Prior to the Revolution Iran and Israel had been de facto allies in the Middle East. With the change in Iranian leadership, Iran became hostile to Israel. All oil sales ceased, and Iranian leaders contended that Israel was illegitimate because it came about by the destruction of Muslim Palestine with the help of imperial powers.³¹ In other words, Iran's policy towards Israel is based on a belief in championing Muslim rights and that Israel is a Western imperial holdover in the Middle East. Thus, Iran has supported the Hezbollah terrorists in Lebanon and may have even recently collaborated with the Palestinians in

an attempt to ship arms to Palestinian militants. Iran's support for terror and its proliferation of WMD has led President Bush to label it as one of three countries in an "Axis of Evil."

Though Iran signed the Non Proliferation Treaty in 1970 and ratified the Chemical Weapons Convention in 1997, Iran continues to develop WMD. In his article, "Weapons of Mass Destruction in the Middle East", Anthony Cordesman describes in detail Iran's nuclear, chemical, and biological weapons capability. In short, Iran has a civilian nuclear program and there is concern that by 2005 Iran would have nuclear weapons capability.³² Moreover, Iran does have a significant chemical weapons capability and is in the process of developing the Shahab-3 and Shahab-4 ballistic missiles with a range of 2,000 KM.³³

It is apparent then that Iran is proliferating WMD. However, how would a declaration by Israel effect this proliferation? Once again, Iran would use such an announcement as an excuse to continue proliferating. Iran would argue that the protection of Muslims (the Palestinians, as well as Syria, Israel's neighbor allied with Iran) demands a nuclear deterrent to the Israeli threat. As noted above, nuclear and chemical weapons are prestige and deterrence mechanisms. Therefore, an Israeli declaration would give Iran a cover to further proliferate in order to deter or threaten Iraq, aid in its quest for dominance in the Persian Gulf, and to deter or slow a major power intervention or influence in the region.

Saudi Arabia

The modern country of Saudi Arabia was founded in 1902 by Abdul Aziz Al-Saud (Ibn-Saud) who re-conquered Riyadh and the rest of the Nejd and Hijaz between 1913 and 1926. In 1932, these regions were unified as the Kingdom of Saudi Arabia. It is important to note that unlike many of its neighbors, Saudi Arabia was never under the direct control of a European power and thus does not have the same resentment toward the West as does other Arab nations.

Boundaries have been established between Saudi Arabia and Jordan, Iraq, Kuwait and Yemen. And prior to Iraqi forces concentrating on its Northeast border after the Iraqi invasion of Kuwait, Saudi Arabia had been exposed to few direct threats to its territory. However, Saudi Arabia, still has security and foreign policy concerns. Saudi Arabia's primary foreign policy objective is to preserve political stability in the Middle East. This is directly connected to Saudi Arabia's desire to maintain a stable and long-term market for its oil reserves by allying itself with Western economies that can protect the value of Saudi Arabian financial assets.³⁴ Thus, Saudi Arabia has an interest in a solution to the Arab-Israeli conflict, the Palestinian issue and other threats to stability in the region such as Iraq.

Saudi Arabia is concerned about external aggression and externally supported subversion. The principal threats are from Iraq and Iran, alternating, depending on the time and issue. During the 1979 Iranian Revolution, Saudi Arabia feared Muslim extremists who advocated the overthrow of all monarchies as being un-Islamic. But in 1990, when Iraq invaded Kuwait, there was a rapprochement with Iran due to the mortal threat from Iraq. Saudi Arabia welcomed Iran's call for an Iraqi withdraw from Kuwait

and respected Iran's neutrality. The 1991 Gulf War also led Saudi Arabia to ally itself with fellow monarchies in Bahrain, Kuwait, Oman, Qatar and the United Arab Emirates in the Gulf Cooperation Council, a regional collective security and economic organization.³⁵

Other foreign policy concerns of Saudi Arabia involve defending Arab and Islamic interests and promoting solidarity among Islamic governments. To this end Arab nationalism has played a large role in Saudi foreign affairs. Three themes have dominated Saudi Arab nationalism since 1950: Arab Unity, the Palestinian issue and the conflict with Israel. While Saudi Arabia does not see Israel as a direct threat, it does fear Israel's ability to mount strikes against sensitive Saudi targets at the onset of any future Arab-Israeli war. Thus Saudi Arabia has committed significant defenses to the military bases in the north and oil facilities on the Red Sea

More importantly, Saudi Arabia believes the failure to resolve the Palestinian issue upsets the stability of the Middle East and has linked the influence of extremist revolutionary Arab and Islamic regimes to the continuation of the Palestinian-Israeli conflict. In fact, the Saudi government has stated that part of the reason for the growth of Islamic extremism in the Middle East and Arabia itself is due to Arab frustration over the plight of the Palestinians and Western support for Israel. Since Arab and Islamic revolutionary or extremist groups pose a threat to the Saudi monarchy, especially due to the government's close ties to the West, a resolution to the Arab/Palestinian-Israeli conflict is vital. Thus, Saudi Arabia has recently put forth a proposal by which Israel would withdraw from the Palestinian territories and return to the pre 1967 borders in return for peace with the Arab World.

Yet, the question remains: how would Saudi Arabia perceive a declaration by Israel that it had nuclear weapons? Saudi Arabia does not appear to currently proliferate WMD itself, however it would perceive a declaration by Israel as increasing proliferation in the Middle East. Saudi Arabia is aware that Syria, Iran and Iraq would use such a declaration as an argument to support their own accumulation of WMD. Saudi Arabia's concern about the threats from Iran and Iraq would only increase. Saudi Arabia would be concerned about a preemptive strike by Syria or Iraq against Israel, or vice versa in order to damage the others capability. While Saudi Arabia knows it would receive protection and intervention from the West, as it did during Desert Storm, and thus would not engage in proliferation itself, it would find the proliferation by other actors destabilizing to the region. More importantly, given the sympathies of Arab Unity among its citizens, Saudi Arabia would be caught in a quagmire: The public would demand that the government support other Arab nations in countering the Israeli threat yet Saudi Arabia itself would be threatened by proliferation in other Arab countries.

National Actor Courses of Action

Before discussing the courses of action that each actor may take, it is important to note that an Israeli declaration that it has nuclear weapons and any resultant proliferation would not occur in a vacuum. Over the past 15 years the United States and the West have made concerted efforts to stop or control the proliferation of WMD to countries such as Iraq and Iran through sanctions and other efforts of international cooperation. Thus, should the national actors decide to proliferate, even under the guise or argument of needing to counter the Israeli threat, they would be doing so in an

environment that is closely monitoring such activity. Moreover, though Syria, Iraq, Iran and Saudi Arabia all know that Israel has a nuclear capability, despite the policy of opacity, the public announcement of such capability would, at the very least demand that the governments of Arab nations engage in a serious discussion, if not lead directly to proliferation.

Given that each actor would perceive an Israeli declaration as an increased threat there are two possible courses of action that each may take.

1. Proliferate. Here the actor pursues nuclear weapons and/or Chemical and Biological Weapons (CBW), or in the case of Syria, Iran and Iraq continues the pursuit of WMD. As noted above, while nuclear weapons are the ultimate weapon, and they symbolize prestige and power, CBW are also included here because of their psychological effect in Israel and the Middle East. Moreover proliferation here includes activity that permits the actors to obtain the parts and technology to assemble the weapons themselves or to obtain the weapons from sympathetic countries such as Pakistan, North Korea and China. Finally, since the West already keeps a watchful eye on proliferation by these actors, the idea of proliferation includes rallying international support to permit the actors to counter the perceived Israeli.
2. Non-Proliferation: Here the actor chooses not to proliferate or continue to proliferate and instead supports the inevitable international pressure on Israel to open its nuclear capability to international inspection and control. The actor supports pressure on the United States to cease supplying Israel with conventional weapons due to its clear nuclear deterrent. The actor here also seeks security from the

international community and/or seeks assistance from the West in developing hi-tech defenses to the Israeli threat.

It is important to note that one possible course of action, a preemptive strike by a national actor, is not included in this analysis for two reasons. First, the addition of one course of action increases the number of alternate futures exponentially and renders the analysis more difficult and thus suspect. Second, an effective LAMP study narrows the question to manage the number of alternate futures. Here the question posed is how would a declaration by Israel that it is a nuclear power effect proliferation in the Middle East? A preemptive strike by a national actor really is a course of action open to a more general question; what would happen if Israel declared itself a nuclear power?

Scenarios

A major focus of the new War on Terrorism has been increased concern about the proliferation of WMD into the Middle East, especially Iran and Iraq. A declaration that Israel is a nuclear power would be problematic for combating proliferation because the pursuit of an Arab bomb may become more justifiable in international opinion, especially among Islamic nations.³⁶ Consequently, there would be immense pressure on Israel to sign the Non-Proliferation Treaty and to open itself up to inspections and control by the International Atomic Energy Agency. Moreover, because the Israeli-Palestinian conflict enrages many Arab nations and is a destabilizing feature in the region, there would be increased pressure on Israel to complete a peace deal with the Palestinians. The reason for this is that Israel, as a declared nuclear state, would be

seen by much of the world as being able to act with impunity given its nuclear arsenal against possible aggressors intervening on behalf of the Palestinians. As such, there are four scenarios under which the actors' possible courses of actions must be examined.

1. Israel declares itself a nuclear power. As a result, international pressure, especially that from the United States, forces Israel to sign the Non-Proliferation Treaty and submit to IAEA inspections and controls. Moreover, under international pressure the Israeli-Palestinian dispute is resolved.
2. Israel declares itself a nuclear power. As a result, international pressure, especially that from the United States, forces Israel to sign the Non-Proliferation Treaty and submit to IAEA inspections and controls. However, despite international pressure the Israeli-Palestinian dispute is NOT resolved.
3. Despite international pressure, Israel refuses to sign the NPT and submit to IAEA controls and inspections. The Israeli-Palestinian dispute is resolved.
4. Despite international pressure, Israel refuses to sign the NPT and submit to IAEA controls and inspections. The Israel-Palestinian dispute is NOT resolved.

Alternate Futures

According to LAMP, the number of possible or Alternate Futures is determined by the formula $X^Y=Z$ where X is the number of courses of action open to each actor, Y is number of national actors and Z is the total number of Alternate Futures to be compared.³⁷ Here, there are three courses of action open to each actor and four

national actors equaling 16 Alternate Futures, $2^4=16$. In this matter the sixteen Alternate Futures are as follows:

TABLE 1----ALTERNATE FUTURES

	<u>Syria</u>	<u>Iraq</u>	<u>Iran</u>	<u>Saudi Arabia</u>
1.	P	P	P	P
2.	P	P	P	NP
3.	P	P	NP	NP
4.	P	NP	NP	NP
5.	P	P	NP	P
6.	P	NP	P	P
7.	P	NP	NP	P
8.	P	NP	P	NP
9.	NP	P	P	P
10.	NP	P	P	NP
11.	NP	NP	P	P
12.	NP	NP	NP	P
13.	NP	NP	P	NP
14.	NP	P	NP	NP
15.	NP	P	NP	P
16.	NP	NP	NP	NP

P= Proliferate NP= No Proliferation

Pairwise Comparison/Rank Alternate Futures from Each Scenario

A pairwise comparison of all Alternate Futures within each scenario is performed to determine relative probability. The number of comparisons is determined by the formula: $X = (n-1) + (n-2) + \dots + (n-n)$ where n equals the number of Alternate Futures to be analyzed and x equals the number of pairwise comparisons to be performed.³⁷ Here there are sixteen Alternate Futures in each scenario and based on the formula there are 120 pairwise comparisons to be made. One vote is given in each comparison to the Alternative Future that is most likely to occur given current information about the national actors' perceptions of the situation.

For the sake of brevity the top three and bottom three Alternate Futures, in terms of number of votes, from each scenario were as follows:

Scenario 1---Top Alternate Futures:

Number 10----15 votes

Number 2-----14 votes

Number 1-----11 votes

Scenario 1---Bottom Alternate Futures:

Number 12----1 vote

Number 7-----1 vote

Number 16----3 votes

Scenario 2---Top Alternate Futures:

Number 2-----15 votes

Number 1-----13 votes

Number 10----13 votes (Number 9 received 12 votes)

Scenario 2---Bottom Alternate Futures:

Number 16-----0 votes

Number 12-----0 votes

Number 7-----2 votes

Scenario 3---Top Alternate Futures:

Number 2---- 15 votes

Number 1-----14 votes

Number 10----13 votes

Scenario 3---Bottom Alternate Futures:

Number 12-----0 votes

Number 16-----2 votes

Number 7-----2 votes

Scenario 4---Top Alternate Futures:

Number 2-----15 votes

Number 1-----14 votes

Number 10-----13 votes (number 9----12 votes)

Scenario 4---Bottom Alternate Futures:

Number 12-----0 votes

Number 7-----2 votes

Number 16-----2 votes

Analysis and Transposition

It is now important to examine the Alternate Futures within each scenario that received the most votes and their consequences for the issue.

Scenario 1---Alternate Future 10: In this Alternate Future (AF), Syria and Saudi Arabia do not proliferate while Iraq and Iran continue to research and develop WMD. Iraq and Iran will view Israel's declaration as an insult. Since nuclear weapons are a symbol of power, and Israel is perceived as an unwanted creation by Western powers, they will view this as a further example of "Western" imperialism or influence the Middle East. They will proliferate in order to counter the Israeli/Western threat. This is especially true should their economies continue to stagger while Western economies thrive. Moreover, they would find support for proliferation from other Arab countries with similar viewpoints as well as other economically depressed nations who are antagonistic toward the West. In addition, since Iran views any proliferation by Iraq as a threat to its security and since the current Iraqi leadership retains territorial aspirations in the Gulf, proliferation by one will lead to proliferation by the other. Finally, even if Iraq and Iran do not truly perceive Israel's declaration as a threat, and despite the "Arab/Islamic Unity" argument being

nullified here in terms of the Palestinians, they will use it as an excuse to proliferate in order threaten each other and other nations as they vie for control of the Gulf.

Saudi Arabia does not invest in proliferation because its symbiotic relationship with Western economies remains in tact. The West's reliance on Saudi Arabia and the Gulf States for oil means that Saudi Arabia will continue to receive "protection" from the West (to counter any Iraqi or Iranian threats) as it did during Desert Storm. Moreover, the new transparency of Israel's nuclear capability and the fact Israel would be submitting to international inspections and controls would actually diminish any perceived threat from Israel and thus render Saudi proliferation senseless. Moreover, since part of the Arab Unity/Nationalism card has been taken from the table due to a resolution of the Palestinian issue Saudi Arabia would not see any reason to proliferate. Under this scenario a threat to Saudi security has not been altered from the present state.

While Iraq, Iran and Saudi Arabia's courses of action do not differ under this scenario, from their current activities, Syria's course of action is different. Here, Syria does not proliferate. Its horrific economy and low standard of living render further proliferation difficult. Moreover, Israel's signing of the NPT and accepting IAEA controls may benefit Syria's goal of obtaining the Golan. The thought process is that since the international community will believe that a publicly declared nuclear Israel is secure, the necessity of the Golan for Israel's security is negated and thus Syria's demand for the Golan will have international support. Syria will thus have the Golan as security against Israel. In addition, since the Palestinian issue will be resolved the Syrian citizens' cry for

its government to protect fellow Arabs and interests will be diminished and they will likely demand that the government focus on the domestic economy.

It is important to note however, that this AF has the potential of transposing into AF 2. This would be the case if Syria feels threatened by Iraq's proliferation and/or if the economic situation in Syria is so bad that the government tries to deflect attention from domestic issues to the "newly announced" threat from Israel.

Scenario 1----AF 2: This AF is most like the current situation. Syria, Iran and Iraq continue to proliferate for the reasons stated above. Even with the Palestinian problem solved (thus diminishing each actors' argument of protecting Arabs and Arab interests), the prestige and power associated with nuclear weapons and CBW, along with the "perceived" threat from Israel, will give these actors the necessary argument for proliferating. Once again Saudi Arabia does not proliferate because of its contacts and ties with Western economies. Since the Palestinian's have a state and the threat from Israel is not as great as that to Syria, Saudi Arabia does not invest in proliferating nuclear or CB weapons.

Scenario 1---AF 1: In this AF, Saudi Arabia feels threatened by Iraq and Iran's continued attempts at proliferation despite the international community's close monitoring of the two actors. Saudi public opinion, which has become radicalized over the last few years and increasingly anti-Israel, demands a response to the Israeli threat to the Arab world. The AF becomes even more likely should Western economies find alternate energy sources thus diminishing their reliance on Saudi and Gulf oil. Saudi Arabia will then feel less secure and begin proliferation to protect itself.

Scenario2----AF 2: In addition to the arguments that Syria, Iraq and Iran will make to support their proliferation under scenario 1, they will also use the Palestinian—Arab unity argument. These actors will claim that since Israel has announced it is a nuclear power it will act with impunity and will not have any reason to negotiate an end to Palestinian suffering. This is especially true if the current or similarly conservative government of Israel remains in power. In other words, Arab Unity/Nationalism and the humiliation of the Zionist announcement of nuclear power will be used as arguments for proliferation among these and other Arab actors. Even if the Israeli threat is not real, the declaration will be used to advance Iraqi and Iranian attempt to control the Gulf. Again, Saudi Arabia does not proliferate here because of its ties to Western economies, but for the reasons discussed above, this AF has the possibility of transposing into AF 1 where Saudi Arabia does proliferate.

Scenario2----AF 1: The AF is the same as AF 2 but Saudi Arabia does proliferate, for the same reasons discussed in Scenario 1. The difference here is now the Saudi's will be able to use the Arab unity/nationalism argument, the need to protect fellow Arabs and their interests, since the Palestinian issue has not been resolved.

Scenario2----AF 10: This AF finds Syria not proliferating for economic and social reasons. Despite the failure to solve the Palestinian problem, Syria's citizens are appeased by the international community's demand that Israel return the Golan (its security solidified with the announcement that it has nuclear weapons). This allows the government to focus on domestic issues. But as noted above, if the domestic issues are too difficult to solve, Syria will deflect attention back to the Israeli threat and this AF will transpose back to AF 1 or AF 2.

Scenario3---AF 2: Once again, Syria, Iran and Iraq proliferate while Saudi Arabia does not. The arguments for the three proliferating actors are “enhanced” by the fact that Israel does not sign the NPT nor accept IAEA controls. Thus, the “threat” from Israel is intensified and Syria, Iraq and Iran proliferate in the name of security and Arab Unity. The fact that the Palestinian issue has been resolved is irrelevant to the three proliferators. The risk and humiliation of a declared nuclear Israel refusing to abide by international controls is another example of the Arabs needing to protect themselves from Western control and dominance. Saudi Arabia, as noted above, does not proliferate and relies on its Western ties. However, this AF can transpose into AF 1 for the reasons discussed in scenarios 1 and 2.

Scenario3---AF 1: Here Saudi Arabia proliferates because the radicalized citizens who are anti-Israel and anti-West demand action by the government. Iraq continues to proliferate creating a threat from the Northeast as well as from the Northwest (Israel). The impetus to proliferate is increased should Western economies find and begin to rely on alternate energy sources.

Scenario3---AF 10: The analysis here is similar to scenario 1. Syria does not proliferate despite Israel’s failure to sign the NPT and accept IAEA controls. Its economic and social problems command the government’s attention and the resolution of the Palestinian issue decreases the Arab protection argument. Moreover, the international community will pressure Israel to return the Golan to Syria now that its “nuclear” status ensures its security. This pressure will be even greater given Israel’s refusal to sign the NPT and accept IAEA controls. However, this AF can easily transpose into AF 1 or AF 2 should the Syrian government decide to focus on the Israeli

threat (rather than domestic issues) and the fact that it does not accept international controls.

Scenario4----AF's 2, 1 and 10: Under scenario 4, the AF's are the same as scenarios 3. The key difference here is that under each AF, the failure to resolve the Palestinian issue solidifies the Arab unity/nationalism argument , which is used as an additional reason for proliferation. Under this scenario, the pursuit of an “Islamic Bomb” or proliferation may be more justifiable in international opinion (p.8, Drake)

The important point is that under each scenario, the result of Israel's declaration of nuclear capability is proliferation at some level. Iran and Iraq will attempt to continue to proliferate. This should not come as a surprise given that both actors attempt to proliferate given Israel's current policy of Opacity. They will only use an Israeli declaration as an excuse to further proliferate. Similar to the current situation, the only factor keeping these actors from proliferating would be the strength of the international community's monitoring and control mechanisms. Finally, as discussed above the real interesting AF's are those in which Saudi Arabia chooses to proliferate and Syria does not.

Focal Events and Indicators

Focal events are those occurrences of “sufficient magnitude that they change the relative probability of the universe of alternate futures.”³⁸(An AF that resembles the present may not have any focal events while an AF that is very different from the present would have more focal events. Since, under the present analysis the same AF's present themselves under each scenario there may be only a few focal events. AF 2 is

most like the present; Syria, Iraq and Iran proliferate while Saudi Arabia does not. There is not any focal event for AF2 because it is a continuation of current policy and practice. On the other hand, AF 1, a situation in which Saudi Arabia does proliferate, contains focal events. One focal event would be a significant decrease in the West's reliance on and purchase of Saudi oil. As noted above, a symbiotic relationship exists between Saudi Arabia and the West. Saudi Arabia receives "protection" from the Western economies due to their need for Saudi oil reserves. This was exemplified by Desert Storm. Any dramatic change in the West's reliance and purchase of Saudi oil would significantly alter Saudi Arabia's sense of security, forcing it to increase its defense mechanisms.

There are a number of indicators that would signal a sharp decline in Western reliance on Saudi oil. For example, the discovery of additional oil or alternate energy sources that could be utilized by the West at a cost cheaper than the purchase of oil. Another indicator would be the implementation of increased safeguards that render the use of nuclear power more viable and widespread. Similarly, the mandatory use of solar panels for home heating or the use of solar or electric cars both would indicate a decreased reliance by the West on Saudi Arabia.

Another focal event(s) that may lead to AF 1 would be increased and unchecked threats from Iraq, Iran or even Israel that cause Saudi Arabia to invest in proliferation for security reasons. One indicator for this focal event would be increased proliferation by Iraq and Iran. The massing of Iraqi troops and weapons on Iraq's southern border would also be an indicator for this focal event. Moreover, any information or intelligence that Iraq, Iran or Israel has targeted vital Saudi military and civilian installations with WMD

would signal an increased threat. Finally, given Saudi Arabia's concern with externally supported subversive elements, any attempted coup, revolution or information about sustained subversive threats would lead to heightened security concerns. It is important to note that should the two focal events discussed above occur concurrently there is a greater probability of Saudi Arabia proliferating WMD to protect itself.

Alternate Future 10, the situation in which Syria does not proliferate, also requires focal events. One such focal event would be a return of the Golan Heights. An indicator leading to this event is intense international pressure on Israel, given its declared "nuclear" status, to withdraw from the territory. As noted above, the security argument that Israel currently uses as a reason for retaining the Golan is greatly diminished, should it declare itself a nuclear power. A return of the Golan would be a victory of in the minds of Syria's citizens who then would then demand that the government pay further attention to domestic issues.

Moreover, a continuing downward spiraling of the economy would force the Syrian government to reconsider how much it wants to spend on proliferation versus domestic concerns. This is especially true under scenario 1 where the Palestinian issue, and one of the rallying cries for Arab Unity, is resolved. Indicators of this focal event include increasing unemployment, increasing debt and a decreasing standard of living.

It is interesting to note that AF 16, where not one of the actors proliferates, and which received the fewest votes, would require the most focal events. Such events may include peace agreements and security pacts among the Islamic governments, changes in the governments toward a more Western type of thinking and acceptance of Israel as an actor in the region. Focal events would need to occur that lead to economic and

social security and stability in each country. Most importantly, the actors would need to alter their goals of regional domination and leadership of Arab or Islamic unity.

Conclusion

An Israeli declaration that it has nuclear weapons would definitely effect proliferation of WMD in the Middle East. By using LAMP to examine the relative probability of alternate futures, it is clear that Iraq and Iran would continue to proliferate. Even if Israel signs the NPT and accepts IAEA controls and resolves the Palestinian problem, these two countries would continue to proliferate, using Israel's declaration as an excuse. While one AF posits that Syria may not proliferate and another that Saudi Arabia would proliferate, the important point is that a declaration by Israel would not diminish or stop proliferation. At best, proliferation would not increase beyond the current situation and at worst, an Israeli declaration would be a justification by the actors and other Arab or Islamic nations for proliferation.

NOTES

1. Warner D. Farr, LTC, U.S. Army. "The Third Temple's Holy of Holies: Israel's Nuclear Weapons". The Counter proliferation Papers, Future War Series No. 2. USAF Counter proliferation Center, Air War College, Maxwell Air Force Base, Alabama. September, 1999. p.5
2. Ibid. p.7
3. Ibid. p.7
4. Ibid. p.8
5. Anthony H. Cordesman, "Weapons of Mass Destruction in the Middle East" Center for Strategic and International Studies, June 2001. P.25-26.
6. Shlomo Aronson, The Politics and Strategy of Nuclear Weapons in the Middle East: Opacity, Theory and Reality 1960-1991. Albany. State University of New York Press. 1992. P.4
7. Laura Drake, "Israel's Nuclear Development and Strategy: Future Ramifications for the Middle East Regional Balance, at www.arabmedia.com. p.8.
8. Dr. Jonathan Lockwood and Kathleen O'brien Lockwood, "The Lockwood Analytical Method of Prediction" 1993. P.26.
9. Ibid. p.27-28.
10. Farr, p.7
11. Cordesman, p.30
12. Farr, p.14
13. Aronson, p.290
14. Drake, p.8
15. Ibid. p.5
16. Aronson, p.1
17. Murhaf Jouejati, presentation at The Woodrow Wilson Center. Feb. 2, 2001. P.1.
18. Ibid. p.1
19. Barry Rubin. "Middle East Review of International Affairs", vol.4 no.2 June 2000.
20. Ibid. p.3
21. Aronson, p.293.
22. "The Middle East and North Africa---IRP Threat", www.fas.org. p.7.
23. Ibid. p.7.
24. Cordesman, p.3.
25. Major Richard Perry. "Rogue or Rational State?: A Nuclear Armed Iran and U.S. Counter Proliferation Strategy", a research paper presented to the Research Department Air Command and Staff College. March 1997. P.5
26. Federal Research Division, Library of Congress, Iran—A Country Study.
27. Ibid.
28. Perry, p.10.
29. "Non-Proliferation: Iran. Carnegie Endowment for International Peace", www.ceip.org. p.1.
30. "Iran: Headed for a National Deterrent?" www.fas.org. p.1.
31. Ibid. p.1.
32. Cordesman, p.49.
33. Ibid. p.54.

34. United States Department of State Country Profile---Saudi Arabia.
35. Federal Research Division, Library of Congress, Saudi Arabia---A Country Study.
36. Drake, p.8.
37. Lockwood & Lockwood, p.40.
38. Lockwood & Lockwood, p.55.

BIBLIOGRAPHY

1. Aronson, Shlomo. The Politics and Strategy of Nuclear Weapons in the Middle East: Opacity, Theory and Reality 1960-1991. Albany. State University of New York Press. 1992.
2. Barnaby, Frank. The Invisible Bomb: Nuclear Weapons and the Middle East. Tauris. London. 1989.
3. Cordesman, Anthon. "Weapons of Mass Destruction in the Middle East". Center for Strategic and International Studies, June 2001
4. Drake, Laura. "Israel's Nuclear Development and Strategy: Future Ramifications for the Middle East Regional Balance", at www.arabmedia.com.
5. Ehteshami, Anoushiravan. Nuclearisation of the Middle East. Brassey's. London. 1989.
6. Farr, Warner D. LTC , U.S. Army. "The Third Temple's Holy of Holies: Israel's Nuclear Weapons. The Counter proliferation Papers, Future War Series No. 2. USAF Counter proliferation Center, Air War College, Maxwell Air Force Base, Alabama. September, 1999.
7. Feldman, Shai. Nuclear Weapons and Arms Control in the Middle East. MIT Press. Cambridge, Mass. 1997.
8. Hamzah, Khidr. Sadam's Bombmaker: The Terrifying Inside Story of the Iraqi Nuclear and Biological Weapons Agenda. Scribner. New York. 2000.
9. Jouejati, Murhaf. Paper delivered at The Woodrow Wilson Center, Feb. 2, 2001.
10. Khalidi, Rashid (editor). The Origins of Arab Nationalism. Columbia University Press. New York 1991.
11. Lockwood, Dr. Jonathan and Lockwood, Kathleen O'Brien. "The Lockwood Analytical Method of Prediction" 1993.
12. Nashif, Taysir N. Nuclear Warfare in the Middle East: Dimensions and Responsibilities. Kingston Press. Princeton, N.J. 1984.
13. Perry, Richard M. Major. "Rogue or Rational State?: A Nuclear Armed Iran and U.S. Counter Proliferation Strategy", a research paper presented to the Research Department Air Command and Staff College, March 1997.
14. Rubin, Barry. "Middle East Review of International Affairs", vol.4, no.2—June 2000.
15. Weissman, Steve. The Islamic Bomb: The Nuclear Threat to Israel and the Middle East. Times Books. New York, New York. 1981.
16. Federal Research Division, Library of Congress, Iran-A Country Study.

17. Federal Research Division, Library of Congress, Iraq-A Country Study.
18. Federal Research Division, Library of Congress, Saudi Arabia-A Country Study.
19. Federal Research Division, Library of Congress, Syria-A Country Study.
20. United States Department of State Country Profile: Iran
21. United States Department of State Country Profile: Iraq
22. United States Department of State Country Profile: Saudi Arabia
23. United States Department of State Country Profile: Syria.
24. "The Middle East and North Africa-IRP Threat", www.fas.org
25. "Iran: Headed for a National Deterrent?", at www.fas.org
26. "Non-Proliferation: Iran. Carnegie Endowment for International Peace", www.ceip.org.