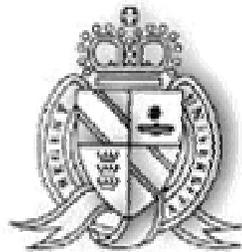


Weapons of Mass Destruction And Alternative Futures



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Disclaimer: This report does not represent the views of the U.S. Government or any entity other than the author. The views and opinions expressed in this document are solely those of the author. The format of a National Security Council report was used purely to stimulate analysis concerning the potential use of Weapons of Mass Destruction and how the likelihood for their use may relate to possible future environments.

Prepared by Gordon R. Middleton



Regent University Center for Strategic & International Leadership Studies

Acknowledgements

This paper implements concepts and approaches presented in the School of Global Leadership and Entrepreneurship, Regent University. Its purpose is to illustrate the utility and forcefulness of futures studies and analysis. I am personally indebted to the vision of Dean Bruce Winston and the tireless efforts Jay Gary, who directed our course in Future Organizational Design and Leadership Styles. This paper began as a group project at Residency 2006 for the third year cohort of students in the Doctorate of Strategic Leadership program, and included Fletcher Walters, Thomas Ferleman, Jackie Faulhaber, Jeffrey Radford, and Larry Ross. Much credit is due to these fellow students, as this paper built on the thinking of that initial, group effort. I also wish to thank the tireless efforts of Sharon, my wife of over 36 years, for her seemingly endless task of editing this paper and all my graduate papers. Without her support and encouragement, this would never have come into being.



Regent University Center for Strategic & International Leadership Studies

Executive Summary

Key Findings

- Among driving forces in the international security environment affecting the potential future use of Weapons of Mass Destruction (WMD) against the United States, those judged to be the most significant are the spread of Radical Islam and the increase of Globalization.
- Plausible events could lead to alternative futures in which Radical Islam and Globalization could be either high or low.
- The likelihood of the use of WMD would be highest in the Hidden Imam scenario and lowest in the Open Borders scenario.
- Each scenario has different opportunities, allies, threats, and competitors.
- In all scenarios, there are indicators and signposts that occur in the years prior to their full development that the Intelligence Community will be tasked to monitor and identify.

Major Recommendations

- **Be Prepared.** In the development of policies, processes, and national security capabilities, senior officials should favor solutions that provide the most robust capabilities and outcomes against this range of possible futures. This will ensure we are prepared for an uncertain future.
- **Be Aware.** One of the functions of on-going environmental scanning by intelligence agencies is to monitor for indicators of developments that might indicate reality moving toward or away from one of these postulated scenarios. The Intelligence Community will need to place substantial emphasis on long-term analysis to monitor these potential developments.
- **Be Engaged.** Engagement on a broad front is required to ensure the security of the American public. Leadership will need to define reality as it truly is, engage in the war of ideas with Radical Islam, facilitate beneficial effects of Globalization, engage in counter-proliferation and non-proliferation efforts, and ensure we are prepared to deal with the effects of WMD should attempts fail to prevent its use. Engagement will be required to define who are enemies are, to actively compete in the war of ideas, pro-actively pursue counter-proliferation and non-proliferation objectives, and to be fully prepared to minimize the effects of WMD use against the US, in the event our other efforts fail.

Conclusions

The security of the United States depends on successful prevention of an enemy using WMD on the United States. The US has the ability to identify, monitor, and proactively engage with these forces. Aggressively doing so provides some reasonable expectation that such efforts may at least forestall the use of such weapons against the populace of the United States.

I. Overview

National Security Strategy. The National Security Strategy of the United States includes as a major tenet the necessity of preventing our enemies from threatening us, our allies, and our friends with weapons of mass destruction (WMD). It highlights that the security environment confronting the United States today is radically different from what we have faced before. Because the declared intent of our enemies is to use WMD in their efforts to destroy our society, there is a compelling case for our taking anticipatory action to defend ourselves. There are few greater threats to our security and well-being than a terrorist attack with WMD.¹

In light of these realities, the United States has declared its intent to act preemptively in exercising our inherent right of self-defense, when necessary. We recognize that resorting to force in all cases to preempt emerging threats has a high cost in terms of lives lost, political capital expended, and damage to the influence and interests of the United States around the globe. It also may create tension with our deeply held political beliefs and cultural philosophy of freedom and liberty. Our preference is that nonmilitary actions succeed. In addition, we firmly agree with the international consensus that aggression should never be disguised as preemption.

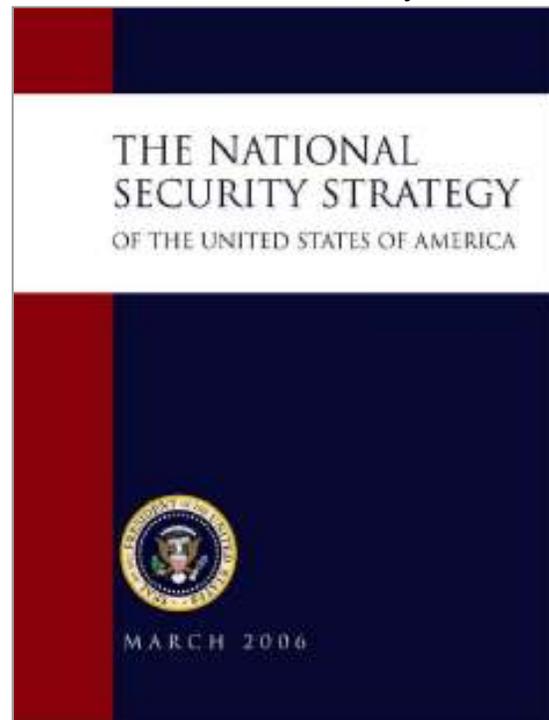


Figure 1. National Security Strategy of the United States

Alternative Futures. Because the results of an enemy using WMD are so potentially destructive, we have an imperative to understand the driving forces that are impacting national security and how they relate to the use of weapons of mass destruction. The purpose of this report is to recommend actions that will reduce the likelihood of the use of WMD against the interests of the United States. To provide the logical and analytic basis for those recommendations this report:

- Section II: identifies the driving forces in the international security environment;
- Section III: develops scenarios that exemplify the most important and the most uncertain driving forces;
- Section IV: examines the implications of each scenario with regard to US National Security;
- Section V: identifies potential signposts or indicators of the actualization or unfolding of each posited scenario; and

¹ National Security Strategy of the United States. March 2006. <http://www.whitehouse.gov/nsc/nss/2006>. Accessed 29Sep06.

- Section VI: identifies approaches to minimize the likelihood of the use of WMD that will help the United States navigate and shape an environment driven by these forces.

II. Driving Forces in the International Security Environment.

An inter-agency group identified the major forces affecting the international security environment. They initially identified the following threats to the security of the United States. This group met under the auspices of the National Security Council and was facilitated by the Regent University Center for Strategic & International Studies. They identified the following major forces on the international security environment:

- **National and Transnational Threats**. The combination of rogue states and threats based on non-nation state entities (e.g., al Qaeda) form a significant threat exhibiting characteristics that are challenging for our national security establishment.
- **Expanding Partnerships**. The interests of the United States are increasingly resulting in partnering with a moving slate of stakeholders, which is typically different on individual topics.
- **Global Insurgency**. Various groups in different parts of the globe are engaging in different levels of insurgency conflict in pursuit of their policy, power, and personal goals.
- **Globalization**. There is a growing interconnectedness among business, government, and academia facilitated by rapid expansion in communication technologies. It is reflected in the expanded flow of information, technology, capital, goods, services, and people throughout the world. It is “a force so ubiquitous it will substantially shape all of the other major trends in the world of 2020” and beyond.²
- **Ideology, Power, and Religion**. A combination of factors is resulting in a mix of ideology, political power, and religion that has not been observed in history since before the Dark Ages.
- **Financial Instability**. Some estimates suggest that over the last quarter of a century financial instability has reduced the incomes of developing countries by roughly 25 per cent.³ Attempts to manage, if not control the consequences of such excursions may have significant international political ramifications that are very difficult to predict.⁴
- **Public Sentiments**. With defense spending remaining at Cold War levels, there is growing concern over the collision of national security bills with rising costs in Federal social services associated with the graying of the Baby Boomers. The open question is whether the American public will sustain the investment in national security over the next 10-20 years due to such competing interests.
- **Weapons of Mass Destruction**. The mass effects from large-scale destructive systems that are now publicly available over the internet are nearly unimaginable. This places a high social priority on non-proliferation efforts to deny these weapons of terror and

² Mapping the Global Future. National Intelligence Council, Office of the Director of National Intelligence, December 2004.

³ Paper written on behalf of the Copenhagen Consensus, presented in Copenhagen on 25-28 May 2004.

⁴ Nyquist, J. R. The Political Consequences of a Financial Crash. February 2, 2005.
<http://www.financialsense.com/stormwatch/geo/pastanalysis/2005/0204.html>. Accessed 29Sep06.

proactive counter-proliferation efforts to defend against and defeat WMD before they are unleashed.

Based upon extensive research, the consensus of this group of subject matter experts was that the two most significant forces driving the context for future use of WMD are Globalization—due to its impact on a broad front—and a combination of several of the above factors, termed Radical Islam. Radical Islam refers to radical elements within larger Islam that desire imposition of strict and severe interpretation of Sharia law, combined with militant elements intent upon the violent restoration of a new political and religious Caliphate spanning the former Islamic empire, from Spain to Central Asia, and the Western Hemisphere. It is sometimes referred to as Islamofascism or Radical Militant Islam.^{5, 6, 7, 8, 9} For purposes of this analysis, Radical Islam was taken to include major threat elements of Transnational Threats; Global Insurgency; and Ideology, Power, and Religion, as described above.

III. Scenarios

Scenarios have been used extensively in public and private enterprises to model reality as a means to explore the future.^{10, 11} The interagency working group used the two driving forces, above, to develop four future scenarios to illustrate the most important and the most uncertain driving forces regarding the potential for use of Weapons of Mass Destruction. (See Figure 2)



Figure 2. Illustrative Alternative Futures for WMD Analysis

⁵ Mortal threat. The Washington Times (2006-01-17).

⁶ Scardino, Albert. 1-0 in the propaganda war. The Guardian. Retrieved on 2006-04-19.

⁷ Schwartz, Stephen. What Is 'Islamofascism?'. TCS Daily. Retrieved on 2006-09-14.

⁸ President Discusses War on Terror at National Endowment for Democracy. Retrieved on 2006-04-19.

⁹ Santorum Pairs 'Islamic Fascism,' WWIIAP via MSNBC 28 August 2006.

¹⁰ Ringland, G. Scenario Planning: Managing for the Future . New York: Wiley, 1998.

¹¹ Schwartz, P. The Art of the Long View . New York: Currency-Doubleday, 1996.

These four scenarios represent the four alternative combinations of high and low Globalization and high and low Radical Islam.

- **HIDDEN IMAM.** This is the future in which there is High Globalization and High Radical Islam.

High Globalization means it is marked by an increasingly secular global society, increase in advanced technology, decrease in importance of nation states, increase in the importance of international corporations, continued blending of ethnic cultures, and the increase of international humanitarianism.

High Radical Islam means it is also marked by the emergence of a global or regional Islamic Caliphate, an increase in religious polarization, the increased occurrence of nation-state theocracies, more gender discrimination and male dominance, an increase in politically-motivated mass migrations, and narrowed education to focus on sectarian and national agendas. This future results from a combination of events that drive the future to this configuration.

These events include:

- **2010**-Nuclear Power Indemnity Act of 2010 provides Federal insurance umbrella for the US domestic nuclear power industry, setting off a major reinvestment in nuclear power.
- **2015**-Within a six-month period, patents are granted for a breakthrough patent for high efficiency hydrogen fuel cells and an additional patent for a modified hydrogen fuel cell technology which produce a virtually limitless supply of power and water. Within 10 years, these two technologies, alone, result in blooming of arid areas across the globe and a 75% reduction in worldwide hunger.
- **2012**-Iran completes its nuclear weapons program with a dramatic, multiple weapons test.
- **2013**-A fatwa from the leading Islamic cleric in Europe expands the legitimate scope of the Islamic Caliphate--a restoration of patriarchal caliphs of Islam and a new golden age of Islamic government--to a global concept, not limited to the historical boundaries of the Islamic empire associated with the early Islamic dynasties (749–1258 AD).

HIDDEN IMAM

Personal Profile:

Identity: Said Jama, a 22-year old male residing in north London, UK

Job: A knowledge worker in bio-engineering by day and at night a student under the radical Islamic cleric, Al-Asid Rami.

Values: Support for the Young Islamists, British chapter of the European Islamic Party, which ushered in an Imam to head Spain's government a decade ago and plans to repeat that outcome in the upcoming national elections in Britain.

Hot book title: Islamic Technology: A History.

Latest technology: Virtual Islamic Glasses show prayers from the Dome of the Rock Mosque in Hi-Definition 3D-Vision.

Average wage: Increased to 1.5x of that in the US(2005) and 4x of UK(2005).

Personal Story:
 Peace be upon you, my brother. Globalization has created a wonderful opportunity for Islam. We have slept but it is now time for Allah's children to bring about the long awaited Caliphate. The world has ignored religion and has followed the pattern of post-industrial secularization ignoring followers of Muhammad, may Allah have mercy upon Him. We have quietly toiled and watched in happiness as the nation state crumbled. It is bringing a new world of the Koran and the Prophet, eliminating the foolish Americans and their Western puppets the Jews, may Allah have mercy upon us. The migration that is now possible with no borders is making the rapid spread of the Truth at last within our grasp. Never before have we had such access to scarce natural resources and technology. Never again will the Great Satan shame our women. Gone will be the days of the hedonistic West as we return to the one true way. There is only one God and He is Allah and Mohammed is His Prophet; may Peace be upon Him.



- **2015**-Massive immigration into Europe reaches a zenith with election of Imams to head governments within France and Spain within a 12-month period.
- **2016**-Sunni domination of Islamic thought and practice demonstrated in first, all-Islam conference of clerics held in Mecca.
- **2017**-Virtual Mosque of Aquaba becomes the first internet mosque to routinely have a billion people on-line for its weekly Friday prayers. A fatwa from the leading Islamic seminary appears to open the door for interpreting participation via Super-HD Virtual Reality Vision of the 2018 Hajj to be webcast by the Virtual Mosque of Aquaba as satisfying the lifetime requirement for pilgrimage to Mecca. Advertising time for the webcast sells out in less than 24 hours, at over \$500m for a 30-second slot.
- **2017**-Virtual Church of the Holy Trinity becomes the first internet church to routinely have 100 million people on-line for its weekly extravaganza, combining liturgical ritual and charismatic worship webcast in Super-HD Virtual Reality Vision.
- **2017**- The New Middle East Trading Company gains agreement by Egypt and Israel for an aggressive implementation of the new hydrogen fuel cell technology to provide water and energy for a massive agricultural development of the Negev, using cheap Egyptian labor and Israeli intensive farming techniques. Within two years, this turns major tracts of the Negev 'Desert' into the new breadbasket for nations of the Mediterranean and Middle East.
- **2018**-A theoretically 'perfect' anti-virus is uploaded by its inventor to the WWW as open-source, free software. Within 30 days, it is implemented on the major global networks, nearly eliminating spam and malicious virus attacks. E-bay doubles its business within six months, to become the single largest business.
- **2018**-Western demographic shrinkage reaches a new low, becomes the last industrialized western society to fall below the replacement level.
- **2019**-The first, mass-marketed credit card with bio-metric identification is implemented by DISCOVER and VISA credit card companies, overturning what had become a \$5 trillion/month fraud drain on international commerce.
- **2020**-A combined team from Johns-Hopkins, Stockholm, and Tokyo Universities team to produce DNA-engineered cures for the top 10 causes of mortality among adults, including 4 different types of cancer.
- **2020**-The Islamic Caucus within the US House of Representatives gains 10 victories in the elections for the House of Representatives, increasing its membership to a total of 101 seats. The National Association of Imams in the US holds a press conference to declare its support for nominating Imam Rhamadan, head of the NAIU, as candidate for US President in the following election cycle.
- **2021**-Treaty of Tehran provides western economic concessions for limitations and inspections of the Iranian nuclear program.
- **2022**-A World ABC News expose' reveals the existence of a secret codicil to the Treaty of Tehran in which the signatories mutually agreed to place informal restraints on missionary work aimed at proselytizing each others' populations.
- **2025**-Egypt and Israel sign an agreement for a tariff-free business zone in the Negev. Within 36 months, the effect of a previous Israeli agreement to import software developers from India and their new optical processors is commonly referred to as the 'New Silicon Valley of the Middle East.'

- **2026**-The World Islamic Conference VII endorses 5-year plan for establishment of an Islamic Caliphate and the consolidation of independent, national governments, spanning the Middle East, the Former-Soviet-Union–stans, Afghanistan and Pakistan, Spain and France. Islamic clerics from the US participate as observers.

- **SLEEPER CELLS.** This is the future in which there is Low Globalization and High Radical Islam.

Low Globalization means it is marked by increased tariffs, decrease in the role of the United Nations, an increase in the role of regional economic blocks, a decrease in the general populace about caring for others, and a decrease in the concern for the global environment.

High Radical Islam means it is also marked by the emergence of a global or regional Islamic Caliphate, an increase in religious polarization, the increased occurrence of nation-state theocracies, more gender discrimination and male dominance, an increase in politically-motivated mass migrations, and narrowed education to focus on sectarian and national agendas.

This future results from a combination of events that drive the future to this configuration.

These events include:

- **2010**-A feared Bird-Flu outbreak, which kills 45 million people within a month, is traced to an Indonesian flight attendant on 3 international flights. The resulting flurry of class-action law suits bankrupt all international air carriers not legally protected by their national governments.
- **2012**-Iran completes its nuclear weapons program with a dramatic, multiple weapons test.
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- **2021**-Treaty of Tehran provides western economic concessions for limitations and inspections of the Iranian nuclear program.

SLEEPER CELLS

Personal Profile:

Identity: 30-year old male,
Muhammad Bakir

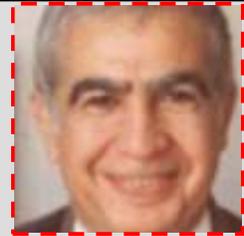
Job: Islamic, college Teacher
residing in the US

Values: Shar'ia-based society;
global Islam

Reading book: Quranic
Principles for
Education in Western Societies

Latest technology: Water Recapture kit (WR-11),
suitable for any home roof-top installation.
Produces up to 30 gallons per day when
interfaced with the XP-32 Water Closet
Disposal unit.

Average wage: Dropped to 0.45 of that in the US(2005).



Personal Story:

May Allah preserve you. Allah u Akbar. I am Muhammad, a teacher of humanities, who emigrated from Iran only 10 years ago. I was very fortunate to have entered the United States upon the acceptance of Islam as a political force in the U.S. Congress. Fortunately, our brothers and sisters in Islam were also able to infuse our philosophies and values within the American university system over 20 years ago. Universities, in dire need of needed of research money, found our propositions very enticing. Other factors that eased our cause in pushing our philosophy and views in the U.S. included American values, such as tolerance, short-sightedness, and years of non-protected borders, and immigration also contributed.

Ahh... it was indeed Allah's will that Islam became the second largest religion in the U.S.. Globalization that facilitated the spread of Islam came to a rapid halt by a series of high technology disasters that left most industrialized nations bankrupt and other nations dark and hungry. The post-catastrophy reactions furthered protectionism and tribalism among various American ethnic groups, an exclusivist mentality among Christians, and as Muslims we have not fared well in such an environment of suspicion and fear.

These factors have forced Islam to move more quickly to influence educational efforts. My goal as a teacher is to ensure students receive a religious based education. The primary books I utilize are both the Qur'an and The Orchid, a book widely known as the premier Wahabi literature on teaching Muslim values. The American culture is truly changing. American artwork now formally incorporates Islamic geometric shapes and our latest campaign to eradicate all artwork of people, or animals is having an effect in the advertising industry. There is only one God and He is Allah and Mohammed is His Prophet.

- **2022**-A World ABC News expose' reveals the existence of a secret codicil to the Treaty of Tehran in which the signatories mutually agreed to place informal restraints on missionary work aimed at proselytizing each others' populations.
- **2025**-Egypt and Israel sign an agreement for a tariff-free business zone in the Negev. Within 36 months, the effect of a previous Israeli agreement to import software developers from India and their new optical processors is commonly referred to as the 'New Silicon Valley of the Middle East.'
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Low Radical Islam means it is also marked by a decrease in US military force structure, an increase in multi-culturalism, more secular nation-states in mid-East (e.g., Syria, Saudi Arabia, Pakistan...), and the development of an accommodation between Christianity, Islam, and Judaism.

This future results from a combination of events that drive the future to this configuration.

These events include:

- **2010**-A feared Bird-Flu outbreak, which kills 45 million people within a month, is traced to an Indonesian flight attendant on 3 international flights. The resulting flurry of class-action law suits bankrupt all international air carriers not legally protected by their national governments.
- **2010**-Shi'a sect gains ascendancy in Iraqi civil war and provides counter weight to Iranian Sunni movement within world of Islam.

DESPERATE ISOLATION

Personal Profile:

Identity: Bahira, a 21-year old female living in Afghanistan

Job: Wife of a share-crop farmer

Values: Survival and tribal support

Reading book: Classified ads on the bulletin board at her part-time job

Latest technology: Plastic sheeting for a small greenhouse, which will extend the growing season for their small vegetable garden.

Average wage: Dropped to 0.45 of that in the US(2005).



Personal Story:

My name is Bahira (Splendid). I live in a farm house on the outskirts of town. I rarely go into town because we grow most of our produce and transportation is limited. I work on the farm with my husband to provide food for our three children. We keep up with local news from other people in the area or occasionally a local newspaper. We are isolated from global news and our forms of communication are limited. I don't understand why we are so poor and isolated. At times there are wars among people in the different towns and we do not share any of our products or produce with our neighbors. I have also worked outside of the home in a small restaurant in town. My husband and I share the responsibilities of raising and providing for our family. Life is simple but very difficult. I don't understand why the Western world does not share their richness with us. We lack quality healthcare, quality water supplies, and technology to help us communicate with others. I may sound bitter but the struggle of my life and my family's life is tremendous and there is no end in sight.

- **2012**-Islamic conference of 2012 results in reconciliation and political accommodation between Shi'a and Sunni sects.
 - **2012**-A major financial scandal on the Tokyo Stock Exchange escalates the lingering, crippling effects of the Bird-Flu outbreak on international commerce into a global recession. Within six months, the value of the US dollar has lost half its value, with many national currencies suffering far greater losses.
 - **2013**-Public execution of 30 junior high school girls in Pakistan who attempted to flee burning building, but without head coverings, results in rejection of more radical Islamic elements and ascendancy of Ramadan and other reformers within Islam.
 - **2015**-DNA-engineered wheat from South Korea accidentally destroys over half the wheat crop in Southern and Eastern China for two years in a row. The result is massive food shortages in Asia as well as detailed regulation of agricultural DNA experimentation.
 - **2019**-The United Nations declares a major, global emergency due to growing food shortages in major populated regions of the globe.
 - **2020**-The 'Green Revolution' is officially put on permanent 'Hold' by the United Nations, as a result of indemnification requirements on companies doing DNA modification to food or potential food items.
 - **2020**-Islamic 'Vatican II' results in leeway for modern interpretations of Islam to apply it within 21st Century context, rather than continuing the struggle to roll back the world to the 14th Century.
 - **2021**-A new type of internet virus shuts down the WWW for 2 months, with destruction of computers and networks valued at over \$10 trillion per day, not counting lost business. The resultant regulations published by the International Communications Commission of the United Nations effectively breaks up the WWW into regional and sub-regional exchanges. Internet businesses experiences losses in excess of \$1000 trillion (US Dollars) over the next six months.
 - **2023**-False rumors of an additional outbreak of Bird-Flu on top of persistent food shortages results in massive social unrest and violence in major metropolitan cities from Asia, India, Egypt, Spain and Portugal, and Latin America. Martial law is declared in 30 nations within a two-week period in order to avert global chaos.
 - **2026**-Vatican IV includes international representatives from Catholic, Protestant, Hebrew, and Islamic religions. Widely seen as the beginnings of new understanding among the 'people of the book.'
 - **2028**-United Nations statistics report that global GNP is 60% less than it was in 2006.
- **OPEN BORDERS.** This is the future in which there is High Globalization and Low Radical Islam.
High Globalization means it is marked by an increasingly secular global society, increase in advanced technology, decrease in importance of nation states, increase in the importance of international corporations, continued blending of ethnic cultures, and the increase of international humanitarianism.
Low Radical Islam means it is also marked by a decrease in US military force structure, an increase in multi-culturalism, more secular nation-states in mid-East (e.g., Syria, Saudi Arabia, Pakistan...), and the development of an accommodation between Christianity, Islam, and Judaism.
This future results from a combination of events that drive the future to this

configuration.

These events include:

- **2009**-Al Qaeda leadership discredited and humiliated in Islamic world, with al Jasira expose of the private, illicit life of Usama bin Laden and his senior captains.
- **2010**-Nuclear Power Indemnity Act of 2010 provides Federal insurance umbrella for the US domestic nuclear power industry, setting off a major reinvestment in nuclear power.
- **2010**-Sunni's win dominant position in Iraqi Congress.
- **2010**-Shi'a sect gains ascendancy in Iraqi civil war and provides counter weight to Irani Sunnit movement within world of Islam
- **2012**-Islamic conference of 2012 results in reconciliation and political accommodation between Shi'a and Sunni sects.
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- **2017**-Virtual Church of the Holy Trinity becomes the first internet church to routinely have 100 million people on-line for its weekly extravaganza, combining liturgical ritual and charismatic worship webcast in Super-HD Virtual Reality Vision.

OPEN BORDERS

Personal Profile:

Identity: Ajira Ali, a 36-year old female residing in UAE

Job: Indian software engineer in UAE, testing the latest software releases using the new optical processors from India.

Values: Job advancement, recreation, fulfilling lifetime pilgrimage to Mecca at Hajj.

Hot book titles: Extreme Vacations on \$500 a Day; High Nutritional Supplements for Children--the New Marvels of DNA-Engineering.

Latest technology: Super-HD Virtual Reality Vision Mobile Theater System.

Average wage: Increased to 5x of that in the US(2005) and 2x of that in the UAE(2005).



Personal Story:

May peace be upon you, my brother! My name is Ajira Ali, an engineer at the United Arab Emirates University Department of Applied Engineering. Although there have been winners and losers from globalization of the past twenty years, there are so many opportunities! We must not continue to gravitate toward the Western culture and secular values, but global technology exchange with all sectors of the globe will allow us to boost our resources and achieve pan-Arabic economic and political goals.

We are fortunate that the foresight of our Islamic leaders has enabled us to make peace within the world of Islam ('Umma) and with the western world to our mutual benefit, compressing distance, homogenizing culture, accelerating mobility and reducing the relevance of political borders. My mother or grandmothers never had it so good! It is a marvel of our modern age that the best of the Muslim, Christian, and Jewish worlds have finally merged in synergy to achieve new and ever higher accomplishments to the benefit of all mankind. I am very proud to be part of that synthesis of humanity in this triumphant period of economic and social achievement.

- **2018**-A theoretically ‘perfect’ anti-virus is uploaded by its inventor to the WWW as open-source, free software. Within 30 days, it is implemented on the major global networks, nearly eliminating spam and malicious virus attacks. E-bay doubles its business within six months, to become the single largest business.
- **2019**-The first, mass-marketed credit card with bio-metric identification is implemented by DISCOVER and VISA credit card companies, overturning what had become a \$5 trillion/month fraud drain on international commerce.
- **2020**-A combined team from Johns-Hopkins, Stockholm, and Tokyo Universities work together to produce DNA-engineered cures for the top 10 causes of mortality among adults, including 4 different types of cancer.
- **2020**-Islamic ‘Vatican II’ results in leeway for modern interpretations of Islam to apply it within 21st Century context, rather than continuing the struggle to roll back the world to the 14th Century.
- **2025**-Egypt and Israel sign an agreement for a tariff-free business zone in the Negev. Within 36 months, the effect of a previous Israeli agreement to import software developers from India and their new optical processors is commonly referred to as the ‘New Silicon Valley of the Middle East.’
- **2026**-Vatican IV includes international representatives from Catholic, Protestant, Hebrew, and Islamic religions. Widely seen as the beginnings of new understanding among the ‘people of the book.’

IV. Implications for National Security.

None of these scenarios exactly describes the future. They are not intended to do so. The uncertainty of future events makes such predictions not credible. What these scenarios are intended to accomplish is to sufficiently jog the mind as to raise in our collective consciousness the very uncertainty of the future. This level of uncertainty is contrary to our working assumptions that the next day will be approximately the same as the previous. There are implications from these scenarios regarding their potential implications for the United States, as well as insights relative to the relative likelihood of use of WMD against the US in each of these four cases.

Opportunities, Allies, Threats, and Competitors. The clear implication from these scenarios is that there are understandable opportunities, allies, threats, and competitors that would be realized in the event these scenarios approximate reality. These are summarized in Figure 3. For example, in the case of Desperate Isolation there is a major opportunity to forestall WMD use through the amelioration of dialog among the monotheistic religions of the world. This could substantially moderate the rhetoric of religious zealots on many fronts. It would also provide a convenient target to replace the US for the zealots who require a target for their vituperation. Allies in downplaying issues that could lead to use of WMD would include various regional trading partners. These same partners would also join with US efforts to address world hunger and other factors contributing to international and regional turmoil. The existence of competing regional blocks from Europe or Asia might make such venues as the United Nations of elevated importance in this scenario.

SCENARIO:	Opportunities:	Allies:	Threats:	Competitors:
Open Borders [Desired Future]	+ Energy is abundant + Trade is booming + Cross-cultural boundaries falling + Religious rapproachment among the great religions of the world	+ Trade and trading partners expanding to include China, India and select nations in Middle East	Desired Scenario-- + Continued growth	- None identified
Sleeper Cells	- None identified	Internal US Associations: + First Responders + Medical Professionals + Agriculture Community + Organized Labor and Transportation Workers	- Islamic political power in the US - Domestic and international social turmoil and forces of chaos	- Organized, radical Islamicists - Organized 'Know-Nothing'-like Party - Ethnic groups with strong ties to countries ruled by new Islamic theocracies
Desperate Isolation	+ Religious rapproachment among the great religions of the world	North American regional associations: + New North American Free Trade Association + Latin America Trade Association	- Global hunger and disease - Domestic and international social turmoil and forces of chaos	- Competing regional economic blocks - European and Mediterranean Trade Union - Former Soviet Union and West-Asia Resource Conglomerate - East Asia Trading Company
Hidden Imam [Most Likely & Worst Case]	+ Energy is abundant + Trade is booming + Cross-cultural boundaries falling	+ Trade and trading partners expanding to include China, India + Trade with Europe is a question mark	- Growth of political Islamization in US	- Caliphate-based economic block - Future and viability of EEC is in doubt

Figure 3. Implications of Alternative Futures as Context for WMD Analysis

Use of WMD. The likelihood of WMD use against the US is varied and is due to different dynamics in each of these scenarios and varies over time among, and within, the scenarios. Its use is more likely and sooner in certain scenarios, and less expected and likely to be later in other scenarios. (See Figure 3) As it approximates an extrapolation from current trends, Hidden Imam may be thought of as perhaps the ‘most likely’ scenario, as well as the ‘worst case’ scenario from the standpoint of the likelihood for the use of WMD against the US. This is due to the confluence of the social impacts of High Radical Islam coupled with the acceleration of technology in both alienating the Islamic world from the Western world and in accelerating the availability of advanced, global communications to aid in the implementation of a multi-regional Islamic Caliphate.

The likelihood for WMD use against the US is progressively less for the scenarios of Desperate Isolation, Sleeper Cells, and Open Borders. In the case of Desperate Isolation, WMD use may result as much from distant, local political events and perhaps even events unrelated to US

political activities as to any specific official American act. For example, in this scenario it could result from a completely inadvertent slight to an Islamic cleric or even the release of a Hollywood film declared by an influential Imam to be profaning to the Prophet.

In the case of the Sleeper Cells, WMD use is even less likely and this is due in large part to Islamic entities in the US gaining significant political influence in the US political process, which would make WMD use of much less importance. Why destroy a country militarily if you are taking over political power from the inside? In the Open Borders scenario, regional issues have taken on a much larger importance and if WMD is used, it will likely be over a regional conflict and not physically directed at the US.

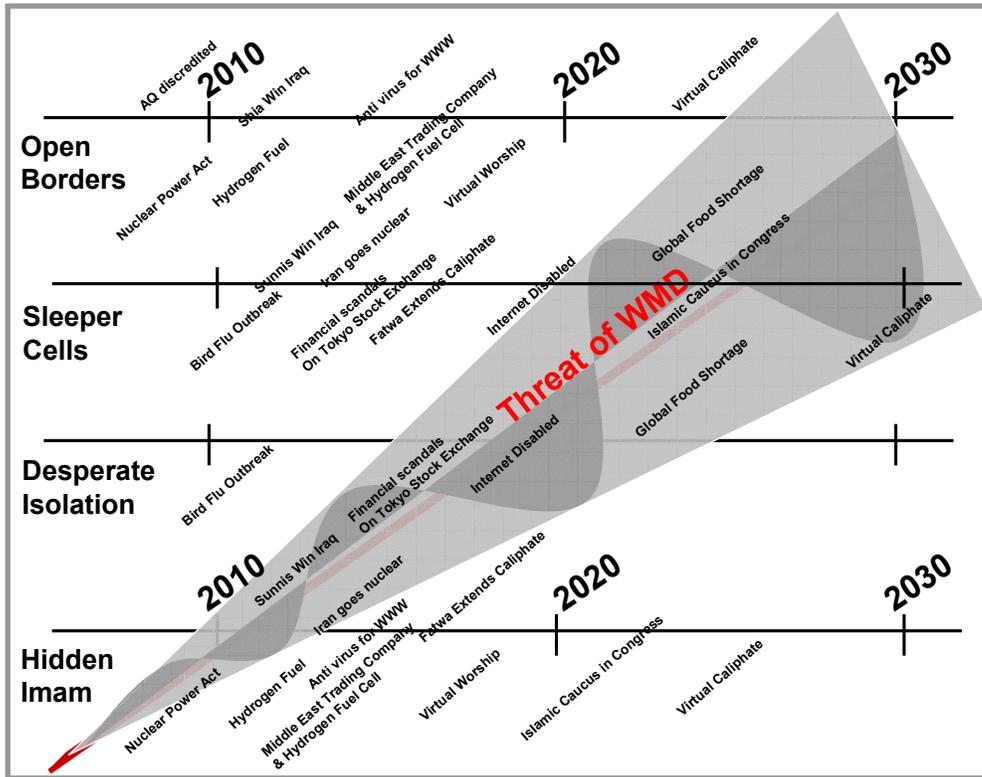


Figure 4. Likelihood of WMD Use in Alternative Futures

V. Potential Signposts.

Potential signposts or indicators of the actualization or unfolding of each posited scenario may be estimated by backcasting the events which would lead to each scenario. A representative sample of such indicators is provided in Figure 5. For example, the development of fatwas that would open the door for reformation in Islam in doctrine and practice would be a step enabling the Open Borders scenario. This might in turn permit the ascendancy of advocates within Islam for modern interpretation of Koran and Islamic doctrines, rather than those frozen in the 14th Century. Factors that would facilitate the dialog among Jewish, Christian, and Islamic organizations

regarding joint activities and projects for humanitarian or other positive purposes would also help facilitate an Open Borders scenario. In this case, there would also be a large array of economic and cultural indicators of continued Globalization that would be indicative of the realization of an Open Borders situation.

SCENARIO:	Potential Signposts/ Indicators:
<p style="text-align: center;">Open Borders [Desired Future]</p>	<ul style="list-style-type: none"> • Agreements on lowering trade barriers • Opportunities for reformation in Islam • Advocates within Islam for modern interpretation of Koran and Islamic doctrines • Dialog among Jewish, Christian, Islamic organization regarding joint activities and projects
<p style="text-align: center;">Sleeper Cells</p>	<ul style="list-style-type: none"> • Vulnerability to pandemics • International instability in financial institutions and processes • Global food shortages • Global social turmoil and rumor-mongering
<p style="text-align: center;">Desperate Isolation</p>	<ul style="list-style-type: none"> • Shia-Sunni cleric openings for sect reconciliation • Decreases in global health levels and vulnerability to pandemics • Food growth patterns and trends along with yearly production estimates
<p style="text-align: center;">Hidden Imam [Most Likely & Worst Case]</p>	<ul style="list-style-type: none"> • Caliphate in Islamic dialogue • Islam-driven immigration • Wahabi strain and its developments, leadership, and doctrine • Islamic-based political activism in the US

Figure 5. Indicators That Reality Is Tracking to One of These Alternative Futures

VI. Actions to Minimize the Likelihood of WMD Use.

Approaches that minimize the likelihood of the use of WMD will help the United States navigate and shape an environment driven by these forces. In general, the US should take steps to, first, be prepared, second, to be aware of developments, and, third, be engaged in attempting to prevent and block developments that would lead toward less desirable futures (Hidden Imam, Desperate Isolation, and Sleeper Cells) and facilitate events that would lead toward a desired future (Open Borders).

Be Prepared. In the development of policies, processes, and national security capabilities, senior officials should use these scenarios as ‘test environments’ for the utility of various options under consideration. Priority should be given to those policies, processes, and national security capabilities which have the best aggregate effect *when assessed against this set of scenarios*. Solutions which provide the most robust capabilities and outcomes against this range of possible futures will be those favored by this Administration, rather than merely those that do well when

assessed against our desired future. This approach will ensure we are prepared for an uncertain future.

Be Aware. One of the functions of on-going environmental scanning by intelligence agencies is to monitor for indicators of developments that might indicate reality moving toward or away from one of these postulated scenarios. One of the substantial challenges is to gauge the ebb and flow of events and to assess the momentum of the times, rather than to place too much weight on individual events. In the example given above in which reality confirms the development of fatwas that could open the door for reformation in Islam in doctrine and practice, the critical issue is whether this event is followed by others that also move in that direction or not. Such fatwas could generate a backlash from opposing clerics and other, more influential parties, such that the aggregate result is not a move toward reform, but a lurch further into obscurantism and radical interpretation of 14th Century Islamic dogma. This phenomenon will require the Intelligence Community to place substantial emphasis on long-term analysis and avoid the temptation of running to press with the latest ‘news’ in a vain attempt to ‘out-CNN’ the media.

Be Engaged. Engagement on a broad front is required to ensure the security of the American public. Leadership will need to define reality as it truly is, engage in the war of ideas with Radical Islam, facilitate beneficial effects of Globalization, engage in counter-proliferation and non-proliferation efforts, and ensure we are prepared to deal with the effects of WMD should attempts fail to prevent its use.

(1) ***Define Reality.*** A responsibility of leadership is to define reality.¹² The Report of the 9/11 Commission identified two areas which are crucial in this engagement with those who would do us harm. First, we must accurately define who is the enemy in our current struggle for survival. As the report of the Commission assessed,

The enemy is not just ‘terrorism,’ some generic evil. This vagueness blurs the strategy. The catastrophic threat at this moment in history is more specific. It is the threat posed by Islamist terrorism—especially the al Qaeda network, its affiliates, and its ideology.¹³

Second, we must also define what we stand for as a nation and as a people. This is a second area in which the 9/11 Commission got it right. Their recommendation that we must be and be seen to be, an example of principled leadership in the world, that treats people with due respect, abides by the rule of law, and is charitable and caring for our neighbors.

[Our] vision of the future should stress life over death (sic) and individual educational and economic opportunity. This vision includes widespread political participation and contempt for indiscriminate violence. It includes respect for the rule of law, openness in discussing differences, and tolerance for opposing points of view.¹⁴

¹² Clarke, Vern. Defining Leadership. Presentation at Regent University, 15 September 2006.

¹³ Final Report of the National Commission on Terrorist Attacks Upon the United States. W.W. Norton & Company: New York, p. 362. 2004.

¹⁴ *ibid*, p. 376.

An inescapable conclusion of the Commission was that as part of defining who we are, we must also engage in the war of ideas.

(2) ***Engage in the War of Ideas.*** As a nation, we must use all the implements of power at our disposal to engage in the war of ideas that provides the backdrop for the potential use of Weapons of Mass Destruction. To conclude that use of WMD in this war is about destroying military capabilities is to fundamentally miss the center of gravity in this conflict. It is a classic struggle for the mind—not just of the military or political leadership, but of our nation as a whole. The conclusion of the 9/11 Commission was that if we do not engage in this war of ideas, our opponents will do that for us and not on terms that are favorable to our further existence.¹⁵ As some others have noted, our strategy needs to get beyond merely killing or capturing terrorists and pressuring the governments that harbor them.¹⁶ In addition to the force of ideas, we also need to be effective in denying WMD capabilities to those who have vowed to use them against us.

(3) ***Counter-Proliferation and Non-Proliferation.*** We must counter proliferation of WMD through a far-reaching strategy that includes improved nonproliferation efforts to deny these weapons to attempting to gain them for nefarious purposes. This must include coordinated use of the full panoply of diplomatic, intelligence, military, and economic instruments of national power. We must also be proactive in countering proliferation efforts, as defeating WMD and missile threats before they are unleashed is a far superior approach than attempting to bring them down once they are launched. We must also be prepared for the eventuality that these preventive measures may not be totally effective.

(4) ***Disaster Preparation and Response.*** As a final element, we need improved protection to diminish the effects of WMD use in the event our other efforts fail. Effective and responsive capabilities to respond to the use of WMD can also help convince our adversaries that they cannot achieve their goals by using such weapons.

VII. Conclusions.

The security of the United States depends on successful prevention of an enemy using WMD on the United States. The scenarios developed in this analysis provide insights into the driving forces that relate to the use of weapons of mass destruction and potential signposts or indicators of the actualization or unfolding of each posited scenario, with its attendant expectations regarding the likelihood of WMD use.

The US has the ability to identify, monitor, and proactively engage with these forces. Aggressively doing so provides some reasonable expectation that such efforts may at least forestall the use of such weapons against the populace of the United States. The success of these

¹⁵ *ibid*, p. 375.

¹⁶ Shrader, Katherine. Grim Report on Terror May Be Much Worse. Associated Press: Miami Herald, September 28, 2006.

efforts will require the utmost in coordinated efforts across the full spectrum of the Executive, Legislative, and Judicial branches of government. Because of the drastic effects of failing in these efforts, the citizens of the US can expect no less than a maximum effort to achieve a desired future with regard to the use of WMD against the US.

Washington, D.C.
1 October 2006